

## President's message

Looking back to 1981 when I first committed to the world of patch testing it is hard not to marvel at the progression made in the field.

During the four decades I have been part of the patch testing community I have witnessed how the discipline has grown from a niche activity performed by a relative few specialists with a deep understanding of biochemistry to the diagnostic tool used today by the many hundreds of practitioners forming the patch testing societies and contact dermatitis groups leading the development in the field.

Moreover, I have witnessed how the practice of comprehensive baseline patch testing has increased as a result of not only necessity, but by an increase in dedication and awareness among the patch testing physicians.

In past years I saw many clinics screen patients with suspected ACD solely with a European Baseline Series or settle with the limited series found in a factory-made patch as the hapten selection required to pinpoint rare or improbable allergies was deemed overwhelming by many.

Today I am relieved to find that the development of comprehensive baseline series has not only been welcomed, but also incorporated in the everyday practice in many clinics. Especially in times like these when several culprit haptens behind the ACD created by the use of face masks are not found in slimmer Baseline Series.

Pinpointing rare allergies will still remain an arduous task that will require not only thorough investigation and perseverance but also luck occasionally. By the increased adoption of comprehensive baseline screening I am confident that the quality of the diagnosis of patients with Contact Allergies will improve significantly as more culprit haptens will be detected. This will have a positive impact on the quality of life for those patients that suffer from contact dermatitis both from occupational exposure and environmental exposure.

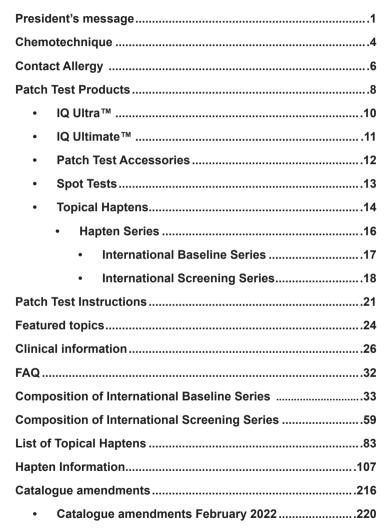
Sincerely yours,

Bo Niklasson CEO and President

Chemotechnique MB Diagnostics AB

## For professional use only

## **Table of Contents**





# Patch Test Products authorized by the ICDRG Distributed Worldwide



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## Chemotechnique



#### Chemotechnique - The trusted name in Patch Testing



Chemotechnique MB Diagnostic AB ("Chemotechnique") has provided Patch Test solutions since 1981 and is proudly recognized as the Trusted name in Patch Testing. Chemotechnique is a Sweden based company with

global reach through world-wide distribution.

#### **Research and Development**



With emphasis on R&D and working in close cooperation with contact dermatitis research groups such as the International Contact Dermatitis Research Group (ICDRG), the European Environmental and Contact Dermatitis Research Group

(**EECDRG**) and the North American Contact Dermatitis Group (**NACDG**), Chemotechnique ensures an ideally composed product line-up.

## **Highest quality products**



Chemotechnique offers a complete range of high quality Patch Test Products including Topical Haptens, Patch Test Units as well as Patch Test Accessories and Spot Tests. Our haptens are produced in Sweden under strict

pharmaceutical control following the **GMP** quality management system audited by the Swedish Medical Products Agency. Certified by the **ISO 13485** and **ISO 9001** Quality Management systems the Chemotechnique high quality products and reliable service will aid you in the diagnosis of contact allergy in your patients.

#### Online resources



Visit the continually updated www.chemotechnique.se website to access the Chemotechnique online resources including an extensive Hapten Database, patch testing Video Instructions, Patch test record forms, Patient

information sheets and much more. Create a free account today!











## **Contact Allergy**



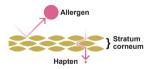
### Contact Allergy & Allergic Contact Dermatitis (ACD)



Contact Allergy is the result of specific immune responses caused by antigens. Unlike allergens (such as pollens and animal proteins) causing other forms of allergy, the culprits of Contact Allergies, haptens, are not antigens by

themselves. Haptens (typically small, chemically reactive molecules with low molecular weight) need to penetrate the horny layer of the skin in order to conjugate to epidermal and dermal proteins forming "hapten-carrier complexes" with antigenic properties capable of causing **contact allergy.** Examples of widely recognized haptens include nickel, formaldehyde and other preservatives in cosmetics.

Contact allergy is the state of being sensitized to a hapten. Sensitization to a hapten occurs when the accumulated exposure to the hapten surpasses a certain threshold. This threshold is individual and varies greatly, some will develop an allergy



the first time encountering the hapten while others withstand a life time of exposure without becoming sensitized. The median prevalence of contact allergy to at least one hapten is around 25% in the general population.

Allergic Contact Dermatitis (ACD) is a disease of the skin that can emerge in people that are exposed to specific haptens after having developed contact allergy to them. Once allergic, the subject might respond with skin inflammation (redness, flaking skin or blisters) whenever exposed. Individuals handling haptens as part of their

profession run a higher risk of developing **ACD**. ACD accounts for 20% of all reported work related skin diseases. Occupational fields with high occurrences of ACD include (but are not limited to) hairdressing, construction work, cleaning and health care. Chronic once developed, and with no known cure, contact allergy is of major distress for those affected

### **Diagnosis**



While contact allergy cannot be treated it can be diagnosed; by **Patch Testing** and not by **Skin Allergy Testing** (such as skin prick testing - used for the diagnosis of, for instance, respiratory allergies). Knowing what hapten is causing the

allergic reactions helps the patient stay clear of that specific hapten, avoiding **ACD** and thereby effectively improving the quality of life for the individual.

The indication for Patch Testing is to test all patients in whom contact allergy is suspected or needs to be ruled out, regardless of age or anatomical site of dermatitis.

**Chemotechnique** provides all tools required to perform patch tests the IQ way - the gold standard for diagnosing contact allergy. In order to perform a diagnostic Patch Test, two crucial components are required; **Topical Haptens** and **Patch Test Units.** 

## **Topical Haptens**



The hapten preparations used in patch testing should ideally be specifically developed for patch testing purposes. The Topical Haptens manufactured by Chemotechnique are standardized and prepared by mixing high purity fine

particle ground raw material with high purity grade white petrolatum using state of the art technology.

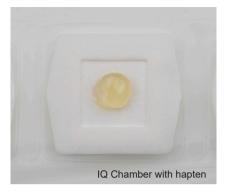
#### **Patch Test Units**



To ensure that the hapten remains in direct contact with the skin for the time required (48h) to create a standardized controlled reaction, a Patch Test Unit is needed. A Patch Test Unit is composed of sets of chambers mounted on an

adhesive tape. The purpose of the patch test chambers is to provide a defined areai in which the skin will be exposed to the haptens during the testing.

## **Patch Test Products**





#### **IQ Patch Test Chambers**

The Inert Quadrate (IQ) chambers are the most technologically advanced patch test chambers ever developed.

The laminated tape/foam/filter paper construction results in a comfortable chamber providing a unique closed-cell and leak-free system which defines a test area.

The quadrate shape allows for easy differentiation between allergic and irritant reactions. This patented patch test chamber design is found in both IQ Ultra™ and IQ Ultimate™ Patch Test Units.

The integrated filter papers makes handling of loose filter papers unnecessary.

#### Adhesive chamber rim



The adhesive eliminates hapten leakage and enhances the adhesion of the test unit to the skin.

## Foam frame for high comfort



The chambers are made of inert additive free soft polyethylene foam.

## Integrated filter paper

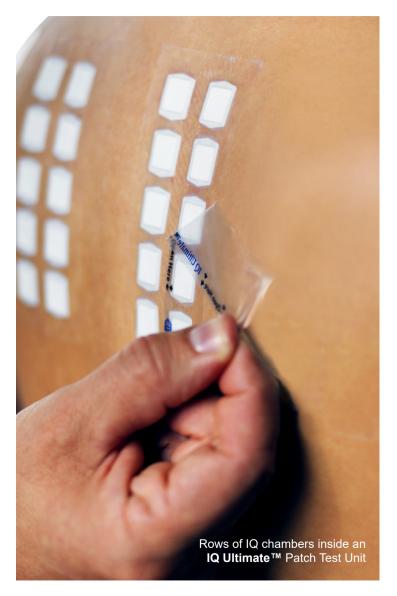


The integrated filter paper facilitates easy handling of liquid haptens.

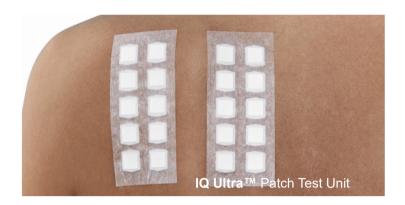
#### IQ Chamber:

### Size:

Inside area: 64 mm<sup>2</sup> Chamber volume: 32 µl



## **IQ** Ultimate<sup>™</sup>



### IQ Ultra™ (IQ-U)

Comfortable and chemically inert - IQ Ultra™ is the reliable patch test choice. The IQ Ultra™ is designed to take full advantage of the acclaimed IQ Chambers. The strong adhesive properties of the premium quality, hypoallergenic and latex free carrier tape eliminates the need for extra reinforcement for patients with normal skin. The IQ Ultra™ Patch Test Units are most cost effective as filter papers and protective covers are not add-ons, but integrated into the design.

#### **IQ Chambers**



The **IQ Ultra™** Patch Test Unit is designed to take full advantage of the IQ Chambers.

With strong adhesion and compact size it is a versatile and reliable Patch Test Unit.

#### Closed-cell & Leak-free



The closed-cell chamber provides a defined test area for standardized testing as the concept

of dose/area can be used.

#### Protective cover



Preloading increases staff efficiency as multiple tests can be prepared in advance.

By using the **Application Device**, loading of the test units is made efficient and time saving.

#### Aluminum free



No uncomfortable metal chambers that might react chemically to haptens ensures

test reliability. Aluminum free means environmentally safe.



### IQ Ultimate™ (IQ-UL)

Elastic, transparent and water resistant. In addition to the features shared with the IQ Ultra™, IQ Ultimate™ has the above named added benefits as a result of the 25 micron thin carrier film.

Allowing for both moderate showers and exercise - **IQ Ultimate™** is the ideal Patch Test Unit for the diagnosis of contact allergy in active patients.

#### Water resistant



The IQ Ultimate™ carrier tape is water resistant allowing for moderate exercise

and showers during the patch test procedure.

### Superior adhesion



IQ Ultimate™ is the perfect patch test choicein warm climate due to its superior

adhesion to the skin.

### Highly elastic



The elasticity of the IQ Ultimate™ carrier tape permits patients to maintain an active

lifestyle during the test period.

#### IQ Ultra™/IQ Ultimate™:

The box includes 100 Patch Test Units as well as a Reading Plate.

### Patch Test Unit:

Size: 52 x 118 mm Chambers/Unit: 10 pcs

## Patch Test Accessories

## **Spot Tests**



The Application Device (AP-P) significantly facilitates preloading multiple IQ Ultra™ or IQ Ultimate™ Patch Test Units. This is convenient when preparing test series in advance, such as the Baseline Series, for a suitable number of patients.

## Syringe Cap Organizer



The device is equipped with a feature that facilitates the detachment and attachment of the

syringe caps without skin contact.

#### **Fixates Patch Test Units**



The design prevents the Patch Test Unit from sliding during application of the haptens.



The Reading Plate for IQ Ultra™/ IQ Ultimate™ (RP-P) facilitates reading and the interpretation of the skin reactions.

## **Easy Diagnosis**



To facilitate visual diagnosis, reference pictures of allergic reactions are printed

on the Reading Plate.

The images are categorized in accordance with the definition recommended by the International Contact Dermatitis Research Group (ICDRG).



The Chemo Skin Marker Medium™ is a long lasting skin marking tool specially suited for patch test site marking.

### **Distinct marking**



The Chemo Skin Marker™ - Medium has a medium round bullet) type tip for a distinct marking. The skin marker

is non-toxic, non-irritating and non-tattooing.

## Chemo Skin Markers™- Medium (SMM-4)

Chemo Skin Markers™ - Medium are provided in boxed sets of 4 units



Chemo Nickel Test™ (NT) and Chemo CobaltTest™ (CoT) are one-component solutions that enable easy detection of free nickel or cobalt in metallic objects.



Contained in a re-sealable packaging, the test solutions

are conveniently stored alongside provided swabs.

## Rub & Compare



Rub a moistened cotton swab on the suspected metal object and

compare the result with the reference color.

## **Chemo Spot Tests**

Volume:

8 ml (50 tests+)

Reagents:

Nickel: Dimethylglyoxime Cobalt: Nitroso-R salt

## **Topical Haptens**



Chemotechnique offers the widest range of commercially available high quality Topical Haptens. The 555+ different preparations are available for purchase in sets of series or as individual preparations. The composition of the various Baseline Series, as well as the additional Screening Series, has been carefully selected based on the latest studies and in close co-operation with leading contact dermatitis societies.

#### Highest quality



The Topical Haptens are prepared using state of the art technology by grinding high purity raw materials down to extremely fine particle size. The ground particles are homogenized either with high purity grade white petrolatum

or with the appropriate highest purity liquid vehicles.

## **Preloading**



Non-volatile Topical Haptens may be preloaded onto IQ Ultra™ or IQ Ultimate™ Patch Test Units and stored for up to two weeks before test application if stored refrigerated, with sealed covers, and kept in air tight bags.

Hapten preparations that may not be preloaded are marked: **DO NOT** 



#### Listed online



The composition of some series is not listed in this printed catalogue but only available for review online. These series are subject to irregular updates why consulting the chemotechnique.se for current composition is advised.

Affected series are marked with:

## **Topical Haptens:**

Topical Haptens are delivered in either 5 ml syringes or in 8 ml dropper bottles which amounts to approximately 200 25µl doses...

#### **Baseline Series**



The haptens in a Baseline Series form the foundation for all routine patch testing. Chemotechnique has developed several regional and national Baseline Series in cooperation with local clinics and research groups. These

tailored Baseline Series enable efficient routine Patch testing with maintained high relevance.

In addition to Baseline Series, a Screening Series may be added based on the occupation and everyday exposure of the patient. Chemotechnique provides a number of such Screening Series, all of which are listed on the next page.

#### International Baseline Series:

European Baseline	(S-1000)
European Comprehensive Baseline	
International (Standard) Baseline	
International Comprehensive Baseline	
Latin American Baseline	
North American Baseline	
North American Extended	` ,
North American Comprehensive	
American Core Series	

#### **National Baseline Series:**

Australian Baseline	(ABS-1000)
Belgian Baseline	(BS-1000)
British Baseline	
Chinese Baseline	
Finnish Baseline	(FIN-1000)
Rungarian Baseline	
Indian Baseline	
talian Baseline	(SIDAPA-1000)
Rorean Baseline	(KOR-1000)
Rew Zealand Baseline/Extended	(NZBS/NŽBSE-1000)
Portuguese Baseline	(PB-1000)
Polish Baseline/Extended	
Spanish Baseline	
Swedish Baseline	

#### Tailored testing:

All Topical Haptens produced by Chemotechnique can be ordered separately, making customization of series possible. This is ideal when catering for patient specific exposure.

## Hapten Series

### **Screening Series**



Bakery

The Screening Series are used in combination with a Baseline Series to facilitate the screening of patients with occupational, or recreational, exposure to a defined set of haptens.

#### International Screening Series:

• bakery	(B-1000)
Corticosteroid     Cosmetic	(CS-1000)
Cosmetic	(C-1000)
Cutaneous Adverse Drug Reaction	(CAD-1000)
Dental Screening	(DS-1000)
Dental Materials - Patients	(DMP-1000)
Dental Materials - Staff	(DMS-1000)
• Epoxy	(E-1000)
European Photopatch Baseline	(EP-1000)
European Photopatch Extended	(EPE-1000)
Fragrance	(F-1000)
Hairdressing	(H-1000)
Implant	(IMP-1000)
Isocyanate	
Leg Ulcer	
Medicament	(ME-1000)
Metal	(MET-1000)
Metal Extended	(METE-1000)
• (Meth) Acrylate - Adhesives, Dental, Printing & Other	r (MA-1000)
(Meth) Acrylate - Artificial Nails	(MN-1000)
Oil & Cooling Fluid	(O-1000)
• Plant	(PL-1000)
Plastic & Glue	
Rubber Additives	
• Shoe	
• Sunscreen	(SU-1000)
Textile Colors & Finish	(1F-1000)
National Screening Series:	
Indian Footwear	(INF-1000)

■ Indian Footwear	.(INF-1000)
Randian Cosmetic & Fragrance	.(INC-1000)
Rorth American Photopatch	(NAP-1000)

## Photopatch testing:

Photopatch Series test for reactions to irradiated and non-irradiated photohaptens. The test method when testing photopatch series differs from regular patch testing. Please visit

www.photopatch.eu for the ESCD approved methodology.

## International Baseline Series

### European (Comprehensive) Baseline / (S-1000, ECB-1000) p. 33 p.35



(B-1000)

The European Baseline (EBS) was the first defined Baseline Series and forms the foundation for many other Baseline Series. The Comprehensive Series includes additional

haptens for routine screening as recommended by the EBS branch of the European Society of Contact Dermatitis (ESCD)

### International Baseline (IS-1000) p. 37



This Baseline Series is a selection of haptens based on the studies performed by the International Contact Dermatitis Research Group (ICDRG).

### International Comprehensive Baseline (ICB-1000) p. 40



This extensive Baseline Series is ideal for physicians preferring comprehensive routine screening. The selection of haptens is based on the studies performed by the North

American Contact Dermatitis Group (NACDG).

## Latin American Baseline (LA-1000) p. 43



This Baseline Series is a selection of haptens based on the studies performed by the Colegio Ibero-Latinoamericano de Dermatología (CILAD).

## North American Baseline Series (NA-1000, NAE-65, NAC-80) p. 45/ p. 48/ p. 51



These Baseline Series are selections of haptens based on studies performed by the North American Contact Dermatitis Group (NACDG). The Series contains 50, 65 and 80 haptens

respectively, providing suitable Baseline Series for any clinic.

## American Core Series (AC-1000) p.55



This Baseline Series is a selection of haptens recommended by the American Contact Dermatits Society (ACDS).

## **Hapten Series**

## **International Screening Series**

#### Bakery (B-1000) p. 59



This series is a selection of haptens (primarily preservatives and substances valued for their fragrance and taste) included in foods and pastries.

#### Corticosteroid (CS-1000) p. 59



This series is a selection of haptens found in topical pharmaceutical products such as corticosteroid creams and ointments.

#### Cosmetic (C-1000) p. 60



This series is a selection of haptens used for fragrance, preservation, sun protection and formulation of cosmetics and beauty products.

#### Cutaneous Adverse Drug Reaction (CAD-1000) p. 62



This series is a selection of haptens present in pharmaceutical products such as antibiotics, NSAID's and painkillers. These pharmaceutical products may cause systemic dermatitis.

## Dental Screening (DS-1000) p. 63



This series is a selection of haptens, primarily metals and plastics, which **both patients and professionals** are exposed to in dental care.

## Dental Materials - Patients (DMP-1000) p. 64



This series is a selection of haptens that primarily dental care **patients** are exposed to. These haptens include plastics, fragrances and materials used for mending teeth.

## Dental Materials - Staff (DMS-1000) p. 65



This series is a selection of haptens that primarily dental care **professionals** are exposed to. These haptens include plastics, fragrances and materials used for mending teeth.

## Epoxy (E-1000) p. 65



This series is a selection of haptens (primarily stabilizers, additives, resins and epoxies) professionals working with epoxy pastes and glues are exposed to.

## European Photopatch Baseline (EP-1000) p. 65



This series is a selection of haptens (UV-blockers, additives and pharmaceutical compounds) present in skincare products protecting against the sun.

#### European Photopatch Extended (EPE-1000) p. 66



This series is an extended selection of haptens (UV-blockers, additives and pharmaceutical compounds) present in skincare products protecting against the sun.

#### Fragrance (F-1000) p. 67



This series is a selection of haptens (fragrances) found in perfumes, scented products, cleaning products and beauty products among others.

#### Hairdressing (H-1000) p. 68



This series is a selection of haptens that hairdressing professionals are exposed to. These haptens include coloring agents, stabilizers, metals and preservatives.

#### Implant (IMP-1000) p. 70



This series contains haptens which are included in metal implants, bone cement and antibiotics which are all known to cause contact allergy.

#### Isocyanate (I-1000) p. 70



This series is a selection of haptens (primarily chemicals that are used as stabilizers or additives in plastics) that professionals working with isocvanates are exposed to.

## Leg Ulcer (LU-1000) p. 71



This series is a selection of haptens (substances used for their medical, preservative or formulative properties) which patients can be exposed to when being treated for leg ulcers.

## Medicament (ME-1000) p. 72



This series is a selection of haptens that healthcare professionals are exposed to when medicating antibiotics and topical pharmaceutical products.

## Metal (MET-1000) p. 73



This series is a selection of haptens (metals present in everyday objects such as jewelry, coins and tools) commonly causing contact allergy.

## Metal Extended (METE-1000) p. 74



This series is an extension to the Metal Series, providing alternate concentrations, vehicles and markers to metals found in the Metal Series.

## Hapten Series

### (Meth) Acrylate - Adhesives, Dental, Printing & Other (MA-1000) p. 74



This series is a selection of haptens that professionals working with acrylates in adhesives (primarily in the dental field) are exposed to.

### (Meth) Acrylate - Nails Artificial Series (MN-1000) p. 75



This series is a selection of haptens (plastics and acrylates) found in artificial nails and products relating to the adhesion of artificial nails.

#### Oil & Cooling Fluid (O-1000) p. 76



This series is a selection of haptens (primarily stabilizers and preservatives) that professionals working with mechanical fluids are exposed to.

#### Plant (PL-1000) p. 77



This series is a selection of haptens (plant extracts) that outside their natural environment commonly are found in "natural / organic" beauty products.

#### Plastic & Glue (PG-1000) p. 78



This series is a selection of haptens (stabilizers, plastics, phthalates, preservatives and bactericides) that professionals working with plastics are exposed to.

## Rubber Additive (R-1000) p. 78



This series is a selection of haptens (stabilizers, antioxidants, preservatives and bactericides) that professionals working with rubber are exposed to.

## Shoe (SH-1000) p. 79



This series is a selection of haptens (tanning materials, coloring agents and preservatives/bactericides) that are found in shoes and in the shoe manufacturing industry.

## Sunscreen (SU-1000) p. 80



This series is a selection of haptens (UV-blockers) found in skincare products that protect against the sun.

## Textile Colors & Finish (TF-1000) p. 81



This series is a selection of haptens (primarily coloring agents and bactericides) found in textiles and clothes.

## **Patch Test Instructions**











## **Patch Test Instructions**



Remove Patch Test Haptens from refrigeration.



Insert IQ Ultimate™ or IQ Ultra™ Patch Test Unit into the Application Device.



Break the perforation of a preferred corner by folding the corner downwards and upwards.



Grip the tape by the detached corner and pull back gently until all chambers are revealed. Do not completely remove the tape from the protective cover.



Depress the clip on the **Application Device** and slide the tape underneath





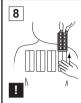
Apply hapten in each patch test chamber starting with the 1st hapten of the series in the corresponding chamber. The recommended dose is  $25 \,\mu l^*$ .



Depress the clip and carefully detach the Patch Test Unit. Remove the Patch Test Unit from the **Application Device.** 



Put haptens (and Patch Test Units if preloading) back in fridge. ! Preloaded Patch Test Units can be stored for < 2 weeks if stored in air tight bags\*\*



Position the Patch Test Unit by holding it by its protective cover and apply the tape onto the patient. Remove the plastic corner. Press your palm on the tape for **5 seconds** to enhance adhesion.

! Wipe the test site with ethanol before application to ensure good adhesion.



## IQ Ultimate™ only:

When all test units have been applied, remove the top-liners with a gentle diagonal motion.



Mark the 1<sup>st</sup> and the 5<sup>th</sup> chamber using a **Chemo Skin Marker**<sup>™</sup>. ! Register the sites location in a **Patch test record form.**\*\*\*



#### After 48 hours:

Remove the Patch Test Units with a gentle diagonal motion to minimize patient discomfort.



\*\*\* Patch Test record forms are available at www.chemotechnique.se

 <sup>25</sup> µl equals approximately to a 5 mm string of petrolatum or a single drop of liquid.
 \*\* Volatile haptens may never be preloaded.

## Featured topics



## **Introducing the Implant Series**

Chemotechnique proudly presents our latest Screening Series addition - the Implant Series (IMP-1000).

The Implant Series contains chemicals and substances which are included in implants. The implant Series is based on comprehensive scientific research and recommendations from various research groups and consists of haptens found in metal implants, bone cement and antibiotics, which are all known to cause contact allergy.

See the series composition on p.69



## **Meet the Patch Tester**

The Patch Tester, our quarterly e-magazine highlighting the most recent findings and advancements in the field of patch testing, has turned two years old!

Our motivation in creating the Patch Tester was to provide an outlet not only for the patch testing MD, but for everyone with an interest in patch testing; doctors, nurses and patients alike with the goal of presenting the latest hot topics in patch testing in an accessible format.

The Patch Tester is available free of charge and can be read at www.patchtester.com.

## Something on your mind?

If you would like to contribute to the Patch Tester, please contact david.niklasson@chemotechnique.se.

## Clinical information

#### **Patch Testing**

Patch testing involves a number of scheduled patient appointments within a one-week time-frame. After the test application on Day 0, two or three appointments are needed for readings.

#### Patch test mode of action

For topical use only. The patch test procedure is an epicutaneous diagnostic provocation test using standardized haptens ("Topical Haptens"). Haptens are typically small, chemically reactive molecules with low molecular weight that, when bound to skin protein, are able to elicit an immune response. Patch testing is performed by applying haptens into small chambers mounted on tape ("Patch Test Units") and placed onto the patient's skin. In sensitized individuals this immune response results in an allergic contact eczema confined to the application area of the chamber on the patient's skin (a positive patch test reaction).

#### **Indications**

Patch Testing is the standard procedure for aiding the diagnosis of Contact Allergy when Allergic Contact Dermatitis (ACD) resulting from type IV hypersensitivity is suspected. **The indication is to test all patients in whom contact allergy is suspected** or needs to be ruled out, regardless of age or anatomical site of dermatitis.

Indications also include conditions that may mimic a contact allergic reaction and needs to be ruled out, such as:

- Erythema multiforme-like
- Lichen planus-like
- Psoriasis of the hands
- Granulomatous or lymphomatoid reactions
- Worsening of pre-existing dermatitis (stasis, atopic or seborrhoeic dermatitis)
- Mucous membrane reactions (conjunctivitis, stomatitis, vulvitis)
- Discoid (nummulár) eczema
- Implant reactions
- · impiant reactions
- Certain drug eruptions

### Series composition

Chemotechnique MB Diagnostics AB, in presenting the various Screening Series in this Reference Manual, does its best to include compounds associated with each field based on current technical, occupational and scientific information, however, each Series should not be considered as all inclusive with compounds associated with each field.

#### Contraindications



**Do not** apply Patch Test Hapten (hereinafter referred to as "haptens") on patients undergoing cortisone treatment or taking other medication altering the immune system such as immunosuppressive treatment.

**Do not** apply hapten on a patient with a known history of severe allergic reaction (local or systemic) to the hapten in question, on patients with severe or generalized active dermatitis or on patients with excited skin syndrome. **Do not** apply hapten on unhealthy or injured skin or on a test area recently exposed to ultraviolet radiation (UV).

**Do not** apply hapten on patients with dermatitis on the upper back area aimed for the application of patch tests or on test sites recently treated with topical corticosteroids; wait at least 1 week after treatment.

Pregnancy and lactation may be a conditional contraindication as there are no data on the safety of the test for the mother and child.

#### **Precautions**

### Haptens:



- **Do** advise patient to protect the Patch Test Units from sunlight (UV radiation) during ongoing patch testing.
- Do consider priming each hapten contained in a syringe.
   Priming is done by discarding a single dose from the tip of the syringe and thereby possible evaporation/degradation of the active compound is avoided. If applications are done in a sequence, there is no need to prime before each new application.
- **Do** apply a recommended dose of 25 µl of hapten into the **IQ Ultra**<sup>™</sup> / **IQ Ultimate** <sup>™</sup> patch test chambers (25 µl equals to approximately a 5 mm string of petrolatum or a single drop of liquid).
- Do remember to put on the protective caps after each application.



 Do not switch protective caps between syringes. This may lead to contamination of the hapten applied onto the patch test chamber.

## Clinical information

#### Volatile Hapten preparations (Fragrances and Acrylates) only:



- **Do not** preload volatile haptens. Apply hapten preparation into patch test chamber directly before application onto patient.
- Volatile haptens contained in syringes must be primed before application.

#### IQ Ultra™ / IQ Ultimate™:



Wiping the test site with ethanol before application is important will improve adhesion of the Patch Test Unit on patients with oily skin. For patients with very dry or oily skin,

additional reinforcing tape might be required. Consider clipping the hair on the test site before patch test application for hairy patients.



Exercise must be avoided during the patch test period.
 Additionally, water submersion and showers must be avoided if using the IQ Ultra™.

#### Patch test placement:

 Use the upper part of the patients back if possible. Avoid applying Patch Test Units to the midline and the scapula. Do not put any Patch Test Units under a brassiere shoulder band which can cause dislocation of the test units.

#### Reactions

#### Normal reactions:

- In sensitized patients, exposure to haptens during the patch testing procedure will normally result in a miniature eczema (normal patch test reaction).
- In addition to the visual imprints on the skin from each chamber, a slight erythema from the frames should be visible as a sign of good occlusion. The erythema generally subsides within 30 minutes after removal of the test units. The erythema may however prevail for up to 24h or more for patients with sensitive skin.
- Itching and burning may occur at the site of application of the Patch Test Units; it can either be caused by a positive patch test reaction or due to tape irritation.

#### Adverse reactions:

- A strong positive reaction may result in a flare-up of an existing, or sometimes a previous, dermatitis. Such flare-up reactions usually indicate that the responsible hapten is or has been, respectively, the cause of the dermatitis. In rare occasions, acute allergic reactions including anaphylaxis may occur. Sensitization by patch testing is a rare but potential complication of patch testing. It is regarded as a positive patch test reaction generally 2 weeks after an initially negative response at the same patch test site. Rarely localized transient hyperpigmentation or hypopigmentation may occur.
- A positive patch test reaction can rarely persist for up to several weeks
- Instruct patients to report any side effects.

#### Warnings

#### **Topical Haptens:**

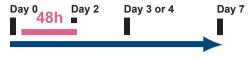
- For topical use only. Avoid contact with eyes. Use only on intact skin.
- IF SWALLOWED: Contact a Poison Control Center right away.
- ACUTE REACTIONS: Patients should be advised to seek immediate medical attention should they experience symptoms of acute allergic reaction after patch test application (trouble breathing or wheezing, a swollen tongue or throat, dizziness, fainting or altered pulse).

#### Patch test considerations:

- Patch testing for allergic contact dermatitis is a process involving 3 to 4 scheduled patient appointments within a one-week time-frame.
- The main reading should be performed within 48h of the removal of the Patch Test Units. A delayed response reading should be performed a full week after the initial test application for haptens that may show delayed reactions.

The reading criteria for morphologically positive patch test reactions defined by the **ICDRG** is widely acknowledged and used as a reference when diagnosing contact allergic reactions. The reading criteria are visualized on the **Reading Plate for IQ Ultra**™/**IQ Ultimate**™.

## Clinical information



Day 0: Patch test application Patch test removal

olication (start of 48h hapten occlusion)
oval (optional reading)

Day 3 or 4: Main reading

Day 7: Delayed response reading

#### Contents

#### **Topical Haptens:**

Topical Haptens are delivered as one or more types of hapten preparations contained in one of two different delivering devices.

Topical Haptens are either contained in:

- 1. Hapten Dispensing Devices ("HDD"s) consisting of one (1) HDD syringe body, one (1) HDD plunger and one (1) HDD protective cap.
- 2. Dropper bottles consisting of one (1) bottle body, one (1) eye dropper and one (1) protective screw cap.

#### IQ Ultra™ / IQ Ultimate™:

Patch Test Units are delivered in sets of hundreds (100) and consist of ten (10) patch test chambers mounted on adhesive backing tape protected by a protective plastic cover.

## Storage

## Topical Haptens:

Haptens must be stored protected from direct sunlight in a dry place refrigerated at 2-8°C. In rare occasions haptens (for instance P-038 and D-023B) must be stored frozen at ≤-18°C. Failure to store haptens as advised may affect the accuracy of the test results.

Please note that only haptens that are clearly marked may be stored at sub-zero temperatures.

IQ Ultra™ / IQ Ultimate™:

Patch Test Units must be stored dry at room temperature, protected from direct sunlight.

### **Expiry**

### **Topical Haptens:**

The expiry date is printed on the label of the hapten and use beyond this date is not recommended to ensure a valid performance.

IQ Ultra™ / IQ Ultimate™:

The expiry date of the Patch Test Units is printed on the box. **IQ Ultra™** and **IQ Ultimate™** Patch Test Units are single use products and may not be re-used.

#### **Disposal**

### **Topical Haptens:**

Emptied and cleaned Patch Test Hapten containers may be regarded as combustible waste and recycled following national regulations.

#### IQ Ultra™ / IQ Ultimate™:

Used patches should be folded with the sticky side inwards and disposed of following national regulations.

## Reading











- IR Irritant reaction
  - · Discrete patchy erythema without infiltration
- +++ Extreme positive reaction
- Coalescing vesicles
   Bullous or ulcerative reaction
- Strong positive reaction
- Erythema
   Infiltration
   Papules
   Discrete vesicles
- Weak positive reaction
- Erythema
   Infiltration
   Papules
- P+ Doubtful reaction
  - Faint macular No infiltration Homogenous erythema

#### How much does a syringe/bottle contain?



A syringe contains 5 ml of hapten preparation and a bottle contains 8 ml.

How many patients can be tested per syringe/bottle? Approximately 150 patients/syringe and bottle.

### Which volume should I dispense onto each patch test chamber?



The recommended dose is 25 µl. When applying haptens in petrolatum, dispense a 5 mm string into the IQ Patch Test Chamber (this corresponds to approximately 25 µl or 20 mg). For liquid haptens, the same amount (20-25 µl) is

produced by applying a single drop. Using a micropipette is however preferred.

#### Why are some hapten names written in CAPITAL letters?

Haptens names written in CAPITAL letters indicate that they are **INCI\*** names. The use of INCI names facilitates detection of haptens in cosmetic products.

## For how long time can I store a preloaded Patch Test Unit?



Non-volatile haptens can be preloaded for up to two weeks. Preloaded Patch Tests Units must be stored refrigerated in air tight bags. Volatile substances (acrylates and fragrances) and liquid haptens can not be preloaded.

## Is there any way to improve adhesion of the Patch Test Units?



The Chemotechnique Patch Test Units have excellent adhesive properties if applied correctly.

Make sure to always put pressure on the applied test unit with the palm of your hand for at least

**5 seconds.** The heat and pressure will ensure good adhesion.

## How long is the shelf life of the haptens?



The shelf life of a hapten depend on its composition. The shelf life is generally between **12-30 months** for petrolatum based haptens, and **6-12 months** for haptens based on agua or ethanol.

The expiration date is clearly marked on the label of each hapten.

# **Compostion of International Baseline Series**

PO NOT | Volatile hapten, not recommended for preloading

- <sup>1</sup> Also present in European Baseline Series
- <sup>2</sup> Emulsifier: SORBITAN SESQUIOLEATE 5%
- <sup>3</sup> Emulsifier: SORBITAN SESQUIOLEATE 1%
- <sup>4</sup> Emulsifier: SORBITAN SESQUIOLEATE 2%
- <sup>5</sup> Contains DECYL GLUCOSIDE
- <sup>6</sup> Present in national series. Visit www.chemotechnique.se for further information.
- <sup>EC</sup> Directive 2003/15/EC relating to cosmetic products

## **European Baseline Series** S-1000

1. 2. 3.	Potassium dichromate p-PHENYLENEDIAMINE (PPD) Thiuram mix -Dipentamethylenethiuram disulfide (D-019) -Tetraethylthiuram disulfide (TETD) (T-002) -Tetramethylthiuram disulfide (TMTD) (T-005) -Tetramethylthiuram monosulfide (TMTM) (T-006)	0.5 1.0 1.0 0.25 0.25 0.25	pet pet pet	P-014A P-006 Mx-01
4.	Neomycin sulfate	20.0	net	N-001
5.	Cobalt(II)chloride hexahydrate	1.0	•	C-017A
6.	Caine mix III	10.0	•	Mx-19
	-Benzocaine (B-004)	5.0	•	
	-Dibucaine hydrochloride (D-005)	2.5		
	-Tetracaine hydrochloride (T-025)	2.5		
7.	Nickel(II)sulfate hexahydrate	5.0	pet	N-002A
8.	2-Hydroxyethyl methacrylate PONOT	2.0	pet	H-010
9.	COLOPHONIUM	20.0	•	C-020
10.	Paraben mix	16.0	pet	Mx-03C
	-BUTYLPARABEN (B-020)	4.0		
	-ETHYLPARABEN (E-010)	4.0		
	-METHYLPARABEN (M-012)	4.0		
	-PROPYLPARABEN (P-020)	4.0		1.004
11.	N-Isopropyl-N-phenyl-4-phenylenediamine (IPPD)	0.1	pet	I-004
12.	LANOLIN ALCOHOL	30.0	pet	W-001
13.	·	2.0	pet	Mx-05A
	-N-Cyclohexyl-2-benzothiazolylsulfenamide	0.5		
	(C-023)			22

32 (C-023)

<sup>\*</sup> INCI: International Nomenclature of Cosmetic Ingredients

	Compound	Conc. Veh. %(w/w)	Art. No.		Compound	Conc.	Veh. /w)	Art. No.
	-Dibenzothiazyl disulfide (MBTS) (D-003)	0.5			-Diperse Blue 35 (D-027)	1.0	•	
	-2-Mercaptobenzothiazole (MBT) (M-003)	0.5			-Diperse Orange 1 (D-031)	1.0		
	-2-(4-Morpholinylmercapto)benzothiazol	0.5			-DISPERSE ORANGE 3 (D-032)	1.0		
	(MOR) (M-016)				-Disperse Red 1 (D-034)	1.0		
14.	Epoxy resin, Bisphenol A	1.0 pet	E-002		-DISPERSE RED 17 (D-035)	1.0		
15.	Peru balsam² PRELOAD	25.0 pet	B-001		-Disperse Yellow 3 (D-036)	1.0		
16.	4-tert-Butylphenolformaldehyde resin (PTBP)	) 1.0 pet	B-024		-Disperse Blue 106 (D-040)	0.3		
17.	2-Mercaptobenzothiazole (MBT)	2.0 pet	M-003A		-Disperse Blue 124 (D-041)	0.3		
18.	FORMALDEHYDE DO NOT PRELOAD	2.0 aq	F-002B		. , ,	sed C	ctobe	er 2018
19.	Fragrance mix 1 <sup>2</sup> POR NOT	8.0 pet	Mx-07	F11	ropean Comprehensive			
	-AMYL CINNAMAL (A-014)	1.0					ECI	D 1000
	-CINNAMYL ALCOHOL (C-013) PO NOT RELOAD	1.0		Da	seline Series		ECI	B <b>-1</b> 000
	-CINNAMAL (C-014) PO NOT PRELOAD	1.0						
	-EUGENOL (E-016) PRELOAD	1.0		1.	Potassium dichromate <sup>1</sup>	0.5	pet	P-014A
	-GERANIOL (G-001) POR NOT	1.0		2.	p-PHENYLENEDIAMINE (PPD) <sup>1</sup>	1.0	pet	P-006
	-HYDROXYCITRONELLAL (H-008)	1.0		3.	Thiuram mix <sup>1</sup>		pet	Mx-01
	-ISOEUGENOL (I-002) PO NOT PRELOAD	1.0				0.25		
	-Oakmoss absolute (O-001) PRELOAD	1.0			-Tetraethylthiuram disulfide (TETD) (T-002)	0.25		
20.	Sesquiterpene lactone mix		Mx-18		-Tetramethylthiuram disulfide (TMTD) (T-005)			
	-Alantolactone (A-003)	0.033			-Tetramethylthiuram monosulfide (TMTM)	0.25		
	-Costunolide (C-039)	0.033			(T-006)			
	-Dehydrocostus lactone (D-056)	0.033		4.	Neomycin sulfate <sup>1</sup>	20.0	pet	N-001
	QUATERNIUM-15		C-007A	5.	Cobalt(II)chloride hexahydrate <sup>1</sup>	1.0		C-017A
	Propolis		P-022	6.	Caine mix III <sup>1</sup>	10.0	pet	Mx-19
23.	METHYLISOTHIAZOLINONE +	0.02 aq	C-009B		-Benzocaine (B-004)	5.0		
	METHYLCHLOROISOTHIAZOLINONE				-Dibucaine hydrochloride (D-005)	2.5		
	Budesonide	0.01 pet	B-033B		-Tetracaine hydrochloride (T-025)	2.5		
	Tixocortol-21-pivalate	•	T-031B	7.	Nickel(II)sulfate hexahydrate <sup>1</sup>	5.0	pet	N-002A
	METHYLDIBROMO GLUTARONITRILE	0.5 pet	D-049E	8.	2-Hydroxyethyl methacrylate <sup>1</sup> PRINT	2.0	pet	H-010
27.	Fragrance mix II POR NOT	14.0 pet	Mx-25	9.	COLOPHONIUM <sup>1</sup>	20.0		C-020
	-Hexyl cinnamic aldehyde (H-025)	5.0		10.	Paraben mix <sup>1</sup>	16.0	pet	Mx-03C
	-COUMARIN (C-038)	2.5			-BUTYLPARABEN (B-020)	4.0		
	-FARNESOL (F-004)	2.5			-ETHYLPARABEN (E-010)	4.0		
	-HYDROXYISOHEXYL 3-CYCLOHEXENE	2.5			-METHYLPARABEN (M-012)	4.0		
	CARBOXALDEHYDE (L-003)				-PROPYLPARABEN (P-020)	4.0		
	-CITRAL (C-036)	1.0		11.	N-Isopropyl-N-phenyl-4-phenylenediamine	0.1	pet	I-004
	-CITRONELLOL (C-037) PRIORI	0.5			(IPPD)1			
28.	HYDROXYISOHEXYL 3-CYCLOHEXENE	5.0 pet	L-003		LANOLIN ALCOHOL <sup>1</sup>	30.0	•	W-001
00	CARBOXALDEHYDE	0.0	M 005D	13.	Mercapto mix <sup>1</sup>	2.0	pet	Mx-05A
	METHYLISOTHIAZOLINONE PROMI	0.2 aq	M-035B		-N-Cyclohexyl-2-benzothiazolylsulfenamide	0.5		
30.	Textile dye mix	6.6 pet	Mx-30		(C-023)	۰.		
					-Dibenzothiazyl disulfide (MBTS) (D-003)	0.5		
0.4								25

	Compound	Conc. Veh. %(w/w)	Art. No.		Compound	Conc. %(w/		Art. No.
	-2-Mercaptobenzothiazole (MBT) (M-003) -2-(4-Morpholinylmercapto)benzothiazol	0.5 0.5			-Diperse Orange 1 (D-031) -DISPERSE ORANGE 3 (D-032)	1.0 1.0		
	(MOR) (M-016)				-Disperse Red 1 (D-034)	1.0		
	Epoxy resin, Bisphenol A1	1.0 pet	E-002		-DISPERSE RED 17 (D-035)	1.0		
	Peru balsam <sup>1,2</sup> PORELOAD	25.0 pet	B-001		-Disperse Yellow 3 (D-036)	1.0		
	4-tert-Butylphenolformaldehyde resin(PTBP)		B-024		-Disperse Blue 106 (D-040)	0.3		
	2-Mercaptobenzothiazole (MBT) <sup>1</sup>	2.0 pet	M-003A		-Disperse Blue 124 (D-041)	0.3		
	FORMALDEHYDE <sup>1</sup> PORNOT	2.0 aq	F-002B		SODIUM METABISULFITE	1.0	pet	S-011
19.	Fragrance mix I <sup>1,2</sup> PRIORI	8.0 pet	Mx-07		2-BROMO-2-NITROPROPANE-1,3-DIOL	0.5	pet	B-015B
	-AMYL CINNAMAL (A-014)	1.0			DIAZOLIDINYL UREA	2.0	pet	D-044A
	-CINNAMYL ALCOHOL (C-013) RENOT	1.0			IMIDAZOLIDINYL UREA	2.0	pet	I-001A
	-CINNAMAL (C-014) PRINT	1.0		35.	Compositae mix II PRINT	2.5	pet	Mx-29B
	-EUGENOL (E-016) PRINCE	1.0			-Anthemis nobilis extract (C-029) PRINT	0.6		
	-GERANIOL (G-001) RENOT	1.0			-Chamomilla recutita extract (C-051) PROJECT	0.6		
	-HYDROXYCITRONELLAL (H-008)	1.0			-Achillea millefolium extract (A-025)	0.5		
	-ISOEUGENOL (I-002) PRINT	1.0			-Tanacetum vulgare extract (T-033) PRINT	0.5		
00	-Oakmoss absolute (O-001) RECO	1.0	M-: 40		-Arnica montana extract (A-024) RECO	0.25		
20.	Sesquiterpene lactone mix <sup>1</sup>	0.1 pet	Mx-18	26	-Parthenolide (P-029)	0.05	not	LI 024A
	-Alantolactone (A-003)	0.033			Hydroperoxides of Linalool	1.0	•	H-031A
	-Costunolide (C-039) -Dehydrocostus lactone (D-056)	0.033 0.033			Hydroperoxides of Linalool RENT Hydroperoxides of Limonene	0.5		H-031B H-032A
21	QUATERNIUM-15 <sup>1</sup>	1.0 pet	C-007A		Hydroperoxides of Limonene PORTON	0.3	pet	H-032B
	Propolis <sup>1</sup>	1.0 pet	P-022		BENZISOTHIAZOLINONE	0.2	pet	B-003B
	METHYLISOTHIAZOLINONE +	0.02 aq	C-009B		2-n-Octyl-4-isothiazolin-3-one	0.1	pet	O-003B
25.	METHYLCHLOROISOTHIAZOLINONE <sup>1</sup>		C-009D		DECYL GLUCOSIDE PRELOAD	5.0	pet	D-065
2/	Budesonide <sup>1</sup>	0.01 pet	B-033B		LAURYL POLYGLUCOSE PRENOT			L-004
	Tixocortol-21-pivalate <sup>1</sup>	0.01 pet	T-031B	40.				ber 2018
	METHYLDIBROMO GLUTARONITRILE <sup>1</sup>	0.5 pet	D-049E		TCVI.	ocu iv	IOVCII	1001 2010
	Fragrance mix II <sup>1</sup> PRILOAD	14.0 pet	Mx-25	In	ternational Standard Series		IS-	1000
	-Hexyl cinnamic aldehyde (H-025)	5.0						
	-COUMARIN (C-038)	2.5		1.	Potassium dichromate <sup>1</sup>	0.5	pet	P-014A
	-FARNESOL (F-004)	2.5		2.	Neomycin sulfate <sup>1</sup>	20.0	pet	N-001
	-HYDROXYISOHEXYL 3-CYCLOHEXENE	2.5		3.	Thiuram mix <sup>1</sup>	1.0	pet	Mx-01
	CARBOXALDEHYDE (L-003)				-Dipentamethylenethiuram disulfide (D-019)	0.25		
	-CITRAL (C-036)	1.0			-Tetraethylthiuram disulfide (TETD) (T-002)	0.25		
	-CITRONELLOL (C-037) PRINT	0.5			-Tetramethylthiuram disulfide (TMTD) (T-005)			
28.	HYDROXYISOHEXYL 3-CYCLOHEXENE	5.0 pet	L-003		-Tetramethylthiuram monosulfide (TMTM)	0.25		
00	CARBOXALDEHYDE <sup>1</sup>	0.0	M 005D		(T-006)			
	METHYLISOTHIAZOLINONE <sup>1</sup> PRINCE	0.2 aq	M-035B	4.	p-PHENYLENEDIAMINE (PPD) <sup>1</sup>	1.0	pet	P-006
30.	Textile dye mix <sup>1</sup>	6.6 pet	Mx-30	5.	FORMALDEHYDE <sup>1</sup> PO NOT PRELOAD	2.0		F-002B
	-Diperse Blue 35 (D-027)	1.0		6.	COLOPHONIUM <sup>1</sup>	20.0	pet	C-020

	Compound	Conc. \ %(w/v		Art. No.		Compound	Conc %(w		Art. No.
7.	Peru balsam <sup>1,2</sup> POR NOT PRELOAD	25.0	pet	B-001		-Zinc diethyldithiocarbamate (ZDC) (Z-003)	1.0		
8.	LANOLIN ALCOHOL <sup>1</sup>	30.0	pet	W-001		Cobalt(II)chloride hexahydrate <sup>1</sup>	1.0	pet	C-017A
9.	Mercapto mix <sup>1</sup>	3.5 <sub>I</sub>	pet	Mx-05C	23.	Compositae mix II PRENOTI	5.0	pet	Mx-29A
	-N-Cyclohexyl-2-benzothiazolylsulfenamide (C-023)	0.5				-Anthemis nobilis extract (C-029) Chamomilla recutita extract (C-051)	1.2 1.2		
	-Dibenzothiazyl disulfide (MBTS) (D-003)	0.5				-Achillea millefolium extract (A-025)	1.0		
	-2-Mercaptobenzothiazole (MBT) (M-003)	2.0				-Tanacetum vulgare extract (T-033)	1.0		
	-2-(4-Morpholinylmercapto)benzothiazol	0.5				-Arnica montana extract (A-024) RELOAD	0.5		
	(MOR) (M-016)					-Parthenolide (P-029)	0.1		
	Epoxy resin, Bisphenol A <sup>1</sup>			E-002	24.	DIAZOLIDINYL UREA	2.0	pet	D-044A
	4-tert-Butylphenolformaldehyde resin (PTBP)			B-024	25.	Fragrance mix II <sup>1</sup> PRILOZD	14.0	pet	Mx-25
12.	Fragrance mix I <sup>1,2</sup> PRELOAD		pet	Mx-07		-Hexyl cinnamic aldehyde (H-025)	5.0		
	-AMYL CINNAMAL (A-014)	1.0				-COUMARIN (C-038)	2.5		
	-CINNAMYL ALCOHOL (C-013) PRINT	1.0				-FARNESOL (F-004)	2.5		
	-CINNAMAL (C-014) POR NOT	1.0				-HYDROXYISOHEXYL 3-CYCLOHEXENE	2.5		
	-EUGENOL (E-016) PRINCE	1.0				CARBOXALDEHYDE (L-003)			
	-GERANIOL (G-001) PRICATI	1.0				-CITRAL (C-036)	1.0		
	-HYDROXYCITRONELLAL (H-008)	1.0			00	-CITRONELLOL (C-037) REMO	0.5		D 005
	-ISOEUGENOL (I-002) PRINT	1.0				Phenol formaldehyde resin (PFR2) PRINTERS AND	1.0	pet	P-005
40	-Oakmoss absolute (O-001)	1.0		NI OOOD	27.	HYDROXYISOHEXYL 3-CYCLOHEXENE	5.0	pet	L-003
	Nickel(II)sulfate hexahydrate			N-002B	00	CARBOXALDEHYDE <sup>1</sup>			
14.	Textile dye mix		pet	Mx-30	28.	N-Isopropyl-N-phenyl-4-phenylenediamine	0.1	pet	I-004
	-Diperse Blue 35 (D-027)	1.0			00	(IPPD) <sup>1</sup>	40.0	4	NA: 000
	-Diperse Orange 1 (D-031)	1.0			29.	Paraben mix <sup>1</sup>		pet	Mx-03C
	-DISPERSE ORANGE 3 (D-032)	1.0				-BUTYLPARABEN (B-020)	4.0		
	-Disperse Red 1 (D-034)	1.0 1.0				-ETHYLPARABEN (E-010)	4.0		
	-DISPERSE RED 17 (D-035) -Disperse Yellow 3 (D-036)	1.0				-METHYLPARABEN (M-012) -PROPYLPARABEN (P-020)	4.0 4.0		
	-Disperse Reliow 3 (D-030) -Disperse Blue 106 (D-040)	0.3			20	Sesquiterpene lactone mix <sup>1</sup>		not	Mv 10
	-Disperse Blue 100 (D-040) -Disperse Blue 124 (D-041)	0.3			30.	-Alantolactone (A-003)	0.1	pet	Mx-18
15	Budesonide <sup>1</sup>		not	B-033B		-Costunolide (C-039)	0.03		
	QUATERNIUM-15			C-007B		-Dehydrocostus lactone (D-056)	0.03		
	METHYLISOTHIAZOLINONE +	0.215		C-007B		•	0.03	3	
17.	METHYLCHLORO-ISOTHIAZOLINONE		ач	C-009L	Rev	ised January 2021			
18	IMIDAZOLIDINYL UREA PRIORI		pet	I-001A					
	Tixocortol-21-pivalate <sup>1</sup>			T-031B					
	METHYLDIBROMO GLUTARONITRILE			D-049A					
	Carba mix			Mx-06					
<u>-</u> 1.	-1,3-Diphenylguanidine (D-022)	1.0	701						
	-ZINC DIBUTYLDITHIOCARBAMATE	1.0							
	(ZBC) (Z-002)								
	( / (- <b> /</b> )								

	Compound	Conc. Veh. %(w/w)	Art. No.		Compound	Conc. Veh. %(w/w)	Art. No.
In	ternational Comprehensive	•			Bacitracin	20.0 pet	
	seline Series		B <b>-1</b> 000	24.	Mixed dialkyl thiourea	1.0 pet	Mx-24
	iscille selles	10.			-N,N'-Dibutylthiourea (D-038)	0.5	
1	Benzocaine	5.0 pet	B-004	25	-N,N'-Diethylthiourea (D-039) DISPERSE ORANGE 3	0.5 1.0 pet	D-032
1. 2.	2-Mercaptobenzothiazole (MBT)	5.0 pet 1.0 pet	M-003B		Paraben mix	1.0 pet 12.0 pet	
3.	COLOPHONIUM <sup>1</sup>	20.0 pet	C-020	20.	-BUTYLPARABEN (B-020)	3.0 per	IVIX-USA
4.	p-PHENYLENEDIAMINE (PPD) <sup>1</sup>	1.0 pet	P-006		-ETHYLPARABEN (E-010)	3.0	
5.	IMIDAZOLIDINYL UREA	2.0 pet	I-001A		-METHYLPARABEN (M-012)	3.0	
6.	CINNAMAL PRIORI	1.0 pet	C-014		-PROPYLPARABEN (P-020)	3.0	
7.	Amerchol L-101	50.0 pet	A-004	27.	METHYLDIBROMO GLUTARONITRILE <sup>1</sup>	0.5 pet	D-049E
8.	Carba mix	3.0 pet	Mx-06		Fragrance mix I <sup>1,2</sup> RENOTE	8.0 pet	
	-1,3-Diphenylguanidine (D-022)	1.0			-AMYL CINNAMAL (A-014)	1.0	
	-ZINC DIBUTYLDITHIOCARBAMATE	1.0			-CINNAMYL ALCOHOL (C-013) RENSSI	1.0	
	(ZBC) (Z-002)				-CINNAMAL (C-014) PONOT	1.0	
	-Zinc diethyldithiocarbamate (ZDC) (Z-003)	1.0			-EUGENOL (E-016) PO NOT PRELOAD	1.0	
9.	Neomycin sulfate¹	20.0 pet	N-001		-GERANIOL (G-001) PO NOTI	1.0	
10.	Thiuram mix <sup>1</sup>	1.0 pet	Mx-01		-HYDROXYCITRONELLAL (H-008)	1.0	
	-Dipentamethylenethiuram disulfide (D-019)				-ISOEUGENOL (I-002) PRELOZI	1.0	
	-Tetraethylthiuram disulfide (TETD) (T-002)	0.25			-Oakmoss absolute (O-001) RENOT	1.0	
	-Tetramethylthiuram disulfide (TMTD) (T-005				GLUTARAL <sup>2</sup> PORELOAD	0.5 pet	
	-Tetramethylthiuram monosulfide (TMTM)	0.25			2-BROMO-2-NITROPROPANE-1,3-DIOL	0.5 pet	
	(T-006)			31.	Sesquiterpene lactone mix <sup>1</sup>	0.1 pet	Mx-18
	Clobetasol-17-propionate	1.0 pet	C-028		-Alantolactone (A-003)	0.033	
	Ethylenediamine dihydrochloride	1.0 pet	E-005		-Costunolide (C-039)	0.033	
	Epoxy resin, Bisphenol A <sup>1</sup>	1.0 pet	E-002	00	-Dehydrocostus lactone (D-056)	0.033	T 007
	QUATERNIUM-15 <sup>1</sup>	2.0 pet	C-007B		THIMEROSAL	0.1 pet	
	4-tert-Butylphenolformaldehyde resin (PTBP)		B-024		Propolis <sup>1</sup>	10.0 pet	
10.	Mercapto mix	1.0 pet	Mx-05B		BENZOPHENONE-3	10.0 pet	
	-N-Cyclohexyl-2-benzothiazolylsulfenamide	e 0.25			CHLOROXYLENOL (PCMX)	1.0 pet	
	(C-023) -Dibenzothiazyl disulfide (MBTS) (D-003)	0.25		30.	Ethyleneurea, melamine formaldehyde mix <sup>2</sup> PRIS -Dimethylol dihydroxy ethylene urea (D-012)		IVIX-10
	-2-Mercaptobenzothiazole (MBT) (M-003)				-Melamine formaldehyde (M-001) PRELOTE -Melamine formaldehyde (M-001) - Melamine formaldehydeh	1.0	
	-2-(4-Morpholinylmercapto)benzothiazol	0.25		37	2-tert-Butyl-4-methoxyphenol (BHA)	2.0 pet	B-022
	(MOR) (M-016)	0.20			Gold(I)sodium thiosulfate dihydrate	0.5 pet	
17	1,3-Diphenylguanidine	1.0 pet	D-022		Ethyl acrylate RM	0.0 pet	
	Potassium dichromate	0.25 pet	P-014B		GLYCERYL THIOGLYCOLATE	1.0 pet	
	Peru balsam <sup>1,2</sup> Perusam	25.0 pet	B-001		Toluenesulfonamide formaldehyde resin	10.0 pet	
	Nickel(II)sulfate hexahydrate	2.5 pet	N-002B		Methyl methacrylate RENT	2.0 pet	
	DIAZOLIDINYL UREA	1.0 pet	D-044C		Cobalt(II)chloride hexahydrate <sup>1</sup>	1.0 pet	
	TOCOPHEROL PRIORI	100	T-036		Tixocortol-21-pivalate	1.0 pet	
					1	- 1	

	Compound	Conc. Vel %(w/w)	. Art. No.		Compound	Conc. Veh. %(w/w)	Art. No.
45.	Budesonide	0.1 pe	t B-033A		-Achillea millefolium extract (A-025) PRILOGI	1.0	
46.	COCAMIDE DEA	0.5 pe	t C-019		-Tanacetum vulgare extract (T-033)	1.0	
47.	TRIETHANOLAMINE	2.0 pe	t T-016		-Arnica montana extract (A-024) RENSE	0.5	
48.	Textile dye mix <sup>1</sup>	6.6 pe	t Mx-30		-Parthenolide (P-029)	0.1	
	-Diperse Blue 35 (D-027)	1.0		67.	Lidocaine	15.0 pet	L-002B
	-Diperse Orange 1 (D-031)	1.0		68.	Fusidic acid sodium salt	2.0 pet	F-003
	-DISPERSE ORANGE 3 (D-032)	1.0		69.	Dibucaine hydrochloride	2.5 pet	D-005B
	-Disperse Red 1 (D-034)	1.0		70.	Benzoylperoxide	1.0 pet	B-007
	-DISPERSE RED 17 (D-035)	1.0		71.	ISOAMYL p-METHOXYCINNAMATE	10.0 pet	I-009
	-Disperse Yellow 3 (D-036)	1.0		72.	HYDROXYISOHEXYL 3-CYCLOHEXENE	5.0 pet	L-003
	-Disperse Blue 106 (D-040)	0.3			CARBOXALDEHYDE1		
	-Disperse Blue 124 (D-041)	0.3		73.	ETHYLHEXYL SALICYLATE	5.0 pet	O-007A
49.	Tea tree oil oxidized PONOT	5.0 pe	t T-035B	74.	Hydroperoxides of Linalool POR NOT PRELOAD	1.0 pet	H-031A
50.	Fragrance mix II <sup>1</sup> PRO NOTI	14.0 pe	t Mx-25	75.	Amidoamine PREDATE	0.1 aq	A-029
	-Hexyl cinnamic aldehyde (H-025)	5.0		76.	COCAMIDOPROPYL BETAINE PRELOAD	1.0 aq	C-018
	-COUMARIN (C-038)	2.5		77.	FORMALDEHYDE1 DO NOT PRELOAD	2.0 aq	F-002B
	-FARNESOL (F-004)	2.5		78.	METHYLISOTHIAZOLINONE +	0.02 aq	C-009B
	-HYDROXYISOHEXYL 3-CYCLOHEXENE	2.5			METHYLCHLOROISOTHIAZOLINONE <sup>1</sup> 🖼	NOT	
	CARBOXALDEHYDE (L-003)			79.	PROPYLENE GLYCOL PO NOT PRELOAD	30.0 aq	P-019B
	-CITRAL (C-036)	1.0		80.	OLEAMIDOPROPYL DIMETHYLAMINE		O-005
	-CITRONELLOL (C-037) PO NOT	0.5			Revi	ised Janu	ary 2018
	D: V-II 0						
	Disperse Yellow 3	1.0 pe					
52.	BENZYL SALICYLATE	10.0 pe	t B-010B	La	ntin American Baseline Seri	es LA	-1000
52. 53.	BENZYL SALICYLATE DECYL GLUCOSIDE <sup>4</sup> PRIORI	10.0 pe 5.0 pe	t B-010B t D-065	La	ntin American Baseline Seri	es LA	-1000
52. 53. 54.	BENZYL SALICYLATE DECYL GLUCOSIDE <sup>4</sup> REMU METHYLISOTHIAZOLINONE <sup>1</sup> REMU	10.0 pe 5.0 pe 0.2 aq	t B-010B t D-065 M-035B	<u>L</u> á	atin American Baseline Seri		<b>-1000</b> P-014A
52. 53. 54. 55.	BENZYL SALICYLATE DECYL GLUCOSIDE <sup>4</sup> RENTE METHYLISOTHIAZOLINONE <sup>1</sup> RENTE 2-Hydroxyethyl methacrylate <sup>1</sup> RENTE	10.0 pe 5.0 pe 0.2 aq 2.0 pe	t B-010B t D-065 M-035B t H-010	1.	Potassium dichromate <sup>1</sup>		P-014A
52. 53. 54. 55. 56.	BENZYL SALICYLATE DECYL GLUCOSIDE <sup>4</sup> MEM METHYLISOTHIAZOLINONE <sup>1</sup> MEM 2-Hydroxyethyl methacrylate <sup>1</sup> MEM DMDM HYDANTOIN <sup>3</sup> MEM	10.0 pe 5.0 pe 0.2 aq 2.0 pe 1.0 pe	t B-010B t D-065 M-035B t H-010 t D-047B			0.5 pet	
52. 53. 54. 55. 56. 57.	BENZYL SALICYLATE DECYL GLUCOSIDE <sup>4</sup> MMM METHYLISOTHIAZOLINONE <sup>1</sup> MMM 2-Hydroxyethyl methacrylate <sup>1</sup> MMM DMDM HYDANTOIN <sup>3</sup> MMM Ylang ylang oil MMM	10.0 pe 5.0 pe 0.2 aq 2.0 pe 1.0 pe 2.0 pe	t B-010B t D-065 M-035B t H-010 t D-047B t Y-001	1. 2.	Potassium dichromate¹ p-PHENYLENEDIAMINE (PPD)¹ Thiuram mix¹	0.5 pet 1.0 pet 1.0 pet	P-014A P-006
52. 53. 54. 55. 56. 57. 58.	BENZYL SALICYLATE DECYL GLUCOSIDE <sup>4</sup> MANN METHYLISOTHIAZOLINONE <sup>1</sup> MANN 2-Hydroxyethyl methacrylate <sup>1</sup> MANN DMDM HYDANTOIN <sup>3</sup> MANN Ylang ylang oil MANN BENZYL ALCOHOL MANN	10.0 pe 5.0 pe 0.2 aq 2.0 pe 1.0 pe 2.0 pe 10.0 so	t B-010B t D-065 M-035B t H-010 t D-047B t Y-001 f B-008B	1. 2.	Potassium dichromate¹ p-PHENYLENEDIAMINE (PPD)¹	0.5 pet 1.0 pet 1.0 pet	P-014A P-006
52. 53. 54. 55. 56. 57. 58. 59.	BENZYL SALICYLATE DECYL GLUCOSIDE <sup>4</sup> MEM METHYLISOTHIAZOLINONE <sup>1</sup> MEM 2-Hydroxyethyl methacrylate <sup>1</sup> MEM DMDM HYDANTOIN <sup>3</sup> MEM Ylang ylang oil MEM BENZYL ALCOHOL MEM ISOPROPYL MYRISTATE	10.0 pe 5.0 pe 0.2 aq 2.0 pe 1.0 pe 2.0 pe 10.0 so 20.0 pe	t B-010B t D-065 M-035B t H-010 t D-047B t Y-001 f B-008B t I-003	1. 2.	Potassium dichromate¹ p-PHENYLENEDIAMINE (PPD)¹ Thiuram mix¹ -Dipentamethylenethiuram disulfide (D-019) -Tetraethylthiuram disulfide (TETD) (T-002)	0.5 pet 1.0 pet 1.0 pet 0.25 0.25	P-014A P-006
52. 53. 54. 55. 56. 57. 58. 59.	BENZYL SALICYLATE DECYL GLUCOSIDE <sup>4</sup> MEM METHYLISOTHIAZOLINONE <sup>1</sup> MEM 2-Hydroxyethyl methacrylate <sup>1</sup> MEM DMDM HYDANTOIN <sup>3</sup> MEM Ylang ylang oil MEM BENZYL ALCOHOL MEM ISOPROPYL MYRISTATE Hydroperoxides of Limonene	10.0 pe 5.0 pe 0.2 aq 2.0 pe 1.0 pe 2.0 pe 10.0 so 20.0 pe 0.3 pe	t B-010B t D-065 M-035B t H-010 t D-047B t Y-001 f B-008B t I-003 t H-032A	1. 2.	Potassium dichromate¹ p-PHENYLENEDIAMINE (PPD)¹ Thiuram mix¹ -Dipentamethylenethiuram disulfide (D-019)	0.5 pet 1.0 pet 1.0 pet 0.25 0.25 0.25	P-014A P-006
52. 53. 54. 55. 56. 57. 58. 59. 60.	BENZYL SALICYLATE DECYL GLUCOSIDE <sup>4</sup> PROBLEM METHYLISOTHIAZOLINONE <sup>1</sup> PROBLEM 2-Hydroxyethyl methacrylate <sup>1</sup> PROBLEM DMDM HYDANTOIN <sup>3</sup> PROBLEM Ylang ylang oil PROBLEM BENZYL ALCOHOL PROBLEM ISOPROPYL MYRISTATE Hydroperoxides of Limonene PROBLEM Desoximetasone	10.0 pe 5.0 pe 0.2 aq 2.0 pe 1.0 pe 2.0 pe 10.0 so 20.0 pe 0.3 pe 1.0 pe	t B-010B t D-065 M-035B t H-010 t D-047B t Y-001 f B-008B t I-003 t H-032A t D-057	1. 2.	Potassium dichromate¹ p-PHENYLENEDIAMINE (PPD)¹ Thiuram mix¹ -Dipentamethylenethiuram disulfide (D-019) -Tetraethylthiuram disulfide (TETD) (T-002) -Tetramethylthiuram disulfide (TMTD) (T-005)	0.5 pet 1.0 pet 1.0 pet 0.25 0.25 0.25	P-014A P-006
52. 53. 54. 55. 56. 57. 58. 59. 60. 61.	BENZYL SALICYLATE DECYL GLUCOSIDE <sup>4</sup> PRODUCTOR STATE METHYLISOTHIAZOLINONE <sup>1</sup> PRODUCTOR STATE 2-Hydroxyethyl methacrylate <sup>1</sup> PRODUCTOR STATE DMDM HYDANTOIN <sup>3</sup> PRODUCTOR STATE Hydroperoxides of Limonene POLYSORBATE 80	10.0 pe 5.0 pe 0.2 aq 2.0 pe 1.0 pe 2.0 pe 10.0 so 20.0 pe 0.3 pe 1.0 pe 5.0 pe	t B-010B t D-065 M-035B t H-010 t D-047B t Y-001 f B-008B t I-003 t H-032A t D-057 t P-013	1. 2.	Potassium dichromate¹ p-PHENYLENEDIAMINE (PPD)¹ Thiuram mix¹ -Dipentamethylenethiuram disulfide (D-019) -Tetraethylthiuram disulfide (TETD) (T-002) -Tetramethylthiuram disulfide (TMTD) (T-005)	0.5 pet 1.0 pet 1.0 pet 0.25 0.25 0.25	P-014A P-006
52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62.	BENZYL SALICYLATE DECYL GLUCOSIDE <sup>4</sup> PRODUCTOR STATE METHYLISOTHIAZOLINONE <sup>1</sup> PRODUCTOR STATE 2-Hydroxyethyl methacrylate <sup>1</sup> PRODUCTOR STATE DMDM HYDANTOIN <sup>3</sup> PRODUCTOR STATE Hydroperoxides of Limonene POLYSORBATE 80 IODOPROPYNYL BUTYLCARBAMATE	10.0 pe 5.0 pe 0.2 aq 2.0 pe 1.0 pe 2.0 pe 10.0 so 20.0 pe 0.3 pe 1.0 pe 5.0 pe 0.2 pe	t B-010B t D-065 M-035B t H-010 t D-047B t Y-001 f B-008B t I-003 t H-032A t D-057 t P-013 t I-008C	1. 2. 3.	Potassium dichromate¹ p-PHENYLENEDIAMINE (PPD)¹ Thiuram mix¹ -Dipentamethylenethiuram disulfide (D-019) -Tetraethylthiuram disulfide (TETD) (T-002) -Tetramethylthiuram disulfide (TMTD) (T-005) -Tetramethylthiuram monosulfide (TMTM) (T-006)	0.5 pet 1.0 pet 1.0 pet 0.25 0.25 0.25 0.25	P-014A P-006 Mx-01
52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63.	BENZYL SALICYLATE DECYL GLUCOSIDE <sup>4</sup> PRODUCTOR STATE METHYLISOTHIAZOLINONE <sup>1</sup> PRODUCTOR STATE 2-Hydroxyethyl methacrylate <sup>1</sup> PRODUCTOR STATE DMDM HYDANTOIN <sup>3</sup> PRODUCTOR STATE Ylang ylang oil PRODUCTOR STATE BENZYL ALCOHOL PRODUCTOR STATE Hydroperoxides of Limonene PRODUCTOR STATE Desoximetasone POLYSORBATE 80 IODOPROPYNYL BUTYLCARBAMATE 2-n-Octyl-4-isothiazolin-3-one PRODUCTOR STATE BENZYL SALICYLATION STATE  METHYLISOTHIAZOLITION STATE  METHYLISO	10.0 pe 5.0 pe 0.2 aq 2.0 pe 1.0 pe 2.0 pe 10.0 so 20.0 pe 0.3 pe 1.0 pe 5.0 pe 0.2 pe 0.1 pe	t B-010B t D-065 M-035B t H-010 t D-047B t Y-001 f B-008B t I-003 t H-032A t D-057 t P-013 t I-008C t O-004	1. 2. 3.	Potassium dichromate¹ p-PHENYLENEDIAMINE (PPD)¹ Thiuram mix¹ -Dipentamethylenethiuram disulfide (D-019) -Tetraethylthiuram disulfide (TETD) (T-002) -Tetramethylthiuram disulfide (TMTD) (T-005) -Tetramethylthiuram monosulfide (TMTM) (T-006) Neomycin sulfate¹	0.5 pet 1.0 pet 1.0 pet 0.25 0.25 0.25 0.25 0.25 0.25	P-014A P-006 Mx-01
52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63.	BENZYL SALICYLATE DECYL GLUCOSIDE <sup>4</sup> PROD METHYLISOTHIAZOLINONE <sup>1</sup> PROD 2-Hydroxyethyl methacrylate <sup>1</sup> PROD DMDM HYDANTOIN <sup>3</sup> PROD Ylang ylang oil PROD BENZYL ALCOHOL PROD ISOPROPYL MYRISTATE Hydroperoxides of Limonene POLYSORBATE 80 IODOPROPYNYL BUTYLCARBAMATE 2-n-Octyl-4-isothiazolin-3-one PROD Disperse Blue mix 106/124	10.0 pe 5.0 pe 0.2 aq 2.0 pe 1.0 pe 2.0 pe 10.0 so 20.0 pe 0.3 pe 1.0 pe 5.0 pe 0.2 pe 0.1 pe 1.0 pe	t B-010B t D-065 M-035B t H-010 t D-047B t Y-001 f B-008B t I-003 t H-032A t D-057 t P-013 t I-008C t O-004	1. 2. 3.	Potassium dichromate¹ p-PHENYLENEDIAMINE (PPD)¹ Thiuram mix¹ -Dipentamethylenethiuram disulfide (D-019) -Tetraethylthiuram disulfide (TETD) (T-002) -Tetramethylthiuram disulfide (TMTD) (T-005) -Tetramethylthiuram monosulfide (TMTM) (T-006) Neomycin sulfate¹ Cobalt(II)chloride hexahydrate¹	0.5 pet 1.0 pet 1.0 pet 0.25 0.25 0.25 0.25 0.25 20.0 pet 1.0 pet	P-014A P-006 Mx-01 N-001 C-017A
52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63.	BENZYL SALICYLATE DECYL GLUCOSIDE <sup>4</sup> INITIAL METHYLISOTHIAZOLINONE <sup>1</sup> INITIAL 2-Hydroxyethyl methacrylate <sup>1</sup> INITIAL 2-Hydroxyethyl methacrylate <sup>1</sup> INITIAL 2-Hydroxyethyl methacrylate <sup>1</sup> INITIAL 2-Hydroxyethyl MYRISTATE Hydroperoxides of Limonene INITIAL 2-Hydroxyethyl MYRISTATE Hydroperoxides of Limonene INITIAL 2-n-Octyl-4-isothiazolin-3-one INITIAL 2-n-Octyl-4-isothiazolin-3-one INITIAL 2-Disperse Blue mix 106/124 -Disperse Blue 106 (D-040)	10.0 pe 5.0 pe 0.2 aq 2.0 pe 1.0 pe 2.0 pe 10.0 so 20.0 pe 0.3 pe 1.0 pe 5.0 pe 0.2 pe 0.1 pe 1.0 pe 0.5	t B-010B t D-065 M-035B t H-010 t D-047B t Y-001 f B-008B t I-003 t H-032A t D-057 t P-013 t I-008C t O-004	1. 2. 3.	Potassium dichromate¹ p-PHENYLENEDIAMINE (PPD)¹ Thiuram mix¹ -Dipentamethylenethiuram disulfide (D-019) -Tetraethylthiuram disulfide (TETD) (T-002) -Tetramethylthiuram disulfide (TMTD) (T-005) -Tetramethylthiuram monosulfide (TMTM) (T-006) Neomycin sulfate¹ Cobalt(II)chloride hexahydrate¹ Caine mix III¹	0.5 pet 1.0 pet 1.0 pet 0.25 0.25 0.25 0.25 0.25 20.0 pet 1.0 pet 10.0 pet	P-014A P-006 Mx-01 N-001 C-017A
52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64.	BENZYL SALICYLATE DECYL GLUCOSIDE <sup>4</sup> PRODUCTOR STATE METHYLISOTHIAZOLINONE <sup>1</sup> PRODUCTOR STATE 2-Hydroxyethyl methacrylate <sup>1</sup> PRODUCTOR STATE Ylang ylang oil PRODUCTOR STATE Hydroperoxides of Limonene PRODUCTOR SORBATE 80 IODOPROPYNYL BUTYLCARBAMATE 2-n-Octyl-4-isothiazolin-3-one PRODUCTOR STATE Disperse Blue mix 106/124 -Disperse Blue 106 (D-040) -Disperse Blue 124 (D-041)	10.0 pe 5.0 pe 0.2 aq 2.0 pe 1.0 pe 2.0 pe 10.0 so 20.0 pe 0.3 pe 1.0 pe 5.0 pe 0.2 pe 0.1 pe 1.0 pe 0.5 0.5	t B-010B t D-065 M-035B t H-010 t D-047B t Y-001 f B-008B t I-003 t H-032A t D-057 t P-013 t I-008C t O-004 t Mx-26	1. 2. 3.	Potassium dichromate¹ p-PHENYLENEDIAMINE (PPD)¹ Thiuram mix¹ -Dipentamethylenethiuram disulfide (D-019) -Tetraethylthiuram disulfide (TETD) (T-002) -Tetramethylthiuram disulfide (TMTD) (T-005) -Tetramethylthiuram monosulfide (TMTM) (T-006) Neomycin sulfate¹ Cobalt(II)chloride hexahydrate¹ Caine mix III¹ -Benzocaine (B-004) -Dibucaine hydrochloride (D-005) -Tetracaine hydrochloride (T-025)	0.5 pet 1.0 pet 1.0 pet 0.25 0.25 0.25 0.25 0.25 20.0 pet 1.0 pet 10.0 pet 5.0	P-014A P-006 Mx-01 N-001 C-017A
52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64.	BENZYL SALICYLATE DECYL GLUCOSIDE <sup>4</sup> PRODUCT SALICYLATE DECYL GLUCOSIDE <sup>4</sup> PRODUCT SALICYLATE METHYLISOTHIAZOLINONE <sup>1</sup> PRODUCT SALICYLATE DMDM HYDANTOIN <sup>3</sup> PRODUCT SALICYLATE PRODUCT SALICYLATE HYDROGOTH SALICYLATE HYDROGOTH SALICYLATE HYDROGOTH SALICYLATE HYDROGOTH SALICYLATE Desoximetasone POLYSORBATE 80 IODOPROPYNYL BUTYLCARBAMATE 2-n-Octyl-4-isothiazolin-3-one PRODUCT SALICYLATE Disperse Blue mix 106/124 -Disperse Blue 106 (D-040) -Disperse Blue 124 (D-041) Compositae mix II	10.0 pe 5.0 pe 0.2 aq 2.0 pe 1.0 pe 2.0 pe 10.0 so 20.0 pe 0.3 pe 1.0 pe 5.0 pe 0.2 pe 0.1 pe 1.0 pe 0.5 o.5	t B-010B t D-065 M-035B t H-010 t D-047B t Y-001 f B-008B t I-003 t H-032A t D-057 t P-013 t I-008C t O-004 t Mx-26	1. 2. 3.	Potassium dichromate¹ p-PHENYLENEDIAMINE (PPD)¹ Thiuram mix¹ -Dipentamethylenethiuram disulfide (D-019) -Tetraethylthiuram disulfide (TETD) (T-002) -Tetramethylthiuram disulfide (TMTD) (T-005) -Tetramethylthiuram monosulfide (TMTM) (T-006) Neomycin sulfate¹ Cobalt(II)chloride hexahydrate¹ Caine mix III¹ -Benzocaine (B-004) -Dibucaine hydrochloride (D-005)	0.5 pet 1.0 pet 1.0 pet 0.25 0.25 0.25 0.25 20.0 pet 1.0 pet 10.0 pet 5.0 2.5	P-014A P-006 Mx-01 N-001 C-017A
52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64.	BENZYL SALICYLATE DECYL GLUCOSIDE <sup>4</sup> PRODUCTOR SALICYLATE DECYL GLUCOSIDE <sup>4</sup> PRODUCTOR SALICYLATE METHYLISOTHIAZOLINONE <sup>1</sup> PRODUCTOR SALICYLATOR SALIC	10.0 pe 5.0 pe 0.2 aq 2.0 pe 1.0 pe 2.0 pe 10.0 so 20.0 pe 0.3 pe 1.0 pe 0.2 pe 0.1 pe 1.0 pe 0.5 0.5 5.0 pe	t B-010B t D-065 M-035B t H-010 t D-047B t Y-001 f B-008B t I-003 t H-032A t D-057 t P-013 t I-008C t O-004 t Mx-26	1. 2. 3.	Potassium dichromate¹ p-PHENYLENEDIAMINE (PPD)¹ Thiuram mix¹ -Dipentamethylenethiuram disulfide (D-019) -Tetraethylthiuram disulfide (TETD) (T-002) -Tetramethylthiuram disulfide (TMTD) (T-005) -Tetramethylthiuram monosulfide (TMTM) (T-006) Neomycin sulfate¹ Cobalt(II)chloride hexahydrate¹ Caine mix III¹ -Benzocaine (B-004) -Dibucaine hydrochloride (D-005) -Tetracaine hydrochloride (T-025)	0.5 pet 1.0 pet 1.0 pet 0.25 0.25 0.25 0.25 20.0 pet 1.0 pet 10.0 pet 5.0 2.5 2.5	P-014A P-006 Mx-01 N-001 C-017A Mx-19
52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64.	BENZYL SALICYLATE DECYL GLUCOSIDE <sup>4</sup> PRODUCT SALICYLATE DECYL GLUCOSIDE <sup>4</sup> PRODUCT SALICYLATE METHYLISOTHIAZOLINONE <sup>1</sup> PRODUCT SALICYLATE DMDM HYDANTOIN <sup>3</sup> PRODUCT SALICYLATE PRODUCT SALICYLATE HYDROGOTH SALICYLATE HYDROGOTH SALICYLATE HYDROGOTH SALICYLATE HYDROGOTH SALICYLATE Desoximetasone POLYSORBATE 80 IODOPROPYNYL BUTYLCARBAMATE 2-n-Octyl-4-isothiazolin-3-one PRODUCT SALICYLATE Disperse Blue mix 106/124 -Disperse Blue 106 (D-040) -Disperse Blue 124 (D-041) Compositae mix II	10.0 pe 5.0 pe 0.2 aq 2.0 pe 1.0 pe 2.0 pe 10.0 so 20.0 pe 0.3 pe 1.0 pe 5.0 pe 0.2 pe 0.1 pe 1.0 pe 0.5 o.5	t B-010B t D-065 M-035B t H-010 t D-047B t Y-001 f B-008B t I-003 t H-032A t D-057 t P-013 t I-008C t O-004 t Mx-26	1. 2. 3. 4. 5. 6.	Potassium dichromate¹ p-PHENYLENEDIAMINE (PPD)¹ Thiuram mix¹ -Dipentamethylenethiuram disulfide (D-019) -Tetraethylthiuram disulfide (TETD) (T-002) -Tetramethylthiuram disulfide (TMTD) (T-005) -Tetramethylthiuram monosulfide (TMTM) (T-006) Neomycin sulfate¹ Cobalt(II)chloride hexahydrate¹ Caine mix III¹ -Benzocaine (B-004) -Dibucaine hydrochloride (D-005) -Tetracaine hydrochloride (T-025) Nickel(II)sulfate hexahydrate¹	0.5 pet 1.0 pet 1.0 pet 0.25 0.25 0.25 0.25 20.0 pet 1.0 pet 10.0 pet 5.0 2.5 2.5 5.0 pet	P-014A P-006 Mx-01 N-001 C-017A Mx-19

	Compound	Conc. Veh. %(w/w)	Art. No.		Compound	Conc. %(w		Art. No.
10.	Paraben mix <sup>1</sup> -BUTYLPARABEN (B-020)	16.0 pet 4.0	Mx-03C		-Hexyl cinnamic aldehyde (H-025)	5.0 2.5		
	-ETHYLPARABEN (E-010)	4.0			-COUMARIN (C-038) -FARNESOL (F-004)	2.5		
	-METHYLPARABEN (M-012)	4.0			-HYDROXYISOHEXYL 3-CYCLOHEXENE			
	-PROPYLPARABEN (P-020)	4.0			CARBOXALDEHYDE (L-003)	2.5		
11	N-Isopropyl-N-phenyl-4-phenylenediamine		I-004		-CITRAL (C-036)	1.0		
	(IPPD) <sup>1</sup>	o.i pet	1-00-		-CITRAL (C-030) -CITRONELLOL (C-037) RM	0.5		
12	LANOLIN ALCOHOL <sup>1</sup>	30.0 pet	W-001	28	HYDROXYISOHEXYL 3-CYCLOHEXENE		pet	L-003
	Mercapto mix <sup>1</sup>	2.0 pet	Mx-05A	20.	CARBOXALDEHYDE <sup>1</sup>	5.0	pcı	L-003
	-N-Cyclohexyl-2-benzothiazolylsulfenamide			29	Toluenesulfonamide formaldehyde resin	10.0	pet	T-010
	(C-023)				COCAMIDOPROPYL BETAINE	1.0		C-018
	-Dibenzothiazyl disulfide (MBTS) (D-003)	0.5			DIAZOLIDINYL UREA	2.0		D-044A
	-2-Mercaptobenzothiazole (MBT) (M-003)				PROPYL GALLATE	1.0		P-021
	-2-(4-Morpholinylmercapto)benzothiazol	0.5			Sodium tetrachloropalladate(II) hydrate	3.0		S-017
	(MOR) (M-016)				THIMEROSAL	0.1		T-007
14.	Epoxy resin, Bisphenol A <sup>1</sup>	1.0 pet	E-002		Disperse Blue mix 106/124	1.0		Mx-26
15.	Peru balsam <sup>1,2</sup> POR NOT PRELOAD	25.0 pet	B-001		-Disperse Blue 106 (D-040)	0.5	•	
16.	4-tert-Butylphenolformaldehyde resin (PTBP) <sup>1</sup>	1.0 pet	B-024		-Disperse Blue 124 (D-041)	0.5		
	2-Mercaptobenzothiazole (MBT) <sup>1</sup>	2.0 pet	M-003A	36.	Mixed dialkyl thiourea	1.0	pet	Mx-24
	FORMALDEHYDE PRELOX	1.0 pet	F-002C		-N,N´-Dibutylthiourea (D-038)	0.5		
19.	Fragrance mix I <sup>1,2</sup> PRELOAD	8.0 pet	Mx-07		-N,N'-Diethylthiourea (D-039)	0.5		
	-AMYL CINNAMAL (A-014)	1.0			METHYLISOTHIAZOLINONE <sup>1</sup>	0.2	aq	M-035B
	-CINNAMYL ALCOHOL (C-013) PRIDAD	1.0		38.	Carba mix	3.0	pet	Mx-06
	-CINNAMAL (C-014) PRENOTE	1.0			-1,3-Diphenylguanidine (D-022)	1.0		
	-EUGENOL (E-016) PRELOAD	1.0			-ZINC DIBUTYLDITHIOCARBAMATE	1.0		
	-GERANIOL (G-001) PRENOT	1.0			(ZBC) (Z-002)			
	-HYDROXYCITRONELLAL (H-008)	1.0			-Zinc diethyldithiocarbamate (ZDC) (Z-003)			
	-ISOEUGENOL (I-002) PRINCE	1.0			Hydrocortisone-17-butyrate	1.0		H-021B
20	-Oakmoss absolute (O-001) RECEI	1.0	M 40	40.	IMIDAZOLIDINYL UREA			I-001A
20.	Sesquiterpene lactone mix <sup>1</sup>		Mx-18			Intro	duced	2015
	-Alantolactone (A-003)	0.033 0.033			.1			1000
	-Costunolide (C-039) -Dehydrocostus lactone (D-056)	0.033		No	orth American Baseline Seri	les	NA	-1000
21	QUATERNIUM-15 <sup>1</sup>	1.0 pet	C-007A					
	2-Methoxy-6-n-pentyl-4-benzoquinone	0.01 pet	M-008	1.	Benzocaine	5.0	pet	B-004
	METHYLISOTHIAZOLINONE +	0.01 pet	C-009A	2.	Textile dye mix <sup>1</sup>	6.6		Mx-30
20.	METHYLCHLOROISOTHIAZOLINONE		O-003A		-Diperse Blue 35 (D-027)	1.0		
24	Budesonide <sup>1</sup>		B-033B		-Diperse Orange 1 (D-031)	1.0		
	Tixocortol-21-pivalate <sup>1</sup>	•	T-031B		-DISPERSE ORANGE 3 (D-032)	1.0		
	METHYLDIBROMO GLUTARONITRILE <sup>1</sup>	0.5 pet	D-049E		-Disperse Red 1 (D-034)	1.0		
	Fragrance mix II <sup>1</sup> RENOTE	14.0 pet	Mx-25		-DISPERSE RED 17 (D-035)	1.0		

	Compound	Conc. Veh. %(w/w)	Art. No.		Compound	Conc. Veh.	Art. No.
	-Disperse Yellow 3 (D-036) -Disperse Blue 106 (D-040)	1.0 0.3			-METHYLPARABEN (M-012) -PROPYLPARABEN (P-020)	%(w/w) 3.0 3.0	
	-Disperse Blue 124 (D-041)	0.3		27.	METHYLDIBROMO GLUTARONITRILE <sup>1</sup>	0.5 pet	D-049E
3.	COLOPHONIUM <sup>1</sup>	20.0 pet	C-020		Fragrance mix I <sup>1,2</sup> PRELOAD	8.0 pet	Mx-07
4.	p-PHENYLENEDIAMINE (PPD) <sup>1</sup>	1.0 pet	P-006		-AMYL CINNAMAL (A-014)	1.0	
5.	IMIDAZOLIDINYL UREA	2.0 pet	I-001A		-CINNAMYL ALCOHOL (C-013) POR NOT	1.0	
6.	CINNAMAL PO NOT PRELOAD	1.0 pet	C-014		-CINNAMAL (C-014) PRELOAD	1.0	
7.	Amerchol L-101	50.0 pet	A-004		-EUGENOL (E-016) PO NOT PRELOAD	1.0	
8.	Carba mix	3.0 pet	Mx-06		-GERANIOL (G-001) PONOT	1.0	
	-1,3-Diphenylguanidine (D-022)	1.0			-HYDROXYCITRONELLAL (H-008)	1.0	
	-ZINC DIBUTYLDITHIOCARBAMATE	1.0			-ISOEUGENOL (I-002) PO NOT PRELOAD	1.0	
	(ZBC) (Z-002)				-Oakmoss absolute (O-001) RELOCATION	1.0	
	-Zinc diethyldithiocarbamate (ZDC) (Z-003)	1.0		29.	GLUTARAL <sup>2</sup> PRELOAD	0.5 pet	G-003B
9.	Neomycin sulfate¹	20.0 pet	N-001		2-BROMO-2-NITROPROPANE-1,3-DIOL	0.5 pet	B-015B
10.	Thiuram mix <sup>1</sup>	1.0 pet	Mx-01	31.	Sesquiterpene lactone mix <sup>1</sup>	0.1 pet	Mx-18
	-Dipentamethylenethiuram disulfide (D-019)	0.25			-Alantolactone (A-003)	0.033	
	-Tetraethylthiuram disulfide (TETD) (T-002)	0.25			-Costunolide (C-039)	0.033	
	-Tetramethylthiuram disulfide (TMTD) (T-005				-Dehydrocostus lactone (D-056)	0.033	
	-Tetramethylthiuram monosulfide (TMTM)	0.25		32.	Fragrance mix II <sup>1</sup> PO NOT PRELOAD	14.0 pet	Mx-25
	(T-006)				-Hexyl cinnamic aldehyde (H-025)	5.0	
	FORMALDEHYDE <sup>1</sup> DO NOT	2.0 aq	F-002B		-COUMARIN (C-038)	2.5	
	Ethylenediamine dihydrochloride	1.0 pet	E-005		-FARNESOL (F-004)	2.5	
	Epoxy resin, Bisphenol A <sup>1</sup>	1.0 pet	E-002		-HYDROXYISOHEXYL 3-CYCLOHEXENE	2.5	
	QUATERNIUM-15 <sup>1</sup>	2.0 pet	C-007B		CARBOXALDEHYDE (L-003)		
	4-tert-Butylphenolformaldehyde resin (PTBP)		B-024		-CITRAL (C-036)	1.0	
	Ylang ylang oil RENOT	2.0 pet	Y-001		-CITRONELLOL (C-037) POR NOT	0.5	
	1,3-Diphenylguanidine	1.0 pet	D-022		PROPYLENE GLYCOL PRINT	30.0 aq	P-019B
	Potassium dichromate	0.25 pet	P-014B		2-Hydroxyethyl methacrylate <sup>1</sup>	2.0 pet	H-010
	Peru balsam <sup>1,2</sup> PRELOAD	25.0 pet	B-001		Propolis <sup>1</sup>	10.0 pet	P-022
	Nickel(II)sulfate hexahydrate	2.5 pet	N-002B		Hydroperoxides of Limonene RENOT	0.3 pet	H-032A
	DIAZOLIDINYL UREA	1.0 pet	D-044C		IODOPROPYNYL BUTYLCARBAMATE	0.2 pet	I-008C
	DMDM HYDANTOIN	1.0 pet	D-047B	38.	Disperse Blue mix 106/124	1.0 pet	Mx-26
	Bacitracin	20.0 pet	B-032B		-Disperse Blue 106 (D-040)	0.5	
24.	Mixed dialkyl thiourea	1.0 pet	Mx-24	00	-Disperse Blue 124 (D-041)	0.5	E 004
	-N,N'-Dibutylthiourea (D-038)	0.5			Ethyl acrylate PRIOR		E-004
0.5	-N,N'-Diethylthiourea (D-039)	0.5	0.000		Hydroperoxides of Linalool RENT	1.0 pet	H-031A
25.	METHYLISOTHIAZOLINONE +	0.02 aq	C-009B		Toluenesulfonamide formaldehyde resin	10.0 pet	T-010
00	METHYLCHLOROISOTHIAZOLINONE <sup>1</sup> 🖭		M 00A		Methyl methacrylate REST	2.0 pet	M-013
26.	Paraben mix	12.0 pet	Mx-03A		Cobalt(II)chloride hexahydrate <sup>1</sup>	1.0 pet	
	-BUTYLPARABEN (B-020)	3.0		44.	Tixocortol-21-pivalate	0.1 pet	T-031A
	-ETHYLPARABEN (E-010)	3.0					

	Compound	Conc. Veh. %(w/w)	Art. No.		Compound	Conc. Veh. %(w/w)	Art. No.
	Budesonide Compositae mix II RECTION -Anthemis nobilis extract (C-029) RECTION -Chamomilla recutita extract (C-051) RECTION -Achillea millefolium extract (A-025) RECTION -Tanacetum vulgare extract (T-033) RECTION -Arnica montana extract (A-024) RECTION	0.1 pet 5.0 pet 1.2 1.2 1.0 1.0	B-033A Mx-29A	16.	Mercapto mix -N-Cyclohexyl-2-benzothiazolylsulfenamide (C-023) -Dibenzothiazyl disulfide (MBTS) (D-003) -2-Mercaptobenzothiazole (MBT) (M-003) -2-(4-Morpholinylmercapto)benzothiazol (MOR) (M-016)	0.25	Mx-05B
	-Parthenolide (P-029) DECYL GLUCOSIDE <sup>4</sup> PRIORI	0.1 5.0 pet	D-065	18.	1,3-Diphenylguanidine Potassium dichromate	1.0 pet 0.25 pet	D-022 P-014B
49.	OLEAMIDOPROPYL DIMETHYLAMINE COCAMIDOPROPYL BETAINE COCAMIDOPROPYL DIMETHYLISOTHIAZOLINONE COCAMIDOPROPYL DIMETHYLAMINE COCAMIDOPROPYL DIMETHYLAMINE COCAMIDOPROPYL DIMETHYLAMINE COCAMIDOPROPYL DIMETHYLAMINE COCAMIDOPROPYL DIMETHYLAMINE COCAMIDOPROPYL BETAINE COCAMIDOPROPYL COCAMIDOPROPYL BETAINE COCAMIDOPROPYL COCAMIDOPROPYL COCAMIDOPROPYL CO	I 0.1 aq 1.0 aq 0.2 aq	O-005 C-018 M-035B	20.	Peru balsam Nickel(II)sulfate hexahydrate DIAZOLIDINYL UREA	25.0 pet 2.5 pet 1.0 pet	B-001 N-002B D-044C
		sed Januar		22.	DMDM HYDANTOIN Bacitracin	1.0 pet 20.0 pet	D-047B B-032B
-	ries Extended	NA	XE-65	24.	Mixed dialkyl thiourea -N,N'-Dibutylthiourea (D-038) -N,N'-Diethylthiourea (D-039)	1.0 pet 0.5 0.5	Mx-24
1. 2.	Benzocaine 2-Mercaptobenzothiazole (MBT) <sup>1</sup>	5.0 pet 1.0 pet	B-004 M-003B	25.	METHYLISOTHIAZOLINONE + METHYLCHLOROISOTHIAZOLINONE <sup>1</sup>	0.02 aq	C-009B
3. 4.	COLOPHONIUM¹ p-PHENYLENEDIAMINE (PPD)¹	20.0 pet 1.0 pet	C-020 P-006	26.	Paraben mix -BUTYLPARABEN (B-020)	12.0 pet 3.0	Mx-03A
5. 6. 7.	IMIDAZOLIDINYL UREA CINNAMAL RESSERVED Americhol L-101	2.0 pet 1.0 pet 50.0 pet	I-001A C-014 A-004		-ETHYLPARABEN (E-010) -METHYLPARABEN (M-012) -PROPYLPARABEN (P-020)	3.0 3.0 3.0	
8.	Carba mix -1,3-Diphenylguanidine (D-022) -ZINC DIBUTYLDITHIOCARBAMATE (ZBC) (Z-002) -Zinc diethyldithiocarbamate (ZDC) (Z-003)	3.0 pet 1.0 1.0	Mx-06		METHYLDIBROMO GLUTARONITRILE <sup>1</sup> Fragrance mix I <sup>1,2</sup> METHYLDIBROMO GLUTARONITRILE <sup>1</sup> -AMYL CINNAMAL (A-014) -CINNAMYL ALCOHOL (C-013) METHYLDIBROMO GLUTARONITRILE <sup>1</sup> -AMYL CINNAMAL (C-014) METHYLDIBROMO GLUTARONITRILE <sup>1</sup> -CINNAMAL (C-014) METHYLDIBROMO GLUTARONITRILE <sup>1</sup> -AMYL CINNAMAL (C-014) METHYLDIBROMO GLUTARONITRILE <sup>1</sup> -AMYL CINNAMAL (C-014) METHYLDIBROMO GLUTARONITRILE <sup>1</sup> -CINNAMAL (C-014) METHYLDIBROMO GLUTARONITRILE <sup>1</sup>	0.5 pet 8.0 pet 1.0 1.0	D-049E Mx-07
9. 10.	Neomycin sulfate¹ Thiuram mix¹ -Dipentamethylenethiuram disulfide (D-019) -Tetraethylthiuram disulfide (TETD) (T-002) -Tetramethylthiuram disulfide (TMTD) (T-005)	20.0 pet 1.0 pet 0.25 0.25	N-001 Mx-01		-EUGENOL (E-016) PROST -GERANIOL (G-001) PROST -HYDROXYCITRONELLAL (H-008) -ISOEUGENOL (I-002) PROST -Oakmoss absolute (O-001) PROST -	1.0 1.0 1.0 1.0	
12. 13.	-Tetramethylthiuram monosulfide (TMTM) (T-006) FORMALDEHYDE REMAIN Ethylenediamine dihydrochloride Epoxy resin, Bisphenol A <sup>1</sup>		F-002B E-005 E-002	30.	GLUTARAL <sup>2</sup> REWE 2-BROMO-2-NITROPROPANE-1,3-DIOL Sesquiterpene lactone mix <sup>1</sup> -Alantolactone (A-003) -Costunolide (C-039)	0.5 pet 0.5 pet 0.1 pet 0.033 0.033	G-003B B-015B Mx-18
	QUATERNIUM-15 <sup>1</sup> 4-tert-Butylphenolformaldehyde resin (PTBP)	2.0 pet 1 1.0 pet	C-007B B-024	32.	-Dehydrocostus lactone (D-056) Fragrance mix II¹	0.033 14.0 pet	Mx-25

	Compound	Conc. Veh. %(w/w)	Art. No.		Compound	Conc. Ve %(w/w)	h. Art. No.
	-Hexyl cinnamic aldehyde (H-025)	5.0		51.	Lidocaine	15.0 pe	
	-COUMARIN (C-038)	2.5		52.	Dibucaine hydrochloride	2.5 pe	
	-FARNESOL (F-004)	2.5		53.	DECYL GLUCOSIDE <sup>4</sup> PRELOAD	5.0 pe	et D-065
	-HYDROXYISOHEXYL 3-CYCLOHEXENE	2.5		54.	Clobetasol-17-propionate	1.0 pe	et C-028
	CARBOXALDEHYDE (L-003)				Amidoamine RELOAD	0.1 ad	•
	-CITRAL (C-036)	1.0			2-Hydroxyethyl methacrylate <sup>1</sup> RELOCATION	2.0 pe	
	-CITRONELLOL (C-037) PO NOT PRELOAD	0.5		57.	Desoximetasone	1.0 pe	
	PROPYLENE GLYCOL PRINT	30.0 aq	P-019B	58.	HYDROXYISOHEXYL 3-CYCLOHEXENE	5.0 pe	et L-003
	BENZOPHENONE-3	10.0 pet	H-014C		CARBOXALDEHYDE <sup>1</sup>		
	CHLOROXYLENOL (PCMX)	1.0 pet	C-010B		BENZYL ALCOHOL PO NOT PRELOAD	10.0 sc	of B-008B
	Hydroperoxides of Limonene RENOT	0.3 pet	H-032A		TOCOPHEROL PRILOZI	100	T-036
	IODOPROPYNYL BUTYLCARBAMATE	0.2 pet	I-008C	61.	Propolis <sup>1</sup>	10.0 pe	
38.	Disperse Blue mix 106/124	1.0 pet	Mx-26	62.	Fusidic acid sodium salt	2.0 pe	et F-003
	-Disperse Blue 106 (D-040)	0.5		63.	COCAMIDE DEA	0.5 pe	et C-019
	-Disperse Blue 124 (D-041)	0.5		64.	Tea tree oil oxidized POR NOT	5.0 pe	et T-035B
39.	Ethyl acrylate PRELOAD	0.1 pet	E-004	65.	Ylang ylang oil RELOAD	2.0 pe	et Y-001
	Hydroperoxides of Linalool PRINCE	1.0 pet	H-031A		Revi	sed Jan	uary 2018
	Toluenesulfonamide formaldehyde resin	10.0 pet	T-010				
42.	Methyl methacrylate PRINT	2.0 pet	M-013	N	orth American 80		
	Cobalt(II)chloride hexahydrate <sup>1</sup>	1.0 pet	C-017A		omprehensive Series		NAC-80
44.	Tixocortol-21-pivalate	0.1 pet	T-031A		mprenensive series		NAC-00
4 -							
	Budesonide	0.1 pet	B-033A				
	Compositae mix II POR NOT PRELOAD	5.0 pet		1.	Benzocaine	5.0 pe	
	Compositae mix II RENSSI -Anthemis nobilis extract (C-029)	5.0 pet 1.2		2.	Benzocaine 2-Mercaptobenzothiazole (MBT)	5.0 pe	
	Compositae mix II RENTI -Anthemis nobilis extract (C-029) RENTI -Chamomilla recutita extract (C-051) RENTI	5.0 pet 1.2 1.2			2-Mercaptobenzothiazole (MBT) COLOPHONIUM¹		et M-003B et C-020
	Compositae mix II RENSSI -Anthemis nobilis extract (C-029)	5.0 pet 1.2		2.	2-Mercaptobenzothiazole (MBT)	1.0 pe	et M-003B et C-020
	Compositae mix II RENTI -Anthemis nobilis extract (C-029) RENTI -Chamomilla recutita extract (C-051) RENTI -Achillea millefolium extract (A-025) RENTI -Tanacetum vulgare extract (T-033)	5.0 pet 1.2 1.2 1.0 1.0		2. 3.	2-Mercaptobenzothiazole (MBT) COLOPHONIUM¹ p-PHENYLENEDIAMINE (PPD)¹ IMIDAZOLIDINYL UREA	1.0 pe 20.0 pe 1.0 pe 2.0 pe	et M-003B et C-020 et P-006 et I-001A
	Compositae mix II REWIII -Anthemis nobilis extract (C-029) REWIII -Chamomilla recutita extract (C-051) REWIII -Achillea millefolium extract (A-025) REWIII -Tanacetum vulgare extract (T-033) REWIII -Arnica montana extract (A-024)	5.0 pet 1.2 1.2 1.0		2. 3. 4.	2-Mercaptobenzothiazole (MBT) COLOPHONIUM¹ p-PHENYLENEDIAMINE (PPD)¹	1.0 pe 20.0 pe 1.0 pe	et M-003B et C-020 et P-006 et I-001A et C-014
46.	Compositae mix II REWI -Anthemis nobilis extract (C-029) REWI -Chamomilla recutita extract (C-051) REWI -Achillea millefolium extract (A-025) REWI -Tanacetum vulgare extract (T-033) REWI -Arnica montana extract (A-024) REWI -Parthenolide (P-029)	5.0 pet 1.2 1.2 1.0 1.0		2. 3. 4. 5.	2-Mercaptobenzothiazole (MBT) COLOPHONIUM¹ p-PHENYLENEDIAMINE (PPD)¹ IMIDAZOLIDINYL UREA	1.0 pe 20.0 pe 1.0 pe 2.0 pe	et M-003B et C-020 et P-006 et I-001A et C-014
46.	Compositae mix II REWIII -Anthemis nobilis extract (C-029) REWIII -Chamomilla recutita extract (C-051) REWIII -Achillea millefolium extract (A-025) REWIII -Tanacetum vulgare extract (T-033) REWIII -Arnica montana extract (A-024)	5.0 pet 1.2 1.2 1.0 1.0 0.5		2. 3. 4. 5. 6.	2-Mercaptobenzothiazole (MBT) COLOPHONIUM¹ p-PHENYLENEDIAMINE (PPD)¹ IMIDAZOLIDINYL UREA CINNAMAL  Amerchol L-101 Carba mix	1.0 pe 20.0 pe 1.0 pe 2.0 pe 1.0 pe	et M-003B et C-020 et P-006 et I-001A et C-014 et A-004
46.	Compositae mix II REWI -Anthemis nobilis extract (C-029) REWI -Chamomilla recutita extract (C-051) REWI -Achillea millefolium extract (A-025) REWI -Tanacetum vulgare extract (T-033) REWI -Arnica montana extract (A-024) REWI -Parthenolide (P-029)	5.0 pet 1.2 1.2 1.0 1.0 0.5 0.1	Mx-29A	2. 3. 4. 5. 6. 7.	2-Mercaptobenzothiazole (MBT) COLOPHONIUM¹ p-PHENYLENEDIAMINE (PPD)¹ IMIDAZOLIDINYL UREA CINNAMAL  Amerchol L-101 Carba mix -1,3-Diphenylguanidine (D-022)	1.0 pe 20.0 pe 1.0 pe 2.0 pe 1.0 pe 50.0 pe	et M-003B et C-020 et P-006 et I-001A et C-014 et A-004
46.	Compositae mix II RESS -Anthemis nobilis extract (C-029) RESS -Chamomilla recutita extract (C-051) RESS -Achillea millefolium extract (A-025) RESS -Tanacetum vulgare extract (T-033) RESS -Arnica montana extract (A-024) RESS -Parthenolide (P-029) Textile dye mix <sup>1</sup>	5.0 pet 1.2 1.2 1.0 1.0 0.5 0.1 6.6 pet	Mx-29A	2. 3. 4. 5. 6. 7.	2-Mercaptobenzothiazole (MBT) COLOPHONIUM¹ p-PHENYLENEDIAMINE (PPD)¹ IMIDAZOLIDINYL UREA CINNAMAL  Amerchol L-101 Carba mix -1,3-Diphenylguanidine (D-022) -ZINC DIBUTYLDITHIOCARBAMATE	1.0 pe 20.0 pe 1.0 pe 2.0 pe 1.0 pe 50.0 pe 3.0 pe	et M-003B et C-020 et P-006 et I-001A et C-014 et A-004
46.	Compositae mix II RESS -Anthemis nobilis extract (C-029) RESSI -Chamomilla recutita extract (C-051) RESSI -Achillea millefolium extract (A-025) RESSI -Tanacetum vulgare extract (T-033) RESSI -Arnica montana extract (A-024) RESSI -Parthenolide (P-029) Textile dye mix <sup>1</sup> -Diperse Blue 35 (D-027)	5.0 pet 1.2 1.2 1.0 1.0 0.5 0.1 6.6 pet 1.0	Mx-29A	2. 3. 4. 5. 6. 7.	2-Mercaptobenzothiazole (MBT) COLOPHONIUM¹ p-PHENYLENEDIAMINE (PPD)¹ IMIDAZOLIDINYL UREA CINNAMAL  Amerchol L-101 Carba mix -1,3-Diphenylguanidine (D-022)	1.0 pe 20.0 pe 1.0 pe 2.0 pe 1.0 pe 50.0 pe 3.0 pe 1.0	et M-003B et C-020 et P-006 et I-001A et C-014 et A-004
46.	Compositae mix II RESS -Anthemis nobilis extract (C-029) RESS -Chamomilla recutita extract (C-051) RESS -Achillea millefolium extract (A-025) RESS -Tanacetum vulgare extract (T-033) RESS -Arnica montana extract (A-024) RESS -Parthenolide (P-029) Textile dye mix <sup>1</sup> -Diperse Blue 35 (D-027) -Diperse Orange 1 (D-031)	5.0 pet 1.2 1.2 1.0 1.0 0.5 0.1 6.6 pet 1.0	Mx-29A	2. 3. 4. 5. 6. 7.	2-Mercaptobenzothiazole (MBT) COLOPHONIUM¹ p-PHENYLENEDIAMINE (PPD)¹ IMIDAZOLIDINYL UREA CINNAMAL  Amerchol L-101 Carba mix -1,3-Diphenylguanidine (D-022) -ZINC DIBUTYLDITHIOCARBAMATE	1.0 pe 20.0 pe 1.0 pe 2.0 pe 1.0 pe 50.0 pe 3.0 pe 1.0 1.0	et M-003B et C-020 et P-006 et I-001A et C-014 et A-004
46.	Compositae mix II RESS  -Anthemis nobilis extract (C-029) RESS  -Chamomilla recutita extract (C-051) RESS  -Achillea millefolium extract (A-025) RESS  -Tanacetum vulgare extract (T-033) RESS  -Arnica montana extract (A-024) RESS  -Parthenolide (P-029)  Textile dye mix <sup>1</sup> -Diperse Blue 35 (D-027)  -Diperse Orange 1 (D-031)  -DISPERSE ORANGE 3 (D-032)	5.0 pet 1.2 1.2 1.0 1.0 0.5 0.1 6.6 pet 1.0 1.0	Mx-29A	2. 3. 4. 5. 6. 7.	2-Mercaptobenzothiazole (MBT) COLOPHONIUM¹ p-PHENYLENEDIAMINE (PPD)¹ IMIDAZOLIDINYL UREA CINNAMAL  Amerchol L-101 Carba mix -1,3-Diphenylguanidine (D-022) -ZINC DIBUTYLDITHIOCARBAMATE (ZBC) (Z-002)	1.0 pe 20.0 pe 1.0 pe 2.0 pe 1.0 pe 50.0 pe 3.0 pe 1.0 1.0	et M-003B et C-020 et P-006 et I-001A et C-014 et A-004 et Mx-06
46.	Compositae mix II Compositae m	5.0 pet 1.2 1.0 1.0 0.5 0.1 6.6 pet 1.0 1.0 1.0	Mx-29A	2. 3. 4. 5. 6. 7. 8.	2-Mercaptobenzothiazole (MBT) COLOPHONIUM¹ p-PHENYLENEDIAMINE (PPD)¹ IMIDAZOLIDINYL UREA CINNAMAL  Amerchol L-101 Carba mix -1,3-Diphenylguanidine (D-022) -ZINC DIBUTYLDITHIOCARBAMATE (ZBC) (Z-002) -Zinc diethyldithiocarbamate (ZDC) (Z-003) Neomycin sulfate¹ Thiuram mix¹	1.0 pc 20.0 pc 1.0 pc 2.0 pc 1.0 pc 50.0 pc 3.0 pc 1.0 1.0	et M-003B et C-020 et P-006 et I-001A et C-014 et A-004 et Mx-06
46.	Compositae mix II RESS  -Anthemis nobilis extract (C-029) RESS -Chamomilla recutita extract (C-051) RESS -Achillea millefolium extract (A-025) RESS -Tanacetum vulgare extract (T-033) RESS -Arnica montana extract (A-024) RESS -Parthenolide (P-029) Textile dye mix¹ -Diperse Blue 35 (D-027) -Diperse Orange 1 (D-031) -DISPERSE ORANGE 3 (D-032) -Disperse Red 1 (D-034) -DISPERSE RED 17 (D-035)	5.0 pet 1.2 1.0 1.0 0.5 0.1 6.6 pet 1.0 1.0 1.0 1.0	Mx-29A	2. 3. 4. 5. 6. 7. 8.	2-Mercaptobenzothiazole (MBT) COLOPHONIUM¹ p-PHENYLENEDIAMINE (PPD)¹ IMIDAZOLIDINYL UREA CINNAMAL  Amerchol L-101 Carba mix -1,3-Diphenylguanidine (D-022) -ZINC DIBUTYLDITHIOCARBAMATE (ZBC) (Z-002) -Zinc diethyldithiocarbamate (ZDC) (Z-003) Neomycin sulfate¹ Thiuram mix¹ -Dipentamethylenethiuram disulfide (D-019)	1.0 pc 20.0 pc 1.0 pc 2.0 pc 1.0 pc 50.0 pc 3.0 pc 1.0 1.0 20.0 pc 1.0 20.0 pc	et M-003B et C-020 et P-006 et I-001A et C-014 et A-004 et Mx-06
46.	Compositae mix II Compositae m	5.0 pet 1.2 1.0 1.0 0.5 0.1 6.6 pet 1.0 1.0 1.0 1.0 1.0	Mx-29A	2. 3. 4. 5. 6. 7. 8.	2-Mercaptobenzothiazole (MBT) COLOPHONIUM¹ p-PHENYLENEDIAMINE (PPD)¹ IMIDAZOLIDINYL UREA CINNAMAL  Amerchol L-101 Carba mix -1,3-Diphenylguanidine (D-022) -ZINC DIBUTYLDITHIOCARBAMATE (ZBC) (Z-002) -Zinc diethyldithiocarbamate (ZDC) (Z-003) Neomycin sulfate¹ Thiuram mix¹ -Dipentamethylenethiuram disulfide (D-019) -Tetraethylthiuram disulfide (TETD) (T-002)	1.0 pc 20.0 pc 1.0 pc 2.0 pc 1.0 pc 50.0 pc 3.0 pc 1.0 1.0 20.0 pc 1.0 20.0 pc 0.25 0.25	et M-003B et C-020 et P-006 et I-001A et C-014 et A-004 et Mx-06
46. 47.	Compositae mix II Compositae m	5.0 pet 1.2 1.0 1.0 0.5 0.1 6.6 pet 1.0 1.0 1.0 1.0 1.0 0.3	Mx-29A	2. 3. 4. 5. 6. 7. 8.	2-Mercaptobenzothiazole (MBT) COLOPHONIUM¹ p-PHENYLENEDIAMINE (PPD)¹ IMIDAZOLIDINYL UREA CINNAMAL  Amerchol L-101 Carba mix -1,3-Diphenylguanidine (D-022) -ZINC DIBUTYLDITHIOCARBAMATE (ZBC) (Z-002) -Zinc diethyldithiocarbamate (ZDC) (Z-003) Neomycin sulfate¹ Thiuram mix¹ -Dipentamethylenethiuram disulfide (D-019)	1.0 pc 20.0 pc 1.0 pc 2.0 pc 1.0 pc 50.0 pc 3.0 pc 1.0 1.0 20.0 pc 1.0 pc 20.0 pc 1.0 pc 50.0 pc	et M-003B et C-020 et P-006 et I-001A et C-014 et A-004 et Mx-06
46. 47.	Compositae mix II Compositae m	5.0 pet 1.2 1.0 1.0 0.5 0.1 6.6 pet 1.0 1.0 1.0 1.0 0.3	Mx-29A Mx-30	2. 3. 4. 5. 6. 7. 8.	2-Mercaptobenzothiazole (MBT) COLOPHONIUM¹ p-PHENYLENEDIAMINE (PPD)¹ IMIDAZOLIDINYL UREA CINNAMAL  Amerchol L-101 Carba mix -1,3-Diphenylguanidine (D-022) -ZINC DIBUTYLDITHIOCARBAMATE (ZBC) (Z-002) -Zinc diethyldithiocarbamate (ZDC) (Z-003) Neomycin sulfate¹ Thiuram mix¹ -Dipentamethylenethiuram disulfide (D-019) -Tetraethylthiuram disulfide (TETD) (T-002) -Tetramethylthiuram monosulfide (TMTM)	1.0 pc 20.0 pc 1.0 pc 2.0 pc 1.0 pc 50.0 pc 3.0 pc 1.0 1.0 20.0 pc 1.0 20.0 pc 0.25 0.25	et M-003B et C-020 et P-006 et I-001A et C-014 et A-004 et Mx-06
46. 47. 48. 49.	Compositae mix II Compositae m	5.0 pet 1.2 1.0 1.0 0.5 0.1 6.6 pet 1.0 1.0 1.0 1.0 0.3 0.3	Mx-29A Mx-30	2. 3. 4. 5. 6. 7. 8.	2-Mercaptobenzothiazole (MBT) COLOPHONIUM¹ p-PHENYLENEDIAMINE (PPD)¹ IMIDAZOLIDINYL UREA CINNAMAL  Amerchol L-101 Carba mix -1,3-Diphenylguanidine (D-022) -ZINC DIBUTYLDITHIOCARBAMATE (ZBC) (Z-002) -Zinc diethyldithiocarbamate (ZDC) (Z-003) Neomycin sulfate¹ Thiuram mix¹ -Dipentamethylenethiuram disulfide (D-019) -Tetraethylthiuram disulfide (TETD) (T-002)	1.0 pc 20.0 pc 1.0 pc 2.0 pc 1.0 pc 50.0 pc 3.0 pc 1.0 1.0 20.0 pc 1.0 20.0 pc 0.25 0.25	et M-003B et C-020 et P-006 et I-001A et C-014 et A-004 et Mx-06

	Compound	Conc. V		Art. No.		Compound	Conc. Veh. %(w/w)	Art. No.
11.	Clobetasol-17-propionate	1.0 p	et	C-028		-Alantolactone (A-003)	0.033	
	Ethylenediamine dihydrochloride	1.0 p	et	E-005		-Costunolide (C-039)	0.033	
	Epoxy resin, Bisphenol A <sup>1</sup>	1.0 p	et	E-002		-Dehydrocostus lactone (D-056)	0.033	
	QUATERNIUM-15 <sup>1</sup>	2.0 p	et	C-007B	32.	THIMEROSAL	0.1 pet	T-007
15.	4-tert-Butylphenolformaldehyde resin (PTBP)	1.0 p	et	B-024	33.	Propolis <sup>1</sup>	10.0 pet	
	Mercapto mix		et	Mx-05B	34.	BENZOPHENONE-3	10.0 pet	H-014C
	-N-Cyclohexyl-2-benzothiazolylsulfenamide	0.25			35.	CHLOROXYLENOL (PCMX)	1.0 pet	C-010B
	(C-023)				36.	Ethyleneurea, melamine formaldehyde mix <sup>2</sup> PRELICAD	5.0 pet	Mx-16
	-Dibenzothiazyl disulfide (MBTS) (D-003)	0.25				-Dimethylol dihydroxy ethylene urea (D-012) RENO	<b>4</b> .0	
	-2-Mercaptobenzothiazole (MBT) (M-003)	0.25				-Melamine formaldehyde (M-001) PRELOCATION	1.0	
	-2-(4-Morpholinylmercapto)benzothiazol	0.25				2-tert-Butyl-4-methoxyphenol (BHA)	2.0 pet	B-022
	(MOR) (M-016)					Gold(I)sodium thiosulfate dihydrate	0.5 pet	G-005A
	1,3-Diphenylguanidine	1.0 p		D-022		Ethyl acrylate RELOAD		E-004
	Potassium dichromate	0.25 p		P-014B		GLYCERYL THIOGLYCOLATE PRINT		G-004
	Peru balsam <sup>1,2</sup> PRELOW	25.0 p		B-001		Toluenesulfonamide formaldehyde resin	10.0 pet	T-010
	Nickel(II)sulfate hexahydrate	2.5 p		N-002B		Methyl methacrylate RELOAD	2.0 pet	M-013
	DIAZOLIDINYL UREA	1.0 p	et	D-044C		Cobalt(II)chloride hexahydrate <sup>1</sup>		C-017A
	TOCOPHEROL PONOT	100		T-036		Tixocortol-21-pivalate	1.0 pet	T-031A
	Bacitracin			B-032B		Budesonide	0.1 pet	B-033A
24.	Mixed dialkyl thiourea		et	Mx-24		COCAMIDE DEA	0.5 pet	
	-N,N´-Dibutylthiourea (D-038)	0.5				TRIETHANOLAMINE	2.0 pet	T-016
0.5	-N,N'-Diethylthiourea (D-039)	0.5	_4	D 000	48.	Textile dye mix <sup>1</sup>	6.6 pet	Mx-30
	DISPERSE ORANGE 3	1.0 p		D-032		-Diperse Blue 35 (D-027)	1.0	
20.	Paraben mix	12.0 p	еι	Mx-03A		-Diperse Orange 1 (D-031)	1.0	
	-BUTYLPARABEN (B-020)	3.0				-DISPERSE ORANGE 3 (D-032)	1.0 1.0	
	-ETHYLPARABEN (E-010)	3.0 3.0				-Disperse Red 1 (D-034) -DISPERSE RED 17 (D-035)	1.0	
	-METHYLPARABEN (M-012) -PROPYLPARABEN (P-020)	3.0				-Disperse Yellow 3 (D-036)	1.0	
27	METHYLDIBROMO GLUTARONITRILE <sup>1</sup>		et	D-049E		-Disperse Reliow 3 (D-030) -Disperse Blue 106 (D-040)	0.3	
	Fragrance mix I <sup>1,2</sup> RRM			Mx-07		-Disperse Blue 124 (D-041)	0.3	
20.	-AMYL CINNAMAL (A-014)	1.0	CL	IVIX-07	49	Tea tree oil oxidized REST	5.0 pet	T-035B
	-CINNAMYL ALCOHOL (C-013) RENSE	1.0				Fragrance mix II <sup>1</sup> PRINTI	14.0 pet	Mx-25
	-CINNAMAL (C-014) PRIST	1.0			00.	-Hexyl cinnamic aldehyde (H-025)	5.0	WIX-20
	-EUGENOL (E-016) RENST	1.0				-COUMARIN (C-038)	2.5	
	-GERANIOL (G-001) RENET	1.0				-FARNESOL (F-004)	2.5	
	-HYDROXYCITRONELLAL (H-008)	1.0				-HYDROXYISOHEXYL 3-CYCLOHEXENE		
	-ISOEUGENOL (I-002) PRINT	1.0				CARBOXALDEHYDE (L-003)		
	-Oakmoss absolute (O-001) PRINT	1.0				-CITRAL (C-036)	1.0	
29.	GLUTARAL <sup>2</sup> PRENOTI	0.5 p	et	G-003B		-CITRONELLOL (C-037) PRINCE	0.5	
	2-BROMO-2-NITROPROPANE-1,3-DIOL		et	B-015B	51.	Disperse Yellow 3	1.0 pet	D-036
	Sesquiterpene lactone mix <sup>1</sup>		et	Mx-18		BENZYL SALICYLATE	10.0 pet	B-010B
	-	·			53.	DECYL GLUCOSIDE <sup>4</sup> PO NOTI	5.0 pet	D-065
								F2

Compound	Conc. Veh.	Art. No.	$\mathbf{A}_{1}$	merican Core Series	AC-10	00
Compound  54. METHYLISOTHIAZOLINONE¹ SSSS 2-Hydroxyethyl methacrylate¹ SSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS	%(w/w) 0.2 aq 2.0 pet 1.0 pet 2.0 pet 1.0 sof 20.0 pet 0.3 pet 1.0 pet 5.0 pet 0.2 pet 0.1 pet 1.0 pet	M-035B H-010 D-047B Y-001 B-008B I-003 H-032A D-057 P-013 I-008C O-004 Mx-26 Mx-29A L-002B F-003 D-005B B-007 I-009 L-003	1. 2. 3. 4. 5. 6. 7. 8.	Nickel(II)sulfate hexahydrate Amerchol L-101 Neomycin sulfate¹ Potassium dichromate DMDM HYDANTOIN³ Fragrance mix I¹.² EMD -AMYL CINNAMAL (A-014) -CINNAMYL ALCOHOL (C-013) -CINNAMYL ALCOHOL (C-013) -CINNAMAL (C-014) EUGENOL (E-016) -GERANIOL (G-001) -HYDROXYCITRONELLAL (H-008) -ISOEUGENOL (I-002) -Oakmoss absolute (O-001) -Oakmoss absolute (O-001) -ETHYLPARABEN (B-020) -ETHYLPARABEN (E-010) -METHYLPARABEN (F-020) METHYLISOTHIAZOLINONE¹ -PROPYLPARABEN (P-020) METHYLISOTHIAZOLINONE¹ -Pru balsam¹.² -Pru balsam¹.² -Pru balsam¹.² -Pru balsam¹.² -Pru balsam¹.²	2.5 pet 50.0 pet 20.0 pet 0.25 pet 1.0 pet 8.0 pet 1.0 1.0 1.0 1.0 1.0 1.0 20.0 pet 12.0 pet 3.0 3.0 3.0 3.0 3.0 3.0 3.0 yet 1.0 pet 1	N-002B A-004 N-001 P-014B D-047B Mx-07 C-020 Mx-03A M-035B B-001 E-005 C-017A B-024 E-002 Mx-06
72. HYDROXYISOHEXYL 3-CYCLOHEXENI CARBOXALDEHYDE¹  73. ETHYLHEXYL SALICYLATE  74. Hydroperoxides of Linalool   75. Amidoamine   76. COCAMIDOPROPYL BETAINE   77. FORMALDEHYDE¹   78. METHYLISOTHIAZOLINONE +	5.0 pet 1.0 pet 0.1 aq 1.0 aq 2.0 aq 0.02 aq		15.	Carba mix	3.0 pet 1.0 1.0	
METHYLCHLOROISOTHIAZOLINONE <sup>1</sup> 79. PROPYLENE GLYCOL  80. OLEAMIDOPROPYL DIMETHYLAMINE  Re	30.0 aq	P-019B O-005 ry 2018		- N,N'-Diphenyl-p-phenylenediamine (D-024 - N-Isopropyl-N-phenyl-4-phenylenediamine (IPPD) (I-004) METHYLISOTHIAZOLINONE + METHYLCHLOROISOTHIAZOLINONE <sup>1</sup> QUATERNIUM-15 <sup>1</sup>	e 0.1 0.01 aq	C-009A C-007B

	Compound	Conc. Ve		Art. No.		Compound	Conc. %(w		Art. No.
	Hydroperoxides of Linalool PRELOAD	0.5 pc	et	H-031B	40.	COCAMIDOPROPYL BETAINE PRELOAD	1.0	aq	C-018
20.	p-PHENYLENEDIAMINE (PPD) <sup>1</sup>	1.0 pc	et	P-006	41.	Mixed dialkyl thiourea	1.0	pet	Mx-24
21.	FORMALDEHYDE1 PO NOT PRELOAD	2.0 a	q	F-002B		-N,N´-Dibutylthiourea (D-038)	0.5		
22.	Mercapto mix		et	Mx-05B		-N,N´-Diethylthiourea (D-039)	0.5		
	-N-Cyclohexyl-2-benzothiazolylsulfenamide	0.25			42.	3-(Dimethylamino)-1-propylamine ₩₩	1.0	aq	D-053
	(C-023)				43.	2-Hydroxyethyl methacrylate <sup>1</sup> PRELOAD	2.0	pet	H-010
	-Dibenzothiazyl disulfide (MBTS) (D-003)	0.25				OLEAMIDOPROPYL DIMETHYLAMINE PREDA	0.1	aq	O-005
	-2-Mercaptobenzothiazole (MBT) (M-003)	0.25				DECYL GLUCOSIDE <sup>4</sup> PRINT	5.0	pet	D-065
	-2-(4-Morpholinylmercapto)benzothiazol	0.25			46.	Methyl methacrylate RENOT	2.0	pet	M-013
	(MOR) (M-016)					Lavender absolute Render	2.0	pet	L-001
23.	2-BROMO-2-NITROPROPANE-1,3-DIOL	0.5 pc	et	B-015B	48.	CINNAMAL PO NOT	1.0	pet	C-014
24.	Thiuram mix¹	1.0 pe	et	Mx-01	49.	TOCOPHEROL PO NOT	100		T-036
	-Dipentamethylenethiuram disulfide (D-019)	0.25				Ethyl acrylate RELOAD	0.1	pet	E-004
	-Tetraethylthiuram disulfide (TETD) (T-002)	0.25				Tea tree oil oxidized RELOAD	5.0	pet	T-035B
	-Tetramethylthiuram disulfide (TMTD) (T-005)					CHLORHEXIDINE DIGLUCONATE PRENOT		aq	C-005
	-Tetramethylthiuram monosulfide (TMTM)	0.25				Propolis <sup>1</sup>			P-022
	(T-006)					CHLOROXYLENOL (PCMX)	1.0	pet	C-010B
	DIAZOLIDINYL UREA		et	D-044C		BENZOPHENONE-3	10.0		H-014C
	Benzocaine		et	B-004		Toluenesulfonamide formaldehyde resin	10.0	•	T-010
	Tixocortol-21-pivalate			T-031A	57.	Sesquiterpene lactone mix <sup>1</sup>	0.1	•	Mx-18
	Gold(I)sodium thiosulfate dihydrate		et	G-005B		-Alantolactone (A-003)	0.03		
	IMIDAZOLIDINYL UREA			I-001A		-Costunolide (C-039)	0.03		
	Budesonide		et	B-033A		-Dehydrocostus lactone (D-056)	0.03		
	Hydrocortisone-17-butyrate		et	H-021B		COCAMIDE DEA		pet	
	2-Mercaptobenzothiazole (MBT)	1.0 pc		M-003B		Hydroperoxides of Limonene PRINT		pet	H-032B
	Bacitracin	20.0 pc		B-032B		BENZALKONIUM CHLORIDE PRICO	0.1	aq	B-027
34.	Fragrance mix II <sup>1</sup> PORNOT	14.0 pc	et	Mx-25		BENZOPHENONE-4	2.0	pet	H-023C
	-Hexyl cinnamic aldehyde (H-025)	5.0				SODIUM BENZOATE	5.0	pet	S-001
	-COUMARIN (C-038)	2.5				SORBIC ACID	2.0	pet	S-003
	-FARNESOL (F-004)	2.5				Ylang ylang oil RENOT	2.0	pet	Y-001
	-HYDROXYISOHEXYL 3-CYCLOHEXENE	2.5			65.	Compositae mix II RELOW	5.0	pet	Mx-29A
	CARBOXALDEHYDE (L-003)					-Anthemis nobilis extract (C-029)	1.2		
	-CITRAL (C-036)	1.0				-Chamomilla recutita extract (C-051)	1.2		
	-CITRONELLOL (C-037) PRECON	0.5				-Achillea millefolium extract (A-025)	1.0		
35.	Disperse Blue mix 106/124		et	Mx-26		-Tanacetum vulgare extract (T-033)	1.0		
	-Disperse Blue 106 (D-040)	0.5				-Arnica montana extract (A-024) RENT	0.5		
00	-Disperse Blue 124 (D-041)	0.5	,	L 000D	00	-Parthenolide (P-029)	0.1		
	Lidocaine	15.0 pc		L-002B	66.	Ethyleneurea, melamine formaldehyde mix <sup>2</sup> Panal		pet	Mx-16
	PROPYLENE GLYCOL RENT	30.0 a		P-019B		-Dimethylol dihydroxy ethylene urea (D-012)			
	IODOPROPYNYL BUTYLCARBAMATE			I-008C	07	-Melamine formaldehyde (M-001) RENT	1.0	4	0.005
39.	Polymyxin B sulfate	5.0 p	et	P-026	67.	SORBITAN SESQUIOLEATE	∠∪.0	pet	S-005

	Compound	Conc. %(w		Art. No.
68.	1,3-Diphenylguanidine	1.0	pet	D-022
69.	HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE EC,1	5.0	pet	L-003
70.	ETHYLHEXYLGLYCERIN	5.0	pet	E-027
71.	Triamcinolone acetonide	1.0	pet	T-030
72.	Clobetasol-17-propionate	1.0	pet	C-028
73.	Amidoamine PO NOT RELOAD	0.1	aq	A-029
74.	ETHYL CYANOACRYLATE PRILOAD	10.0	pet	E-023
75.	PHENOXYETHANOL PORTO	1.0	pet	P-025
76.	DISPERSE ORANGE 3	1.0	pet	D-032
77.	BENZOIC ACID	5.0	pet	B-005
78.	BHT	2.0	pet	D-006
79.	ETHYLHEXYL METHOXYCINNAMATE	10.0	pet	E-019C
80.	BENZYL ALCOHOL PRELOAD	10.0	sof	B-008B
81.	CETEARYL ALCOHOL	20.0	pet	C-033
82.	Carmine	2.5	pet	C-059
83.	BENZYL SALICYLATE	10.0	pet	B-010B
84.	Disperse Yellow 3	1.0	pet	D-036
85.	Jasmine absolute RELOGI	2.0	pet	J-002
86.	Peppermint oil PRELICADI	2.0	pet	P-036
87.	Pramoxine hydrochloride	2.0	pet	P-039
88.	SHELLAC PO NOT PRELOAD	20.0	alc	S-015
89.	LAURYL POLYGLUCOSE PRELOAD	3.0	pet	L-004
90.	p-CHLORO-m-CRESOL (PCMC)	1.0	pet	C-008
	Revi	sed Ja	anuar	y 2022

## Compound

Conc. Veh. Art. No. %(w/w)

## **Compostion of International Screening Series**

Bakery Series	B-1000
1. VANILLIN 2. EUGENOL IN 3. ISOEUGENOL IN 3. CINNAMYL ALCOHOL IN 3. CINNAMYL ALCOHOL IN 3. CINNAMAL IN 3. CINNAMAL IN 3. CINNAMAL IN 3. CINNAMAL IN 3. ISOEUGENOL IN 3. PROPIONIC ACID IN 3. PROPYL GALLATE  15. Hydroperoxides of Limonene IN 3. Hydroperoxide  16. AMMONIUM PERSULFATE  17. Benzoylperoxide  18. PROPYL GALLATE  19. DODECYL GALLATE  20. Gallate mix  -DODECYL GALLATE (D-042)  -PROPYL GALLATE (P-021)	10.0 pet V-001 2.0 pet E-016 2.0 pet I-002 5.0 pet S-001 2.0 pet D-006 2.0 pet M-002 2.0 pet C-013 1.0 pet C-014 2.0 pet B-022 5.0 pet A-015 2.0 pet S-003 5.0 pet B-005 3.0 pet B-005 3.0 pet P-018 0.25 pet O-002 0.3 pet H-032A 2.5 pet A-011 1.0 pet B-007 1.0 pet B-007 1.0 pet P-021 0.25 pet D-042 1.0 pet Mx-28B 0.25 0.5
-Octyl gallate (O-002)	0.25

## Revised January 2018

## **Corticosteroid Series**

CS-1000

2. 3. 4.	Budesonide <sup>1</sup> Betamethasone-17-valerate Triamcinolone acetonide Tixocortol-21-pivalate <sup>1</sup>	1.0 1.0 0.1	pet pet pet	B-033B B-031 T-030 T-031B
5.	Alclomethasone-17,21-dipropionate	1.0	pet	A-023

	Compound	Conc. Veh. %(w/w)	Art. No.		Compound	Conc. Veh. %(w/w)	Art. No.
6.	Clobetasol-17-propionate	1.0 pet	C-028	21.	Clioquinol	5.0 pet	C-015
7.	Dexamethasone-21-phosphate disodium	1.0 pet	D-046	22.	Ethylenediamine dihydrochloride	1.0 pet	E-005
	salt			23.	HYDROABIETYL ALCOHOL	10.0 pet	A-002
8.	Hydrocortisone-17-butyrate RELOAD	1.0 alc	H-021A	24.	PHENYL SALICYLATE	1.0 pet	P-011
9.	Desoximetasone	1.0 pet	D-057	25.	BENZOPHENONE-3	10.0 pet	H-014C
10.	Betamethasone 17,21-dipropionate	1.0 pet	B-042	26.	SORBITAN SESQUIOLEATE	20.0 pet	S-005
11.	Methylprednisolone aceponate	1.0 pet	M-036	27.	PROPYLENE GLYCOL <sup>3</sup> PROPYL	5.0 pet	P-019A
12.	Corticosteroid mix	2.1% pet	Mx-23	28.	STEARYL ALCOHOL	30.0 pet	S-006
	-Budesonide (B-033)	0.1		29.	CETYL ALCOHOL	5.0 pet	C-003
	-Hydrocortisone-17-butyrate (H-021)	1.0		30.	BENZYL SALICYLATE	10.0 pet	B-010B
	-Tixocortol-21-pivalate (T-031)	1.0		31.	2-BROMO-2-NITROPROPANE-1,3-DIOL	0.25 pet	B-015A
13.	Hydrocortisone-21-acetate		H-034	32.	Sodium-2-pyridinethiol-1-oxide RELOAD	0.1 aq	S-002
	Rev	rised Janua	ry 2018	33.	COCAMIDOPROPYL BETAINE PRINT	1.0 aq	C-018
				34.	BENZYL ALCOHOL PONOT	10.0 sof	B-008B
C	osmetic Series	C-1	.000	35.	METHYLISOTHIAZOLINONE +	0.02 aq	C-009B
					METHYLCHLOROISOTHIAZOLINONE <sup>1</sup> REPORT NAME OF THE PROPERTY OF	NOT	
4	ISODDODYL MYDISTATE	20.0 not	1.002	36.	t-BUTYL HYDROQUINONE	1.0 pet	B-028
1. 2.	ISOPROPYL MYRISTATE Amerchol L-101	20.0 pet			DROMETRIZOLE	1.0 pet	H-016
	TRIETHANOLAMINE	50.0 pet	A-004		PROPYL GALLATE	1.0 pet	P-021
3.	POLYSORBATE 80	2.0 pet 5.0 pet	T-016 P-013		DODECYL GALLATE	0.25 pet	D-042
4.	SORBITAN OLEATE	•	S-004		QUATERNIUM-15 <sup>1</sup>	1.0 pet	
5.	2-tert-Butyl-4-methoxyphenol (BHA)	5.0 pet 2.0 pet	S-004 B-022	41.	PHENOXYETHANOL PRINT	1.0 pet	
6. 7.	BHT	2.0 pet	D-022		DIAZOLIDINYL UREA	2.0 pet	D-044A
7. 8.	Octyl gallate	0.25 pet	O-002		TOCOPHEROL PRINT	100	T-036
9.	TRICLOSAN		T-014		DMDM HYDANTOIN PRELOAD	2.0 aq	D-047A
	SORBIC ACID	2.0 pet	S-003		METHYLDIBROMO GLUTARONITRILE <sup>1</sup>	0.5 pet	D-049E
	p-CHLORO-m-CRESOL (PCMC)	1.0 pet	C-008		Tea tree oil oxidized RELOW	5.0 pet	T-035B
	CHLOROXYLENOL (PCMX)	0.5 pet	C-000 C-010A		IODOPROPYNYL BUTYLCARBAMATE	0.2 pet	I-008C
	THIMEROSAL	0.5 pet	T-007		3-(Dimethylamino)-1-propylamine RENOT	1.0 aq	D-053
	IMIDAZOLIDINYL UREA	2.0 pet	I-007		LAURYL POLYGLUCOSE PRIOT	3.0 pet	L-004
	METHENAMINE	2.0 pet	H-003		Peppermint oil PRELOAD	2.0 pet	P-036
	CHLORHEXIDINE DIGLUCONATE RENTERED	0.5 aq	C-005		SHELLAC PRELOAD	20.0 alc	S-015
	Paraben mix <sup>1</sup>	16.0 pet	Mx-03C		TOCOPHERYL ACETATE	10.0 pet	T-037B
17.	-BUTYLPARABEN (B-020)	4.0	WIX-000		Turpentine oil oxidized RENOT	0.4 pet	T-024B
	-ETHYLPARABEN (E-010)	4.0			METHYLISOTHIAZOLINONE <sup>1</sup> PRINT	0.2 aq	M-035B
	-METHYLPARABEN (M-012)	4.0		55.	Musk mix	3.0 pet	Mx-10B
	-PROPYLPARABEN (P-020)	4.0			-MUSK KETONE (M-018)	1.0	
18	PHENYL MERCURIC ACETATE PROMI	0.01 aq	P-008		-Musk moskene (M-019)	1.0	
	CHLOROACETAMIDE	0.01 aq 0.2 pet	C-006		-Musk xylene (M-021)	1.0	0.005
	Hexahydro-1,3,5-tris-(2-hydroxyethyl)triazine		H-002		OLEAMIDOPROPYL DIMETHYLAMINE		O-005
۷٠.	i ionaliyalo-1,0,0-ulo-(2-Hydionyoulyi)uldziile 🙉	aq	11-002	57.	DECYL GLUCOSIDE <sup>4</sup> PRELOAD	5.0 pet	D-065

	Compound	Conc %(v	. Veh. //w)	Art. No.
58.	ETHYLHEXYLGLYCERIN	5.0	pet	E-027
59.	SODIUM METABISULFITE	1.0	pet	S-011
60.	Gallate mix	1.0	pet	Mx-28B
	-DODECYL GALLATE (D-042)	0.25		
	-PROPYL GALLATE (P-021)	0.5		
	-Octyl gallate (O-002)	0.25		
61.	CETEARYL GLUCOSIDE	5.0	pet	C-056
62.	PANTHENOL	5.0	pet	P-042
63.	POLYAMINOPROPYL BIGUANIDE PRICORD	2.5	aq	P-043
	Rev	ised .	lanua	rv 2020

## Cutaneous Adverse Drug Reaction serie CAD-1000

1.	Cefixime trihydrate	10.0 pet	C-054
2.	Amoxicillin trihydrate	10.0 pet	A-030
3.	Dicloxacillin sodium salt hydrate	10.0 pet	D-058
4.	Cefotaxim sodium salt	10.0 pet	C-040
5.	Doxycycline monohydrate	10.0 pet	D-059
6.	Cefpodoxime proxetil	10.0 pet	C-055
7.	, ,	10.0 pet	E-024
8.	Spiramycin base	10.0 pet	
9.	Clarithromycin	10.0 pet	C-041
10.	Potassium clavulanate	10.0 pet	
11.	Cotrimoxazole	10.0 pet	C-042
12.	Norfloxacin	10.0 pet	N-007
	Ciprofloxacin hydrochloride	10.0 pet	
14.	Carbamazepine	1.0 pet	
15.	,	10.0 pet	H-027
16.	Diltiazem hydrochloride	10.0 pet	D-060
17.	Captopril	5.0 pet	C-045
18.	Acetylsalicylic acid	10.0 pet	A-031
19.	Diclofenac sodium salt	5.0 pet	D-061B
20.	Ketoprofen	1.0 pet	K-002B
21.	Piroxicam	1.0 pet	P-033
22.	ACETAMINOPHEN	10.0 pet	A-032
23.	Acyclovir	10.0 pet	A-033
24.	Hydroxyzine hydrochloride	1.0 pet	H-028
25.	Hydrochlorothiazide	10.0 pet	H-029
26.	Clindamycin phosphate	10.0 pet	C-046

Compound	Conc. Veh. Art. No. %(w/w)	
27. Cefradine	10.0 pet C-047	
28. Cefalexin	10.0 pet C-048	
29. Ibuprofen	10.0 pet I-010A	
30. Lamotrigine	10.0 pet L-009	
31. Cefuroxime sodium	10.0 pet C-053	
	Revised November 202	1

## **Dental Screening**

DS-1000

	_			
1.	Methyl methacrylate  Triethylene glycol dimethacrylate Urethane dimethacrylate  Urethane dimethacrylate  Urethane glycol dimethacrylate  Urethane glycol dimethacrylate  Urethane glycerolate  Urethane glycerolat	2.0	pet	M-013
2.		2.0	pet	T-018
3.		2.0	pet	U-004
4.		2.0	pet	E-007
5.		2.0	pet	H-013
18. 19. 20. 21. 22. 23. 24.	N,N-dimethyl-4-toluidine REMINER BENZOPHENONE-3  1,4-Butanediol dimethacrylate REMINER Bisphenol A dimethacrylate (BIS-MA) Reminer Bisphenol Reminer Bisphenol Reminer Bisphenol Reminer Bisphenol Bisph	5.0 10.0 2.0 2.0 0.5 0.5 1.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	pet pet pet pet pet pet pet pet pet	D-016 H-014C B-017 M-007 P-014A M-005 C-017A H-010 G-005B N-002A E-016 C-020 E-015 F-002B T-011 C-022 M-025 P-001 A-022 C-026 D-045 H-004 H-016
29.	Tetrahydrofurfuryl methacrylate	2.0	pet	T-027
30.	Tin	50.0	pet	T-008

	Compound		. Veh. v/w)	Art. No.		Compound	Conc. %(w		Art. No.
	Sodium tetrachloropalladate(II) hydrate CARVONE	3.0 5.0	pet pet	S-017 C-035	D	ental Materials - Staff	D	MS	-1000
33.	2,2-bis(4-(2-Methacryl-oxyethoxy)phenyl)-propane GLUTARAL <sup>2</sup> REMI	2.0	pet pet	M-006B G-003A ry 2020	1. 2. 3. 4.	Methyl methacrylate  Triethylene glycol dimethacrylate Ethyleneglycol dimethacrylate  Siephonel A glycorolate dimethacrylate	2.0 2.0 2.0	pet pet pet	M-013 T-018 E-007
De	ental Materials - Patients			-1000		Bisphenol A glycerolate dimethacrylate (BIS-GMA)  2-Hydroxyethyl methacrylate <sup>1</sup>	2.0	pet pet	H-013 H-010
1. 2. 3. 4.	Methyl methacrylate  Triethylene glycol dimethacrylate  Ethylene glycol dimethacrylate  Sisphenol A glycerolate dimethacrylate  (BIS-GMA)  2,2-bis(4-(2-Methacryl-oxyethoxy)phenyl)-propane (BIS-EMA)	2.0 2.0 2.0 2.0 2.0	pet pet pet pet	M-013 T-018 E-007 H-013		Tetrahydrofurfuryl methacrylate RECO 1,4-Butanediol dimethacrylate RECO Mercury RECO EUGENOL RECO GLUTARAL <sup>2</sup> RECO RECO RECO RECO RECO RECO RECO RECO		duce	T-027 B-017 M-005 E-016 G-003A d 2005
6.	2-Hydroxyethyl methacrylate <sup>1</sup> Renox	2.0	pet	H-010	<u>E</u> ]	poxy Series		E-1	000
11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21.	DIMETHYLAMINOETHYL METHACRYLATE RECONSTRUCTORY Tetrahydrofurfuryl methacrylate RECONSTRUCTORY 1,4-Butanediol dimethacrylate RECONSTRUCTORY 1,6-Hexanediol diacrylate Potassium dichromate¹ Mercury RECONSTRUCTORY Cobalt(II)chloride hexahydrate Gold(I)sodium thiosulfate dihydrate Nickel(II)sulfate hexahydrate¹ EUGENOL RECONSTRUCTORY COLOPHONIUM¹ N-Ethyl-p-toluenesulfonamide Palladium(II)chloride CARVONE RECONSTRUCTORY DROMETRIZOLE Peru balsam¹.²	0.1 2.0 5.0 1.0	pet	D-045 T-027 B-017 H-004 P-014A M-005 C-017A G-005B N-002A E-016 C-020 E-015 P-001 C-035 H-016 B-001	11. <b>E</b> t	METHENAMINE 4,4´-Diaminodiphenylmethane (MDA) Triethylenetetramine (TETA) 2-Phenyl glycidyl ether  Diethylenetriamine, (DETA) Isophorone diamine (IPD) m-Xylylenediamine  Ethylenediamine dihydrochloride 3-(Dimethylamino)-1-propylamine  Epoxy resin, Bisphenol F 2,4,6-Tris(dimethylaminomethyl)phenol Rev  Aropean Photopatch aseline Series	ised J	pet pet pet pet aq pet pet	H-003 D-001 T-019 P-023 D-010 I-006 X-001 E-005 D-053 B-035 T-048 y 2021
23.	Epoxy resin, Bisphenol A <sup>1</sup> Sodium tetrachloropalladate(II) hydrate	1.0 3.0	pet pet	E-002 S-017 y 2021	1. 2. 3. 4. 5.	BENZOPHENONE-3 BENZOPHENONE-4 4-METHYLBENZYLIDENE CAMPHOR ETHYLHEXYL METHOXYCINNAMATE OCTOCRYLENE ISOAMYL p-METHOXYCINNAMATE	10.0 2.0 10.0 10.0 10.0 10.0	pet pet pet pet	H-014C H-023C M-024B E-019C O-009 I-009

14.0 pet Mx-25

5.0

2.5

2.5

1.0

0.5

	Compound	Conc. Veh. %(w/w)	Art. No.		Compound	Conc %(w		Art. No.
7.	PABA	10.0 pet		Fr	agrance Series		F-1	000
8.	BUTYL METHOXYDIBENZOYLMETHANE	•	B-029C		agrance series			
9.	BIS-ETHYLHEXYLOXYPHENOL	10.0 pet	B-037	1.	CINNAMAL <sup>EC</sup> PO NOTI	1.0	not	C-014
10	METHOXYPHENOL TRIAZINE DROMETRIZOLE TRISILOXANE	10.0 not	D 055	2.	CINNAMYL ALCOHOLEC PONOTI	2.0	pet pet	C-014 C-013
	Ketoprofen	10.0 pet 1.0 pet	K-002B	3.	AMYL CINNAMALEC	2.0	pet	A-014
	2-(4-Diethylamino-2-hydroxy benzoyl)-	1.0 pet	D-062	3. 4.	EUGENOLEC PRENON	2.0	pet	E-016
12.	benzoic acid hexylester	10.0 pet	D-002	5.	ISOEUGENOL <sup>EC</sup> PONOT	2.0	pet	I-002
13	ETHYLHEXYL TRIAZONE	10.0 pet	0-010	6.	GERANIOLEC PRECOAD	2.0	pet	G-001
	Methylene bis-benzotriazolyl tetramethyl-	10.0 pet	M-037	7.	Oakmoss absolute <sup>EC,2</sup> PRECON	2.0	pet	O-001
17.	butylphenol	10.0 pct	IVI-037	8.	HYDROXYCITRONELLAL <sup>EC</sup>	2.0	pet	H-008
15	Etofenamate	2.0 pet	E-025	9.	Narcissus poeticus absolute PRINT	2.0	pet	N-006
	DIETHYLHEXYL BUTAMIDO TRIAZONE	10.0 pet	D-063		•	1.0	pet	M-021
	Piroxicam	1.0 pet	P-033	11.	METHYL ANTHRANILATE	5.0	pet	M-028
	Benzydamine hydrochloride	2.0 pet	B-041	12.	Musk moskene	1.0	pet	M-019
	DECYL GLUCOSIDE <sup>5</sup> RENSE	5.0 pet	D-065	13.	SORBITAN SESQUIOLEATE	20.0	pet	S-005
		sed Octobe			Jasmine synthetic Record	2.0		J-001
					BENZYL SALICYLATEEC	10.0	pet	B-010B
F	ropean Photopatch			16.	BENZYL ALCOHOLEC PRINCE	10.0	sof	B-008B
			EPE-1000 17		VANILLIN	10.0	pet	V-001
<b>Extended Series</b>		EFE-	•1000	18.	Lavender absolute PRELOAD	2.0	pet	L-001
	TRICL COARRAN	4.0	T 0.10	19.	Cananga oil RENOTI	2.0	pet	C-002
1.	TRICLOCARBAN		T-013	20.	Rose absolute PORT	2.0	pet	R-003
2.	BENZOPHENONE-10	10.0 pet	H-020B		Ylang ylang oil RELOAD	2.0	pet	Y-001
3.	PHENYLBENZIMIDAZOLE SULFONIC	10.0 pet	P-024B	22.	Geranium oil RELOAD	2.0	pet	G-002
4	ACID	100 ==+	11.004B		Jasmine absolute RENGE	2.0	pet	J-002
4.	HOMOSALATE	10.0 pet			Sandalwood oil PRELOAD	2.0	pet	S-009
5.	ETHYLHEXYL SALICYLATE	10.0 pet	O-007B	25.	HYDROXYISOHEXYL 3-CYCLOHEXENE	5.0	pet	L-003
6. 7.	Polysilicone-15	10.0 pet	P-035		CARBOXALDEHYDE EC,1			
1.	Disodium phenyl dibenzimidazole tetrasulfonate	10.0 pet	D-064		CITRALEC	2.0	pet	
8.	TRICLOSAN	2.0 not	T-014		FARNESOL <sup>EC</sup>	5.0	pet	F-004
o. 9.	Ibuprofen		I-014 I-010B		CITRONELLOLEC DO NOT	1.0	pet	C-037
	Diclofenac sodium salt	5.0 pet			Hexyl cinnamic aldehyde <sup>EC</sup>		pet	H-025
10.		10.0 pet		30.	COUMARINEC	5.0	pet	C-038

31. Fragrance mix II<sup>1</sup> PO NOT PRELOAD

-COUMARIN (C-038)<sup>EC</sup>

-FARNESOL (F-004)<sup>EC</sup>

-CITRAL (C-036)EC

-Hexyl cinnamic aldehyde (H-025)<sup>EC</sup>

CARBOXALDEHYDE (L-003) EC

-CITRONELLOL (C-037)EC DO NOT PRELOAD

-HYDROXYISOHEXYL 3-CYCLOHEXENE 2.5

11. Fenofibrate

12. Olaquindox

67 66

10.0 pet F-006

1.0 pet O-008

Revised January 2021

	Compound	Conc. Veh. %(w/w)	Art. No.		Compound	Conc %(w		Art. No.
32.	Amyl cinnamyl alcohol <sup>EC</sup>	5.0 pet	A-036	12.	Deleted 2020			
33.	Anise alcohol <sup>EC</sup>	10.0 sof	A-037	13.	HYDROQUINONE	1.0	pet	H-007
34.	BENZYL BENZOATEEC	10.0 pet	B-038	14.	Peru balsam <sup>1,2</sup> PRELOAD	25.0	pet	B-001
35.	BENZYL CINNAMATEEC	10.0 pet	B-039	15.	CHLOROACETAMIDE	0.2	pet	C-006
36.	BUTYLPHENYL METHYLPROPIONAL <sup>EC</sup>	10.0 pet	B-040	16.	GLYCERYL THIOGLYCOLATE PRELOAD	1.0	pet	G-004
37.	Treemoss absolute EC PRELOAD	1.0 pet	E-026	17.	COCAMIDOPROPYL BETAINE PRELOAD	1.0	aq	C-018
38.	α-Isomethyl ionone <sup>EC</sup> PRELOAD	10.0 pet	I-017	18.	METHYLISOTHIAZOLINONE +	0.02	aq	C-009B
39.	d-Limonene <sup>EC</sup> PO NOT PRELOAD	10.0 pet	L-006C		METHYLCHLORO-ISOTHIAZOLINONE1	O NOT	-	
40.	LINALOOL <sup>EC</sup> PO NOT PRELOAD	10.0 pet	L-005B	19.	2-BROMO-2-NITROPROPANE-1,3-DIOL	0.25	pet	B-015A
41.	Methyl-2-octynoate <sup>EC</sup> PONOT	0.2 pet	M-034	20.	Captan	0.5	pet	C-025
42.	Majanthole	5.0 pet	M-033	21.	p-CHLORO-m-CRESOL (PCMC)	1.0	pet	C-008
43.	Hydroperoxides of Linalool PRINCE	1.0 pet	H-031A		CHLOROXYLENOL (PCMX)	0.5	pet	C-010A
44.	Hydroperoxides of Limonene POR NOT	0.3 pet	H-032A	23.	IMIDAZOLIDINYL UREA	2.0	pet	I-001A
45.	Fragrance mix I <sup>1,2</sup> PRELOAD	8.0 pet	Mx-07	24.	QUATERNIUM-15 <sup>1</sup>	1.0	pet	C-007A
	-AMYL CINNAMAL (A-014)	1.0		25.	ZINC PYRITHIONE	1.0	pet	Z-006
	-CINNAMYL ALCOHOL (C-013) PRELOAD	1.0		26.	DIAZOLIDINYL UREA	2.0	pet	D-044A
	-CINNAMAL (C-014) DO NOT	1.0		27.	LAURYL POLYGLUCOSE PRELOAD	3.0	pet	L-004
	-EUGENOL (E-016) PO NOT	1.0		28.	OLEAMIDOPROPYL DIMETHYLAMINE REN	ររ 0.1	aq	O-005
	-GERANIOL (G-001) PO NOT PRELOAD	1.0		29.	DECYL GLUCOSIDE <sup>4</sup> POR NOTI	5.0	pet	D-065
	-HYDROXYCITRONELLAL (H-008)	1.0		30.	TOLUENE-2,5-DIAMINE	1.0	pet	T-049
	-ISOEUGENOL (I-002) PO NOTI	1.0		31.	4-AMINO-2-HYDROXYTOLUENE	1.0	pet	A-039
	-Oakmoss absolute (O-001) POR INCLORD	1.0		32.	CYSTEAMINE HCL	0.5	pet	C-052
46.	Hydroperoxides of Linalool RELOAD	0.5 pet	H-031B	33.	2-METHYLRESORCINOL	1.0	pet	M-039
47.	Hydroperoxides of Limonene RELOAD	0.2 pet	H-032B	34.	HYDROXYETHYL-p-PHENYLENE-	2.0	pet	H-033
48.	Styrax PO NOT PRELOAD	2.0 pet	S-008		DIAMINE SULFATE			
	Revi	sed Januar	ry 2017	35.	p-METHYLAMINOPHENOL	1.0	pet	M-040
				36.	CETRIMONIUM BROMIDE	0.5	pet	C-050
Ha	irdressing Series	H-1	1000	37.	SODIUM METABISULFITE	1.0	pet	S-011
				38.	PANTHENOL	5.0	pet	P-042
1.	p-PHENYLENEDIAMINE (PPD) <sup>1</sup>	1.0 pet	P-006		Rev	ised [	Decen	nber 2019
	TOLUENE-2,5-DIAMINE SULFATE	1.0 pet	D-002	Ιω	anlant Sorios		TNA	P-1000
3.	2-NITRO-p-PHENYLENEDIAMINE	1.0 pet	N-004	111	nplant Series		TIVI	1-1000
4.	AMMONIUM THIOGLYCOLATE PRINT	2.5 aq	A-012	1.	Vancomycin hydrochloride	10.0	an	V-004
5.	AMMONIUM PERSULFATE	2.5 pet	A-011	2.	Tobramycin			T-050
	FORMALDEHYDE <sup>1</sup> POR NOT	2.0 aq	F-002B	3.	Benzoylperoxide	1.0	pet	B-007
	Nickel(II)sulfate hexahydrate <sup>1</sup>	5.0 pet	N-002A	3. 4.	HYDROQUINONE	1.0	•	H-007
8.	Cobalt(II)chloride hexahydrate <sup>1</sup>	1.0 pet	C-017A	5.	N,N-dimethyl-4-toluidine	5.0	pet	D-016
9.	RESORCINOL	1.0 pet	R-001	6.	ETHYL CYANOACRYLATE PRELOAD		pet	E-023
	m-AMINOPHENOL	1.0 pet	A-008	7.	Aluminium(III)chloride hexahydrate	2.0		A-022
11.	p-AMINOPHENOL	1.0 pet	A-009	7.	Additional Hoxariyarate	2.0	por	,022

2.0 pet I-001A

Compound	Conc. Veh. %(w/w)	Art. No.	Compound	Conc. Veh. %(w/w)	Art. No.
<ul> <li>8. Cobalt(II)chloride hexahydrate<sup>1</sup></li> <li>9. Beryllium(II)sulfate tetrahydrate</li> </ul>	1.0 pet 1.0 pet	C-017A B-044	<b>Isocyanate Series</b>	I-10	000
10. Gold(I)sodium thiosulfate dihydrate 11. Copper(II)sulfate pentahydrate 12. Tin 13. Iridium(III)chloride trihydrate 14. Titanium(III)nitride 15. Mercury 16. ZINC CHLORIDE 17. Titanium(IV)oxalate hydrate 18. Sodium tetrachloropalladate(II) hydrate 19. Molybdenum 20. Vanadium(III)chloride	2.0 pet 2.0 pet 50.0 pet 1.0 pet 5.0 pet 0.5 pet 1.0 pet 5.0 pet 3.0 pet 5.0 pet 1.0 pet	G-005B C-022 T-008 I-012 T-039 M-005 Z-007B T-041 S-017	<ol> <li>Diphenylmethane-4,4´-diisocyanate (MDI) A,4´-Diaminodiphenylmethane (MDA)</li> <li>ISOPHORONE DIISOCYANATE (IPDI) ISOPHORONE diamine (IPD) ISOPHORONE diamine (IPDI) ISOPHORONE diisocyanate (HDI) ISOPHORONE diisocyanate (HDI) ISOPHORONE diisocyanate (IPDI) ISOPHORONE (IPDI) ISOPHORONE ISOPHO</li></ol>	0.5 pet 1.0 pet 0.1 pet 0.1 pet 2.0 pet ed March	T-009 D-023B D-001 I-007 I-006 H-022 P-038
21. MANGANESE CHLORIDE	2.0 pet	M-031	Leg Ulcer Series	LU	-1000
22. Zirconium(IV)chloride 23. Tungsten 24. FERRIC CHLORIDE 25. Ammonium tetrachloroplatinate(II) 26. Cadmium chloride 27. Indium(III)chloride 28. Nickel(II)sulfate hexahydrate 29. Rhodium(III)chloride hydrate 30. Gallium(III)oxide 31. Ruthenium 32. SILVER NITRATE 28. 33. ALUMINUM HYDROXIDE 34. Niobium(V)chloride 35. Tantalum 36. Potassium dichromate 37. Gentamicin sulfate 38. Neomycin sulfate 39. Bacitracin 40. 2-Hydroxyethyl methacrylate 29. Hydroxyethyl methacrylate 20. CHLORHEXIDINE DIGLUCONATE 20. 20. Ethyl acrylate 20. Ethylate 20.		et Z-008 et T-043 et I-016 q A-013 q C-001 q I-011 et N-002A et R-013 et G-007 et A-038 et N-008 et T-047 et P-014A et G-006 et N-001 et B-032B et H-010 et M-013	2. Fusidic acid sodium salt 3. CHLORHEXIDINE DIGLUCONATE  4. BENZALKONIUM CHLORIDE  5. Nitrofurazone 6. Bacitracin 7. CETEARYL ALCOHOL 8. BHT 9. Chloramphenicol 10. Benzoylperoxide 11. PROPYLENE GLYCOL  12. Propolis¹ 13. THIMEROSAL 14. SORBIC ACID 15. Eosin 16. p-CHLORO-m-CRESOL (PCMC) 17. Budesonide¹ 18. TRIETHANOLAMINE 19. Framycetin sulphate 20. SORBITAN SESQUIOLEATE 21. Tixocortol-21-pivalate¹ 22. SORBITAN OLEATE	50.0 pet 2.0 pet 0.5 aq 0.1 aq 11.0 pet 5.0 pet 22.0 pet 5.0 pet 11.0 pet 5.0 pet 11.0 pet 0.1 pet 22.0 pet 12.0 pet 12.0 pet 12.0 pet 12.0 pet 22.0 pet 22.0 pet 22.0 pet 22.0 pet 22.0 pet 23.0 pet 25.0 pet 0.1 pet 5.0 pet 0.1 pet	A-004 F-003 C-005 B-027 N-005 B-032A C-033 D-006 C-032 B-007 P-019A P-022 T-007 S-003 E-022 C-008 B-033B T-016 F-005 S-005 T-031B S-004 P-008

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26. IMIDAZOLIDINYL UREA

	Compound	Conc. Veh. %(w/w)	Art. No.
27.	Wood tar mix PRELOAD	12.0 pet	Mx-14
	-Beech tar (B-002) PRELOAD	3.0	
	-Birch tar (B-011) PRELOAD	3.0	
	-Juniperus oxycedrus extract (J-003) PRELOAD	3.0	
	-Pine tar (P-012) PO NOT PRELOAD	3.0	
	Rev	ised Januai	v 2007

Revised January 2007

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1/10/110/11/01/10/11/05	1712 2000
Chloramphenicol	5.0 pet C-032
Kanamycin sulfate	10.0 pet K-001
3. Quinine sulfate	1.0 pet Q-001
4. Sulfanilamide	5.0 pet S-010
5. Gentamicin sulfate	20.0 pet G-006
6. Nitrofurazone	1.0 pet N-005
7. Bacitracin	5.0 pet B-032A
8. Framycetin sulphate	20.0 pet F-005
9. Caine mix III <sup>1</sup>	10.0 pet Mx-19
-Benzocaine (B-004)	5.0
-Dibucaine hydrochloride (D-005)	2.5
-Tetracaine hydrochloride (T-025)	2.5
10. Miconazole PRELOAD	1.0 alc M-027
11. Econazole nitrate PO NOT	1.0 alc E-021
12. Caine mix IV	10.0 pet Mx-20
-Lidocaine (L-002)	5.0
-Amylocaine hydrochloride (A-020)	2.5
-Prilocaine hydrochloride (P-027)	2.5
<ol><li>Fusidic acid sodium salt</li></ol>	2.0 pet F-003
14. Tioconazole	1.0 pet T-034
15. Tobramycin	20.0 pet T-050
16. Vancomycin hydrochloride RELOAD	10.0 aq V-004
17. Bufexamac	5.0 pet B-043
<ol><li>Pramoxine hydrochloride</li></ol>	2.0 pet P-039
19. Phenylbutazone	10.0 pet P-041
20. Diphenhydramine hydrochloride	1.0 pet D-021
21. Polymyxin B sulfate	5.0 pet P-026
	Revised January 2018

Compound	Conc. Veh. Art. No. %(w/w)
<b>Metal Series</b>	MET-1000

Metal Series		1	/IE I	-1000
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24.	Aluminium(III)chloride hexahydrate Cobalt(II)chloride hexahydrate¹ Beryllium(II)sulfate tetrahydrate Gold(I)sodium thiosulfate dihydrate Copper(II)sulfate pentahydrate Tin Iridium(III)chloride trihydrate Titanium(III)nitride Mercury ZINC CHLORIDE Titanium(IV)oxalate hydrate Sodium tetrachloropalladate(II) hydrate Molybdenum Vanadium(III)chloride MANGANESE CHLORIDE Zirconium(IV)chloride Tungsten FERRIC CHLORIDE Ammonium tetrachloroplatinate(II)  Cadmium chloride  Mickel(II)sulfate hexahydrate¹ Rhodium(III)chloride hydrate Gallium(III)oxide	2.0 1.0 2.0 2.0 50.0 1.0 5.0 0.5 1.0 5.0 1.0 2.0 1.0 5.0 2.0 1.0 5.0 2.0 1.0 5.0 1.0	pet	A-022 C-017A B-044 G-005B C-022 T-008 I-012 T-039 M-005 Z-007B T-041 S-017 M-030 V-003 M-031 Z-008 T-043 I-016 A-013 C-001 I-011 N-002A R-013 G-007
20.	Cadmium chloride PRELOAD	1.0	aq	C-001
22. 23.	Nickel(II)sulfate hexahydrate <sup>1</sup> Rhodium(III)chloride hydrate	5.0 2.0	pet pet	R-013
26. 27.	Ruthenium SILVER NITRATE RESERVED ALUMINUM HYDROXIDE		pet aq pet	R-012 S-007 A-038
29.	Niobium(V)chloride Tantalum Potassium dichromate Revi	0.2 1.0 0.5 sed J	pet pet pet anuar	N-008 T-047 P-014A y 2022

Compound	Conc. %(w		Art. No.
Metal Series Extended	N	ÆΙ	<b>E-1000</b>
1. Zinc 2. Potassium dicyanoaurate(I)   3. Mercury(II)chloride 4. Mercury(II)amidochloride 5. Gold(I)sodium thiosulfate dihydrate 6. Copper(I)oxide 7. Iridium 8. Indium 9. CALCIUM TITANATE 10. Vanadium 11. Tin(II)oxalate 12. PHENYL MERCURIC ACETATE   13. Ammonium molybdate (VI) tetrahydrate   14. Ammonium hexachloroiridate(IV)   15. Indium(III)sulfate   16. STANNOUS CHLORIDE 17. Lead(II)chloride   18. Ammonium hexachloroplatinate(IV)   19. Palladium(II)chloride 20. TITANIUM DIOXIDE 21. Molybdenum(V)chloride 22. Titanium 23. Sodium tungstate dihydrate   24. Vanadium(V)oxide 25. ZIRCONIUM DIOXIDE	2.5 0.1 0.1 1.0 0.5 5.0 1.0 10.0 5.0 1.0 0.01 1.0 0.1 10.0 0.2 0.1 2.0 10.0 0.5 10.0	pet aq pet pet pet pet pet aq aq aq aq aq pet aq aq pet aq aq pet aq aq aq pet aq aq aq pet pet aq aq aq aq aq aq aq aq aq aq aq aq aq	Z-001 P-015 M-004 M-022 G-005A C-021 I-014 I-015 C-049 V-002 S-014 P-008 A-035 A-035 A-034 I-013 S-013 L-008 A-010 P-001 T-040 M-038 T-042 S-019 V-005 Z-009

## 26.(Meth) Acrylate Series Adhesives, Dental, Printing & Other MA-1000

1.	Methyl methacrylate RELOW	2.0	pet	M-013
2.	BUTYL METHACRYLATE PRELOAD	2.0	pet	B-021
3.	2-Hydroxyethyl methacrylate <sup>1</sup> PRELOAD	2.0	pet	H-010
4.	Hydroxypropyl methacrylate RELOAD	2.0	pet	H-018
5.	Ethylene glycol dimethacrylate PRINCE	2.0	pet	E-007
6.	Triethylene glycol dimethacrylate	2.0	pet	T-018
7.	1,4-Butanediol dimethacrylate RENOT	2.0	pet	B-017
8.	Urethane dimethacrylate RNII	2.0	pet	U-004

	Compound		Conc. %(w		Art. No.
9.	Bisphenol A dimethacrylate (BIS-MA)	NOT	2.0	pet	M-007
10.	Bisphenol A glycerolate dimethacrylate (BIS-GMA)		2.0	pet	H-013
11.	1,6-Hexanediol diacrylate		0.1	pet	H-004
12.	Tetrahydrofurfuryl methacrylate RENOT		2.0	pet	T-027
13.	Tetraethylene glycol dimethacrylate		2.0	pet	T-029
14.	DIMETHYLAMINOETHYL		0.2	pet	D-045
	METHACRYLATE PO NOT PRELOAD				
15.	ETHYL CYANOACRYLATE PRELOAD		10.0	pet	E-023
16.	ISOBORNYL ACRYLATE		0.1	pet	I-019
17.	Ethyl acrylate RELOAD		0.1	pet	E-004
18.	2-Hydroxyethyl acrylate PRELOAD		0.1	pet	H-009
19.	ETHYL METHACRYLATE PO NOT PRELOAD		2.0	pet	E-012
20.	2,2-bis(4-(2-Methacryl-oxyethoxy)phen propane (BIS-EMA)	yl)-	2.0	pet	M-006B
21.	1,4-Butanediol diacrylate		0.1	pet	B-016
22.	Di(ethylene glycol) diacrylate		0.1	pet	D-009
23.	Tri(propylene glycol) diacrylate		0.1	pet	T-023
24.	Trimethylolpropane triacrylate RELOAD		0.1	pet	T-021
25.	Triethylene glycol diacrylate		0.1	pet	T-017
26.	N,N-Methylene-bisacrylamide		1.0	pet	M-023
27.	Butyl acrylate PRELOAD	(	).1	pet	B-018
	F	Revis	sed Ja	anuar	y 2022

## (Meth) Acrylate Series Nails-Artificial

Nails-ArtificialMN-1000ETHYL CYANOACRYLATE 10.0 pet E-023ETHYL METHACRYLATE 2.0 pet E-012Methyl methacrylate 2.0 pet M-0132-Hydroxyethyl methacrylate¹ 2.0 pet H-010

MELLIYI MEMACI YIALE PRELOAD	2.0	her	101-013
2-Hydroxyethyl methacrylate <sup>1</sup> PO NOT	2.0	pet	H-010
Hydroxypropyl methacrylate POR NOT	2.0	pet	H-018
Ethylene glycol dimethacrylate RELOAD	2.0	pet	E-007
Bisphenol A glycerolate dimethacrylate	2.0	pet	H-013
(BIS-GMA)			
1,6-Hexanediol diacrylate	0.1	pet	H-004
Triethylene glycol diacrylate RELOA	0.1	pet	T-017
Tetrahydrofurfuryl methacrylate RELOW	2.0	pet	T-027
Ethyl acrylate PONOT	0.1	pet	E-004
2-Hydroxyethyl acrylate PRINCE	0.1	pet	H-009
Revised August 1992			
	2-Hydroxyethyl methacrylate  Hydroxypropyl methacrylate  Hydroxypropyl methacrylate  Hydroxypropyl methacrylate  Hydroxypropyl methacrylate  Hydroxypropyl methacrylate  Hydroxylate  Hydroxylate	2-Hydroxyethyl methacrylate 2.0 Hydroxypropyl methacrylate 2.0 Ethylene glycol dimethacrylate 2.0 Bisphenol A glycerolate dimethacrylate 2.0 (BIS-GMA) 1,6-Hexanediol diacrylate 0.1 Triethylene glycol diacrylate 0.1 Tetrahydrofurfuryl methacrylate 2.0 Ethyl acrylate 2.0 Ethyl acrylate 2.0 E-Hydroxyethyl acrylate 2.0	2-Hydroxyethyl methacrylate 2.0 pet Hydroxypropyl methacrylate 2.0 pet Ethylene glycol dimethacrylate 2.0 pet Bisphenol A glycerolate dimethacrylate (BIS-GMA)  1,6-Hexanediol diacrylate 0.1 pet Triethylene glycol diacrylate 2.0 pet Ethyl acrylate 2.0 pet 2-Hydroxyethyl acrylate 2.0 pet 0.1 pet

## Compound Conc. Veh. Art. No. %(w/w)

## (Meth) Acrylate Series Printing

**MP-1000** 

Deleted January 2022

Oil & Cooling Fluid Series	O-1
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Oil & Cooling Fluid Series				O-1000		
1.	ABIETIC ACID	10.0	pet	A-001		
2.	p-CHLORO-m-CRESOL (PCMC)	1.0	pet	C-008		
3.	CHLOROXYLENOL (PCMX)	0.5	pet	C-010A		
4.	DICHLOROPHENE `	1.0	pet	D-008		
5.	o-PHENYLPHENOL	1.0	pet	P-010		
6.	PROPYLENE GLYCOL PRELOW	5.0	pet	P-019A		
7.	TRIETHANOLAMINE	2.0	pet	T-016		
8.	4-tert-Butylbenzoic acid	1.0	pet	B-019		
9.	BENZISOTHIAZOLINONE	0.1	pet	B-003B		
10.	Hexahydro-1,3,5-tris-(2-hydroxyethyl)triazine	1.0	aq	H-002		
11.	Bioban P 1487 PRELOAD	0.5	pet	E-014		
12.	CHLOROACETAMIDE	0.2	pet	C-006		
13.	N-Methylolchloroacetamide	0.1	pet	M-014		
14.	BENZOTRIAZOLE	1.0	pet	B-006		
15.	Ethylenediamine dihydrochloride	1.0	pet	E-005		
16.	2-Mercaptobenzothiazole (MBT) <sup>1</sup>	2.0	pet	M-003A		
17.	Zinc ethylenebis-(dithiocarbamate) (Zineb)	1.0	pet	Z-005		
18.	TRICLOSAN	2.0	pet	T-014		
19.	7-ETHYLBICYCLOOXAZOLIDINE PRELOAD	1.0	pet	A-017		
20.	Bioban CS 1135 PRELOAD	1.0	pet	D-015		
21.	TRIS(HYDROXYMETHYL)NITROMETHANE	1.0	pet	H-015		
22.	THIMEROSAL	0.1	pet	T-007		
23.	Hydrazine sulfate	1.0	pet	H-005		
24.	TRICLOCARBAN	1.0	pet	T-013		
25.	FORMALDEHYDE <sup>1</sup> PO NOT PRELOAD	2.0	aq	F-002B		
26.	Amerchol L-101	50.0	pet	A-004		
27.	Hydroperoxides of Limonene RELOAD	0.3	pet	H-032A		
28.	Sodium-2-pyridinethiol-1-oxide RENOT	0.1	aq	S-002		
29.	2-BROMO-2-NITROPROPANE-1,3-DIOL	0.25	pet	B-015A		
30.	COCAMIDE DEA	0.5	pet	C-019		
31.	METHYLISOTHIAZOLINONE +	0.02	aq	C-009B		
	METHYLCHLORO-ISOTHIAZOLINONE <sup>1</sup> 🖭	OAD	-			

	Compound	Conc %(w		Art. No.
32.	PHENOXYETHANOL PO NOT RELOAD	1.0	pet	P-025
33.	2-n-Octyl-4-isothiazolin-3-one RELOAD	0.1	pet	O-004
34.	METHYLDIBROMO GLUTARONITRILE <sup>1</sup>	0.5	pet	D-049E
35.	IODOPROPYNYL BUTYLCARBAMATE	0.2	pet	I-008C
	Revi	sed J	anuar	y 2014

#### **Plant Series** PL-1000

Anthemis nobilis extract PRELOAD	1.0	pet	C-029
Diallyl disulfide PONOT	1.0	•	D-048
Arnica montana extract RELOW	0.5	•	A-024
Taraxacum officinale extract RELOAD	2.5	•	T-032
Achillea millefolium extract RELOAD	1.0	•	A-025
Propolis <sup>1</sup>		•	P-022
•	1.0	pet	C-031
Sesquiterpene lactone mix <sup>1</sup>	0.1	pet	Mx-18
• •	0.03		
	0.03	3	
	0.01	pet	M-026
			T-033
Alantolactone			A-003B
Lichen acid mix	0.3	pet	Mx-15
-Atranorin (A-016)	0.1	•	
-Evernic acid (E-017)	0.1		
-(+)-Usnic acid (U-005)	0.1		
Parthenolide	0.1	pet	P-029
Chamomilla recutita extract RELOAD	1.0	pet	C-051
(+)-Usnic acid	0.1	pet	U-005
Atranorin	0.1	pet	A-016
Evernic acid	0.1	pet	E-017
2-Methoxy-6-n-pentyl-4-benzoquinone	0.01	pet	M-008
Revis	sed N	ovem	ber 2018
	Diallyl disulfide  Arnica montana extract  Taraxacum officinale extract  Achillea millefolium extract  Propolis¹ Chrysanthemum Cinerariaefolium extract  Sesquiterpene lactone mix¹ -Alantolactone (A-003) -Costunolide (C-039) -Dehydrocostus lactone (D-056) α-Methylene-γ-butyrolactone  Tanacetum vulgare extract  Alantolactone Lichen acid mix -Atranorin (A-016) -Evernic acid (E-017) -(+)-Usnic acid (U-005) Parthenolide Chamomilla recutita extract  France  Chamomilla recutita extract  Chamorin  Evernic acid  Atranorin  Evernic acid  Atranorin  Evernic acid  2-Methoxy-6-n-pentyl-4-benzoquinone	Diallyl disulfide       1.0         Arnica montana extract       0.5         Taraxacum officinale extract       2.5         Achillea millefolium extract       1.0         Propolis¹       10.0         Chrysanthemum Cinerariaefolium extract       1.0         Sesquiterpene lactone mix¹       0.1         -Alantolactone (A-003)       0.03         -Costunolide (C-039)       0.03         -Dehydrocostus lactone (D-056)       0.03         α-Methylene-γ-butyrolactone       0.01         Tanacetum vulgare extract       1.0         Alantolactone       0.03         Lichen acid mix       0.3         -Atranorin (A-016)       0.1         -Evernic acid (E-017)       0.1         -(+)-Usnic acid (U-005)       0.1         Parthenolide       0.1         Chamomilla recutita extract       0.1         Atranorin       0.1         Evernic acid       0.1         2-Methoxy-6-n-pentyl-4-benzoquinone       0.01	Diallyl disulfide   Arnica montana extract   Arnica montana extract   Arnica montana extract   Competed   Achillea millefolium extract   Chrysanthemum Cinerariaefolium extract   Chrysanthemum Cinerari

	Compound	Conc. Veh %(w/w)	. Art. No.		Compound		c. Veh. v/w)	Art. No.
<u>P1</u>	astics & Glues Series	PC	G-1000	. 11.	2-(4-Morpholinylmercapto)benzothiazol (MOR)	1.0	pet	M-016
1.	HYDROQUINONE	1.0 pet	H-007	12.	1,3-Diphenylguanidine	1.0	pet	D-022
2.	Dibutyl phthalate	5.0 pet		13.	Zinc diethyldithiocarbama (ZDC)	1.0	pet	Z-003
3.	PHENYL SALICYLATE	1.0 pet		14.	ZINC DIBUTYLDITHIOCARBAMATE (ZB	2)1.0	pet	Z-002
4.	Dioctyl phthalate (DEHP, DOP)	2.0 pet		15.	N,N-Di-2-naphtyl-4-phenylenediamine	1.0	pet	D-017
5.	BHT	2.0 pet			(DBNPD)			
6.	DROMETRIZOLE	1.0 pet		16.	N-Phenyl-2-naphtylamine (PBN)	1.0	pet	P-009
7.	Benzoylperoxide	1.0 pet		17.	METHENAMINE	2.0	pet	H-003
8.	4-tert-Butylcatechol (PTBC)	0.25 pet		18.	4,4'-Diaminodiphenylmethane (MDA)	0.5	pet	D-001
9.	Triglycidyl isocyanurate (TGIC)	0.5 pet		19.	N,N'-Diphenylthiourea (DPTU)	1.0	pet	D-025
10.	Bisphenol A	1.0 pet		20.	Zinc dimethyldithiocarbamate (Ziram)	1.0	pet	Z-004
11.	Tricresyl phosphate	5.0 pet		21.	2,2,4-Trimethyl-1,2-dihydroquinoline	1.0	pet	T-020
12.	* * *	1.0 pet		22.	N,N'-Diethylthiourea	1.0	pet	D-039
	p-tert-Butylphenol formaldehyde resin <sup>1</sup>	1.0 pet		23.	N,N´-Dibutylthiourea	1.0	pet	D-038
	Triphenyl phosphate	5.0 pet		24.	Dodecyl mercaptan PO NOT PRELOAD	0.1	pet	D-043
	Toluenesulfonamide formaldehyde resin	10.0 pet		25.	N-(Cyclohexylthio) phthalimide	1.0	pet	C-034
	Resorcinol monobenzoate	1.0 pet		26.	Thiourea	0.1	pet	T-026
	2-Phenylindole	2.0 pet		27.	4,4`-Dithiodimorpholine	1.0	pet	D-054
	2-tert-Butyl-4-methoxyphenol (BHA)	2.0 pet			Rev	ised	Nover	mber 2018
	HYDROABIETYL ALCOHOL	10.0 pet						
	4-tert-Butylphenol	1.0 pet		Sh	noe Series SI	<b>I-1</b> 0	000	
	2-Monomethylol phenol	1.0 pet		<u> </u>				
	N,N'-Diphenylthiourea (DPTU)	1.0 pet		1.	N-Isopropyl-N-phenyl-4-phenylenediamine	€ 0.1	pet	I-004
	2-n-Octyl-4-isothiazolin-3-one	0.1 pet			(IPPD) <sup>1</sup>		F	
20.	2 II Ootyl I lootilla20iii o ollo iiiiiiiiiii		anuary 2020	2.	GLUTARAL <sup>2</sup> PRELOZI	0.2	pet	G-003A
		i tovioca o	aridary 2020	3.	DISPERSE ORANGE 3	1.0	pet	D-032
D.	shhar Additirras Carias	D.	1000	4.	Acid yellow 36	1.0	pet	A-019
1/1	ubber Additives Series	<u> </u>	1000	· 5.	Hydroquinone monobenzylether	1.0	pet	H-019
4	Totromothylthiurom digulfido (TMTD)	10	T 005	6.	Thiuram mix <sup>1</sup>	1.0	pet	Mx-01
1.	Tetramethylthiuram disulfide (TMTD)	1.0 pet		0.	-Dipentamethylenethiuram disulfide (D-019)		•	
2.	Tetramethylthiuram monosulfide (TMTM)	1.0 pet			-Tetraethylthiuram disulfide (TETD) (T-002)	0.25		
3.	Tetraethvlthiuram disulfide (TETD)	1.0 pet	T-002		10.1.40.1.) (1-002)	0.20	•	

Tetramethylthiuram disulfide (TMTD)	1.0	pet	T-005
Tetramethylthiuram monosulfide (TMTM)	1.0	pet	T-006
Tetraethylthiuram disulfide (TETD)	1.0	pet	T-002
Dipentamethylenethiuram disulfide	1.0	pet	D-019
N-Cyclohexyl-N-phenyl-4-phenylenediamine	1.0	pet	C-024
N,N'-Diphenyl-p-phenylenediamine (DPPD)	1.0	pet	D-024
N-Isopropyl-N-phenyl-4-phenylenediamine (IPPD) <sup>1</sup>	0.1	pet	I-004
2-Mercaptobenzothiazole (MBT) <sup>1</sup>	2.0	pet	M-003A
N-Cyclohexyl-2-benzothiazolylsulfenamide	1.0	pet	C-023
Dibenzothiazyl disulfide (MBTS)	1.0	pet	D-003
	Tetramethylthiuram monosulfide (TMTM) Tetraethylthiuram disulfide (TETD) Dipentamethylenethiuram disulfide N-Cyclohexyl-N-phenyl-4-phenylenediamine N,N'-Diphenyl-p-phenylenediamine (DPPD) N-Isopropyl-N-phenyl-4-phenylenediamine (IPPD)¹ 2-Mercaptobenzothiazole (MBT)¹ N-Cyclohexyl-2-benzothiazolylsulfenamide	Tetramethylthiuram monosulfide (TMTM) 1.0 Tetraethylthiuram disulfide (TETD) 1.0 Dipentamethylenethiuram disulfide 1.0 N-Cyclohexyl-N-phenyl-4-phenylenediamine 1.0 N,N'-Diphenyl-p-phenylenediamine (DPPD) 1.0 N-Isopropyl-N-phenyl-4-phenylenediamine 0.1 (IPPD)¹ 2-Mercaptobenzothiazole (MBT)¹ 2.0 N-Cyclohexyl-2-benzothiazolylsulfenamide 1.0	Tetramethylthiuram monosulfide (TMTM) 1.0 pet Tetraethylthiuram disulfide (TETD) 1.0 pet Dipentamethylenethiuram disulfide 1.0 pet N-Cyclohexyl-N-phenyl-4-phenylenediamine 1.0 pet N,N'-Diphenyl-p-phenylenediamine (DPPD) 1.0 pet N-Isopropyl-N-phenyl-4-phenylenediamine 0.1 pet (IPPD)¹  2-Mercaptobenzothiazole (MBT)¹ 2.0 pet N-Cyclohexyl-2-benzothiazolylsulfenamide 1.0 pet

<u> </u>	ioe belieb bil	10	00	
1.	N-Isopropyl-N-phenyl-4-phenylenediamine (IPPD) <sup>1</sup>	0.1	pet	I-004
2.	GLUTÁRAL <sup>2</sup> POR NOT	0.2	pet	G-003A
3.	DISPERSE ORANGE 3	1.0	pet	D-032
4.	Acid yellow 36	1.0	pet	A-019
5.	Hydroquinone monobenzylether	1.0	pet	H-019
6.	Thiuram mix <sup>1</sup>	1.0	pet	Mx-01
	-Dipentamethylenethiuram disulfide (D-019)	0.25		
	-Tetraethylthiuram disulfide (TETD) (T-002)	0.25		
	-Tetramethylthiuram disulfide (TMTD) (T-005)			
	-Tetramethylthiuram monosulfide (TMTM) (T-006)	0.25		
7.	Potassium dichromate <sup>1</sup>	0.5	pet	P-014A
8.	4-tert-Butylphenolformaldehyde resin (PTBP) <sup>1</sup>		pet	B-024
9.	p-PHENYLENEDIAMINE (PPD) <sup>1</sup>	1.0	pet	P-006
10.	Nickel(II)sulfate hexahydrate <sup>1</sup>	5.0	pet	N-002A
11.	COLOPHONIUM <sup>1</sup>	20.0	•	C-020
12.	FORMALDEHYDE1 PRINTED (DDTLI)	2.0	aq	F-002B D-025
13.	N,N´-Diphenylthiourea (DPTU) 2-Mercaptobenzothiazole (MBT)¹	1.0 2.0	pet pet	M-003A <sub>79</sub>
17.	2-IVICIOAPIODOTIZOTITIAZOTE (IVIDT)	2.0	pet	79

Compound	Conc. Veh. %(w/w)	Art. No.
15. N,N'-Diethylthiourea	1.0 pet	D-039
16. 1,3-Diphenylguanidine	1.0 pet	D-022
17. N,N'-DibutyIthiourea	1.0 pet	D-038
18. Epoxy resin, Bisphenol A <sup>1</sup>	1.0 pet	E-002
19. Dodecyl mercaptan POR NOT	0.1 pet	D-043
20. METHYLISOTHIAZOLINONE +	0.02 aq	C-009B
METHYLCHLORO-ISOTHIAZOLINON	VE1 DO NOT PRELOAD	
21. 4-Aminoazobenzene	0.25 pet	A-005
22. 2-n-Octyl-4-isothiazolin-3-one	0.1 pet	O-004
23. 4,4`-Dithiodimorpholine	1.0 pet	D-054
24. Dimethyl fumarate RENOT	0.01 pet	D-066B
•	Revised Nover	nber 2018

# Sunscreen Series SU-1000

	1.	BUTYL METHOXYDIBENZOYL- METHANE	10.0 pet	B-029C
•	2.	PABA	10.0 pet	A-006C
	 3.	HOMOSALATE	5.0 pet	H-024A
	4.	4-METHYLBENZYLIDENE CAMPHOR	10.0 pet	M-024B
į	5.	ETHYLHEXYL DIMETHYL PABA	10.0 pet	E-018D
(	3.	BENZOPHENONE-3	10.0 pet	H-014C
-	7.	ETHYLHEXYL METHOXYCINNAMATE	10.0 pet	E-019C
8	3.	BENZOPHENONE-10	10.0 pet	H-020B
(	9.	PHENYLBENZIMIDAZOLE SULFONIC	10.0 pet	P-024B
		ACID	•	
	10.	BENZOPHENONE-4	2.0 pet	H-023C
	11.	DROMETRIZOLE TRISILOXANE	10.0 pet	D-055
•	12.	OCTOCRYLENE	10.0 pet	O-009
•	13.	ETHYLHEXYL SALICYLATE	5.0 pet	O-007A
•	14.	ETHYLHEXYL TRIAZONE	10.0 pet	O-010
•	15.	ISOAMYL p-METHOXYCINNAMATE	10.0 pet	I-009
•	16.	BIS-ETHYLHEXYLOXYPHENOL	10.0 pet	B-037
		METHOXYPHENOL TRIAZINE		
•	17.	,	10.0 pet	M-037
		tetramethylbutylphenol		
•	18.	2-(4-Diethylamino-2-hydroxybenzoyl)-	10.0 pet	D-062
		benzoic acid hexylester		
	19.	DIETHYLHEXYL BUTAMIDO TRIAZONE	10.0 pet	D-063
2	20.	Disodium phenyl dibenzimidazole	10.0 pet	D-064

Compound	Conc. Veh. Art. No. %(w/w)
tetrasulfonate	5.0 pet D-065
21. DECYL GLUCOSIDE⁴	Revised January 2014

Te	xtile Colours & Finish		TF-	1000
1.	Disperse Yellow 3	1.0	pet	D-036
	DISPERSE ORANGE 3			D-032
	Disperse Red 1		•	D-034
4.	DISPERSE RED 17	1.0		D-035
5.	Deleted 2020		•	
6.	DISPERSE BLUE 3	1.0	pet	D-026
7.	Disperse Blue 35	1.0	pet	D-027
8.	Dimethylol dihydroxy ethylene urea	4.5	aq	D-012
9.	Dimethyl dihydroxy ethylene urea RELOAD	4.5	aq	D-052
10.	Dimethylol dihydroxy ethylene urea, modified  modified	5.0	aq	D-050
11.	Disperse Blue 106	1.0	pet	D-040
12.			pet	Mx-16
		4.0		
		1.0		
			pet	U-001
			pet	M-001
	·			D-028
			•	D-031
				A-026
	·			D-030
				D-037
	•			D-041
			-	B-026
				R-004B
		1.0	pet	R-005B
		4.0		D 007D
				R-007B
		1.0	peı	R-008B
		1.0	not	R-010B
				R-011B
			•	A-027
			•	D-051
J 1.	Direct Change 34	5.0	her	D-001
	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30.	<ol> <li>DISPERSE ORANGE 3</li> <li>Disperse Red 1</li> <li>DISPERSE RED 17</li> <li>Deleted 2020</li> <li>DISPERSE BLUE 3</li> <li>Disperse Blue 35</li> <li>Dimethylol dihydroxy ethylene urea Dimethyl dihydroxy ethylene urea Dimethylol dihydroxy ethylene urea, modified Disperse Blue 106</li> <li>Disperse Blue 106</li> <li>Ethyleneurea, melamine formaldehyde mix<sup>2</sup> Disperse Blue 106</li> </ol>	1. Disperse Yellow 3 2. DISPERSE ORANGE 3 3. Disperse Red 1 4. DISPERSE RED 17 5. Deleted 2020 6. DISPERSE BLUE 3 7. Disperse Blue 35 8. Dimethylol dihydroxy ethylene urea 9000 8. Dimethylol dihydroxy ethylene urea 9000 9. Dimethylol dihydroxy ethylene urea 9000 10. Dimethylol dihydroxy ethylene urea 9000 11. Disperse Blue 106 12. Ethyleneurea, melamine formaldehyde mix 9000 13. Urea formaldehyde (M-001) 9000 14. Melamine formaldehyde (M-001) 9000 15. Disperse Blue 85 16. Disperse Blue 85 16. Disperse Orange 1 17. Acid Yellow 61 18. Disperse Brown 1 19. Disperse Blue 124 21. Basic Red 46 22. Reactive Black 5 23. Reactive Black 5 24. Deleted 2016 25. Reactive Red 123 27. Deleted 2018 28. Reactive Red 228 29. Reactive Violet 5 30. Acid Red 118 5.0	1. Disperse Yellow 3 2. DISPERSE ORANGE 3 3. Disperse Red 1 4. DISPERSE RED 17 5. Deleted 2020 6. DISPERSE BLUE 3 7. Disperse Blue 35 8. Dimethylol dihydroxy ethylene urea 2020 7. Disperse Blue 35 8. Dimethylol dihydroxy ethylene urea 2020 8. Dimethylol dihydroxy ethylene urea 2020 9. Dimethylol dihydroxy ethylene urea 2020 10. Dimethylol dihydroxy ethylene urea 2020 11. Disperse Blue 106 12. Ethyleneurea, melamine formaldehyde mix 2020 13. Urea formaldehyde (M-001) 2020 14. Melamine formaldehyde (M-001) 2020 15. Disperse Blue 85 10. pet 15. Disperse Brown 1 10. pet 16. Disperse Brown 1 10. pet 17. Acid Yellow 61 18. Disperse Brown 1 19. Disperse Brown 1 10. pet 19. Disperse Blue 124 10. pet 20. Disperse Blue 124 11. Disperse Blue 21 12. Reactive Black 5 12. Det 22. Reactive Black 5 13. Reactive Black 5 14. Det 24. Deleted 2016 25. Reactive Orange 107 16. Reactive Red 123 17. Det 24. Deleted 2018 28. Reactive Red 228 29. Reactive Violet 5 30. Acid Red 118 50. pet

	Compound		c. Veh. v/w)	Art. No.
32.	Acid Red 359	5.0	pet	A-028
33.	Disperse Blue mix 106/124	1.0	pet	Mx-26
	-Disperse Blue 106 (D-040)	0.5		
	-Disperse Blue 124 (D-041)	0.5		
34.	Textile dye mix <sup>2</sup>	6.6	pet	Mx-30
	-Diperse Blue 35 (D-027)	1.0		
	-Diperse Orange 1 (D-031)	1.0		
	-DISPERSE ORANGE 3 (D-032)	1.0		
	-Disperse Red 1 (D-034)	1.0		
	-DISPERSE RED 17 (D-035)	1.0		
	-Disperse Yellow 3 (D-036)	1.0		
	-Disperse Blue 106 (D-040)	0.3		
	-Disperse Blue 124 (D-041)	0.3		

Revised January 2020

Art. No. Serial no. Conc %(w/w) Name & Vehicle

# **List of Topical Haptens**

Volatile hapten and not recommended to preload.

- <sup>1</sup> Also present in European Baseline Series
- <sup>2</sup> Emulsifier: SORBITAN SESQUIOLEATE 5%
- <sup>3</sup> Emulsifier: SORBITAN SESQUIOLEATE 1%
- <sup>4</sup> Emulsifier: SORBITAN SESQUIOLEATE 2%
- <sup>5</sup> Contains DECYL GLUCOSIDE
- <sup>6</sup> Present in national series. Visit www.chemotechnique.se for further information.
- EC Directive 2003/15/EC relating to cosmetic products

Art. No.	Serial no.	Conc %(\ & Vehicle	
A-001	O-1	10.0 pet	ABIETIC ACID
A-002	C-23, PG-19	10.0 pet	HYDROABIETYL ALCOHOL
A-003B	PL-11	0.033 pet	Alantolactone
A-004	ICB-7, C-2, O-26, LU-1,		Amerchol L-101
	NA-7, NAE-7, N	,	
A-005	SH-21	0.25 pet	4-Aminoazobenzene
A-006A	Deleted 2019		(PABA)
A-006B	Deleted 2019		(PABA)
A-006C	EP-7, SU-2	10.0 pet	PABA
A-007	Deleted 2018		(N,N-DIETHYL-p-PHENYLENEDI AMINE SULFATE (TSS))
A-008	H-10	1.0 pet	m-AMINOPHENOL
A-009	H-11	1.0 pet	p-AMINOPHENOL
A-010	METE-18	0.1 aq	Ammonium hexachloroplatinate(IV) PRELOAD
A-011	B-16, H-5, P-8	2.5 pet	AMMONIUM PERSULFATE
A-012	H-4	2.5 aq	AMMONIUM THIOGLYCOLATE PO NOT PRELOAD
A-013	MET-19	0.25 aq	Ammonium tetrachloroplatinate(II) PO NOT
A-014	F-3	2.0 pet	AMYL CINNAMAL
A-015	B-10	5.0 pet	TRANS-ANETHOLE PRELOAD
A-016	PL-16	0.1 pet	Atranorin
A-017	O-19	1.0 pet	7-ETHYLBICYCLOOXAZOLIDINE PRELOAD
A-018	Deleted 2021		(Azodiisobutyrodinitrile)
A-019	SH-4	1.0 pet	Acid Yellow 36
A-020	Deleted 2021	-	(Amylocaine hydrochloride)

Art. No.		Conc %(\ & Vehicle		Art. No.	Serial no.	Conc %(	
A-021	Deleted 2017		(Aluminium)	B-013	PG-10	1.0 pet	Bisphenol A
A-022	DS-24, MET-1	2.0 pet	Aluminium(III)chloride hexahydrate	B-014	6	1.0 pet	Bithionol
A-023	CS-5	1.0 pet	Alclometasone-17,21-dipropionate	B-015A	C-31, H-19, O-2	9 0.25 pet	2-BROMO-2-NITROPROPANE-1,3-DIOL
A-024	PL-3	0.5 pet	Arnica montana extract RELOAD	B-015B	ICB-30, NA-30	0.5 pet	2-BROMO-2-NITROPROPANE-1,3-DIOL
A-025	PL-5	1.0 pet	Achillea millefolium extract PO NOTI		NAE-30, NAC-30	),	
A-026	TF-17	5.0 pet	Acid Yellow 61		ECB-32, AC-23		
A-027	TF-30	5.0 pet	Acid Red 118	B-016	MA-21	•	1,4-Butanediol diacrylate
A-028	TF-32	5.0 pet	Acid Red 359	B-017	DS-8, MA-7, DMP-9, DMS-7	2.0 pet	1,4-Butanediol dimethacrylate RELOAD
A-029	ICB-75, NAE-55 NAC-75, AC-73	, 0.1 aq	Amidoamine PRELOAD	B-018	MA-27	0.1 pet	Butyl acrylate PRINCE
A-030	CAD-2	10.0 pet	Amoxicillin trihydrate	B-019	O-8	1.0 pet	4-tert-Butylbenzoic acid
A-031	CAD-18	•	Acetylsalicylic acid	B-020	Deleted 2021		(BUTYLPARABEN)
A-032	CAD-22		ACETAMINOPHEN	B-021	MA-2,	2.0 pet	BUTYL METHACRYLATE PONT
A-033	CAD-23	10.0 pet	Acyclovir	B-022	ICB-37, B-9, C-6 PG-18, NAC-37	6, 2.0 pet	2-tert-Butyl-4-methoxyphenol (BHA)
A-034	METE-14		Ammonium hexachloroiridate(IV) PO NOTI	B-023	PG-20	1.0 pet	4-tert-Butylphenol
A-035	METE-13		Ammonium molybdate (VI) tetrahydrate	B-024	S-16, ICB-15,	•	4-tert-Butylphenolformaldehyde resin
A-036	F-32		Amyl cinnamyl alcohol		PG-13, SH-8, N		(PTBP)
A-037	F-33	10.0 sof	Anise alcohol		IS-11 , LA-16, N	,	
A-038	MET-27		ALUMINUM HYDROXIDE	D 005	NAC-15, ECB-1	6, AC-13	/Tales had a see also a locate DO NOT!
A-039	H-31	'	4-AMINO-2-HYDROXYTOLUENE	B-025	Deleted 2018	4.0	(Tolu balsam absolute PRELOW)
B-001	S-15, ICB-19,	25.0 pet	Peru balsam <sup>2</sup> PRELOAD	B-026 B-027	TF-21	'	Basic Red 46
	H-14, IS-7, DMP-22   A-15	NA-19 N	AE-19, NAC-19, ECB-15, AC-10		LU-4, AC-60 Deleted 2020	0.1 aq	BENZALKONIUM CHLORIDE
B-002	Only available a			B-027B	C-36	1 0 not	(BENZALKONIUM CHLORIDE)
	ECB-40, O-9	•	BENZISOTHIAZOLINONE		Deleted 2019	1.0 pet	t-BUTYL HYDROQUINONE (BUTYL METHOXYDIBENZOYLMETHANE)
B-004	ICB-1, NA-1 NAE-1, NAC-1, A	5.0 pet	Benzocaine		SU-1, EP-8,		BUTYL METHOXYDIBENZOYLMETHANE  4-tert-Butylcatechol
B-005	B-12, AC-77	5.0 pet	BENZOIC ACID	B-031	CS-2	1.0 pet	Betamethasone-17-valerate
B-006	O-14,P-10	1.0 pet	BENZOTRIAZOLE	B-032A	ME-7, LU-6	5.0 pet	Bacitracin
B-007	ICB-70, B-17, PG-7, LU-10,	1.0 pet	Benzoylperoxide	B-032B	ICB-23, NA-23 NAE-23, NAC-23,		Bacitracin
B-008B	NAC-70 ICB-58, C-34,	10.0 sof	BENZYL ALCOHOL PONOT	B-033A	ICB-45, NA-45, NAE-45, NAC-45,		Budesonide
	F-16, P-12, NAE-59, NAC-5	8, AC-80		B-033B	S-24, CS-1, LU-17, IS-15,	0.01 pet	Budesonide
B-009	Deleted 2015		(BENZYLPARABEN)		LA-24, ECB-24		
	Deleted 2011	10.0	(BENZYL SALICYLATE)	B-035	E-10	0.25 pet	Epoxy resin, Bisphenol F
B-010B	ICB-52. C-30		BENZYL SALICYLATE	B-036	Deleted 2021		(1,4-Butanediol diglycidyl ether)
B-011	NAC-52, F-15, AC		Av-14 (Birch tar)	B-037	SU-16, EP-9,		BIS-ETHYLHEXYLOXYPHENOL
84	Only available a	s part of N	na-14 (Diro∏ tal)	B-038 B-039	F-34 F-35	10.0 pet	XYPHENOL TRIAZINE BENZYL BENZOATE 85 BENZYL CINNAMATE

Art. No.	Serial no.	Conc %(v & Vehicle		Art. No.	Serial no.	Conc %(v & Vehicle	
B-040 B-041 B-042 B-043	F-36 EP-18 CS-10 ME-17	2.0 pet 1.0 pet	BUTYLPHENYL METHYLPROPIONAL Benzydamine hydrochloride Betamethasone 17,21-dipropionate Bufexamac	C-017B C-018	Deleted 2020 ICB-76, C-33, H-1 LA-30, NA-49, NAE-49, NAC-76	·	(Cobalt(II)chloride hexahydrate) COCAMIDOPROPYL BETAINE
B-044 C-001	MET-3 MET-20	1.0 aq	Beryllium(II)sulfate tetrahydrate Cadmium chloride Record	C-019	ICB-46, O-30 NAE-63, NAC-4	•	COCAMIDE DEA
C-002 C-003 C-004	F-19 C-29 V-3	5.0 pet 0.5 aq	Cananga oil Canang	C-020	S-9, ICB-3, DS-17, SH-11, IS-6, DMP-17, NA	•	COLOPHONIUM LA-9, NAC-3, ECB-9, AC-7
C-005 C-006	C-16, LU-3, AC-52 H-15, C-19,		CHLORHEXIDINE DIGLUCONATE CHLOROACETAMIDE	C-021	METE-6	5.0 pet	Copper(I)oxide
C-000	O-12, LU-24	u.z pet	CHEOROACE TAMIBE	C-022	DS-21, MET-5		Copper(II)sulfate pentahydrate
C-007A		0 1.0 pet	QUATERNIUM-15	C-023	R-9		N-Cyclohexyl-2-benzothiazolylsulfenamide
C-007B	LA-21, ECB-21 ICB-14, IS-16	2.0 pet	QUATERNIUM-15	C-024	R-5		N-Cyclohexyl-N-phenyl-4- phenylenediamine
	NA-14, NAE-14, NAC-14, AC-18			C-025	H-20	0.5 pet	Captan
C-008	C-11, H-21,	1.0 pet	p-CHLORO-m-CRESOL	C-026	DS-25	1.0 pet	BORNANEDIONE
	O-2, LU-16, AC-9			C-027	Deleted 2019		(Cyclohexanone resin)
	LA-23 <sup>6</sup> , AC-17	·	METHYLISOTHIAZOLINONE + METHYLCHLOROISOTHIAZOLINONE REMI	C-028	ICB-11, CS-6 NAE-54, NAC-1		Clobetasol-17-propionate
C-009B	S-23, ICB-78, C-35, O-31,		METHYLISOTHIAZOLINONE + .CHLOROISOTHIAZOLINONE PRINT	C-029	PL-1	1.0 pet	Anthemis nobilis extract PRELOAD
	SH-20, H-18,	IVIETHTL	CHLOROISO I HIAZOLINOINE [PRELOAD]	C-031	PL-7	1.0 pet	Chrysanthemum Cinerariaefolium
	NA-25, NAE-25,	NAC-78,	ECB-23				extract PRELOAD
C-009C			METHYLISOTHIAZOLINONE +	C-032	ME-1, LU-9	5.0 pet	Chloramphenicol
			METHYLCHLOROISOTHIAZOLINONE3 PRELOAD	C-033	LU-7, AC-81	20.0 pet	CETEARYL ALCOHOL
C-009D	Deleted 2021			C-034	R-25		N-(Cyclohexylthio) phthalimide
C-009E	IS-17	0.215 aq	METHYLISOTHIAZOLINONE +	C-035		•	CARVONE PRIORI
			METHYLCHLOROISOTHIAZOLINONE <sup>3</sup> PRELOAD	C-036	F-26		CITRAL
C-010A	C-12, H-22, O-3	0.5 pet	CHLOROXYLENOL (PCMX)	C-037	F-28		CITRONELLOL PRECOM
C-010B		1.0 pet	CHLOROXYLENOL (PCMX)	C-037	F-30	•	COUMARIN
	NAC-35, AC-54			C-039	Only available a		
C-011	Deleted 2021		(Chlorpromazine hydrochloride)	C-040	CAD-4	•	Cefotaxim sodium salt
C-012	Deleted 2021		(Chlorquinaldol)	C-040	CAD-9	•	
C-013	B-7, F-2		CINNAMYL ALCOHOL PRELOAD				Clarithromycin
C-014			CINNAMAL PO NOT	C-042	CAD-11		Cotrimoxazole
	NA-6, NAE-6, NA			C-043	CAD-13		Ciprofloxacin hydrochloride
C-015	C-21, LA-8		Clioquinol	C-044	CAD-14		Carbamazepine
C-016	V-4		Coal tar PRELOAD	C-045	CAD-17		Captopril
C-017A	S-5, ICB-43,		Cobalt(II)chloride hexahydrate	C-046	CAD-26	•	Clindamycin phosphate
	DS-12, H-8, IS-2		3, C-43, ECB-5, AC-12, MET-2	C-047	CAD-27		Cefradine
	LA-0, INA-40, INA	1∟-43, IVA	0-40, EOD-0, AO-12, IVIE1-2	C-048	CAD-28	•	Cefalexin
				C-049	METE-9	10.0 pet	CALCIUM TITANATE

Art. No.		Conc %( & Vehicle	,	Art. No.	Serial no.	Conc %(v & Vehicle	
C-050	H-36	0.5 pet	CETRIMONIUM BROMIDE	D-026	TF-6	1.0 pet	DISPERSE BLUE 3
C-051	PL-14	1.0 pet	Chamomilla recutita extract PO NOT PRELOAD	D-027	TF-7	1.0 pet	Disperse Blue 35
C-052	H-32	0.5 pet	CYSTEAMINE HCL	D-028	TF-15	1.0 pet	Disperse Blue 85
C-053	CAD-31	10.0 pet	Cefuroxime sodium	D-029	Deleted 2019		(Disperse Blue 153)
C-054	CAD-1	10.0 pet	Cefixime trihydrate	D-030	TF-18	1.0 pet	Disperse Brown 1
C-055	CAD-6	10.0 pet	Cefpodoxime proxetil	D-031	TF-16	1.0 pet	Disperse Orange 1
C-056	C-61	5.0 pet	CETEARYL GLUCOSIDE	D-032	ICB-25, TF-2,		DISPERSE ORANGE 3
C-059	AC-82	2.5 pet	Carmine		SH-3, NAC-25, A	AC-76	
D-001	E-2,I-3,R-18	0.5 pet	4,4'-Diaminodiphenylmethane (MDA)	D-033	Deleted 1999		(Disperse Orange 13)
D-002	H-2	1.0 pet	TOLUENE-2,5-DIAMINE SULFATE	D-034	TF-3		Disperse Red 1
D-003	R-10	1.0 pet	Dibenzothiazyl disulfide (MBTS)	D-035	TF-4		DISPERSE RED 17
D-005A	V-16	5.0 pet	Dibucaine hydrochloride	D-036	ICB-51, TF-1,	1.0 pet	Disperse Yellow 3
D-005B		2.5 pet	Dibucaine hydrochloride	D-037	NAC-51, AC-84 TF-19	1 0 not	Dianaraa Vallau 0
	NAC-69			D-037			Disperse Yellow 9
D-006	B-5, C-7, PG-5	2.0 pet	BHT	D-036 D-039	SH-17, R-23 SH-15, R-22		N,N´-Dibutylthiourea
D-007	LU-8, AC-78 PG-2	E O not	Dibutyl phtholoto	D-039 D-040	TF-11		N,N'-Diethylthiourea Disperse Blue 106
D-007 D-008	O-4		Dibutyl phthalate DICHLOROPHENE	D-040 D-041	TF-11		Disperse Blue 124
D-008 D-009	MA-22			D-041 D-042	B-19, C-39		DODECYL GALLATE
D-009 D-010	E-5		Di(ethylene glycol) diacrylate Diethylenetriamine, (DETA) RENET	D-042 D-043	R-24, SH-19		Dodecyl mercaptan RENGEL
D-010 D-011	Deleted 2018	1.0 pet	(N,N-DIETHYLTOLUENE-2,5-DIAMINE HCL)		C-42, H-26,		DIAZOLIDINYL UREA
D-011 D-012	TF-8	1 E og	Dimethylol dihydroxy ethylene urea  Dimethylol dihydroxy ethylene urea	D-044A	IS-24, LU-25,	2.0 pet	DIAZOLIDIN'I L'ONLA
D-012 D-014	Deleted 1999	4.5 aq	(Dimethylol propyleneurea)		LA-31, ECB-33		
D-014 D-015	O-20	1.0 not	Bioban CS 1135 RELOW	D-044B	Deleted 2021		(DIAZOLIDINYL UREA PO NOT)
D-015 D-016	DS-6		N,N-Dimethyl-4-toluidine PONOT	D-044C	ICB-21, NA-21	1.0 pet	DIAZOLIDINYL UREA
D-016 D-017	R-15		N,N-Di-2-naphtyl-4-phenylenediamine		NAE-21, NAC-2	1, AC-25	
			(DBNPD)	D-045	DS-26, MA-14, DMP-7	0.2 pet	DIMETHYLAMINOETHYL METHACRYLATE PRELOCATION
D-018	PG-4		Dioctyl phthalate (DEHP, DOP)	D-046	CS-7	1.0 pet	Dexamethasone-21-phosphate disodium salt
D-019	R-4	1.0 pet	Dipentamethylenethiuram disulfide	D-047A	C-44	2.0 aq	DMDM HYDANTOIN PRELOAD
D-020	Deleted 2014	4.0	(DIPENTENE (oxidized))	D-047B	ICB-56, NA-22	1.0 pet	DMDM HYDANTOIN <sup>3</sup> DO NOT PRELOAD
D-021	ME-20		Diphenhydramine hydrochloride		NAE-22, NAC-5	6, AC-5	
D-022	ICB-17, R-12, SH-16, NA-17, N		1,3-Diphenylguanidine	D-048	PL-2		Diallyl disulfide PRELOAD
D-023	Deleted 2012	IAL-17, IN	(Diphenylmethane-4,4'-diisocyanate (MDI))	D-049A	IS-20	0.3 pet	METHYLDIBROMO GLUTARONITRILE
D-023	I-2	0.5 net	Diphenylmethane-4,4′-diisocyanate (MDI)		Deleted 2014		(METHYLDIBROMO GLUTARONITRILE)
D-023B	R-6		N,N´-Diphenyl-p-phenylenediamine	D-049E	S-26, ICB-27, O-34, C-45, LA-2		METHYLDIBROMO GLUTARONITRILE
		•	(DPPD)		NA-27, NAE-27,		ECB-26
D-025	PG-22, R-19, SH-13	1.0 pet	N,N´-Diphenylthiourea (DPTU)	D-050	TF-10	5.0 aq	Dimethylol dihydroxy ethylene urea,

Art. No.		Conc %(\ & Vehicle		Art. No.	Serial no.	Conc %(\ & Vehicle	
D-051	TF-31	5.0 pet	modified RENOT Direct Orange 34	dimetha	crylate PO NOT MN-6, MP-10,		
D-052	TF-9	4.5 aq	Dimethyl dihydroxy ethylene urea	D NOT IELOAD	DMP-3, DMS-3		(Ett. )
D-053	C-48, E-9, AC-42	1.0 aq	3-(Dimethylamino)-1-propylamine	E-008	Deleted 2018		(Ethylene urea)
D-054	SH-23, R-27	1.0 pet	4,4`-Dithiodimorpholine	E-009	Deleted 2021		(2-Ethylhexyl acrylate)
D-055	SU-11, EP-10,	10.0 pet	DROMETRIZOLE TRISILOXANE	E-010	V-8	3.0 pet	ETHYLPARABEN
D-056	Only available as	s a part o	f Mx-18	E-011	Deleted 2018		(N-Ethyl-N-(2-hydroxyethyl)-2-methyl- 1,4-phenylenediamine sulfate salt)
D-057	ICB-61, CS-9		Desoximetasone	E-012	MN-2, MA-19	2.0 not	ETHYL METHACRYLATE
	NAE-57, NAC-6			E-012	Deleted 2018	2.0 pet	(N-Ethyl-N-(2-methane-
D-058	CAD-3		Dicloxacillin sodium salt hydrate	E-013	Deleted 2016		sulfonamidoethyl)-2-methyl-1,4-
D-059	CAD-5		Doxycycline monohydrate				PPD-sesquisulfate, hydrate (CD-3))
D-060	CAD-16	10.0 pet	Diltiazem hydrochloride	E-014	O-11	0.5 pet	Bioban P 1487 PRELOAD
	Deleted 2021		(Diclofenac sodium salt)	E-015	DS-18, DMP-18	0.1 pet	N-Ethyl-p-toluenesulfonamide
	•	'	Diclofenac sodium salt	E-016	B-2, DS-16, F-4	2.0 pet	EUGENOL PRELOAD
D-062	SU-18, EP-12,	10.0 pet	2-(4-Diethylamino-2-hydroxybenzo	<i>y</i> l)	DMP-16, DMS-9		
D 000	CU 40 ED 40	100	benzoic acid hexylester	E-017	PL-17	0.1 pet	Evernic acid
D-063	SU-19, EP-16,	10.0 pet	DIETHYLHEXYL BUTAMIDO TRIAZONE	E-018B	Deleted 2019		(ETHYLHEXYL DIMETHYL PABA)
D 004	CULOO EDE 7	100		E-018C	Deleted 2019		(ETHYLHEXYL DIMETHYL PABA)
D-064	SU-20, EPE-7	10.0 pet	Disodium phenyl dibenzimidazole tetrasulfonate	E-018D	SU-5	10.0 pet	ETHYLHEXYL DIMETHYL PABA
D-065	ICB-53, C-57,	5.0 net	DECYL GLUCOSIDE <sup>4</sup> PONOT	E-019B	Deleted 2019		(ETHYLHEXYL METHOXYCINNAMATE)
D 000	H-29, EP-19, SL		DEGITE GEOGGIBE PRECONG	E-019C	SU-7, EP-4,	10.0 pet	ETHYLHEXYL METHOXYCINNAMATE
	EPE-34, NA-47,	NAE-53,	NAC-53, ECB-42, AC-45	F 000	AC-79		(For any manifer and a stire to a time)
D-066A	Deleted 2018		(Dimethyl fumarate DO NOT)	E-020	Deleted 2019	4.0	(Epoxy resin, cycloaliphatic)
D-066B	SH-24	0.01 pet	Dimethyl fumarate RELOAD	E-021	ME-11		Econazole nitrate PRELICAD
D-067	Deleted 2021		(Dexketoprofen)	E-022	LU-15	5.0 pet	
E-001	Deleted 2019		(Epoxy acrylate)	E-023		•	ETHYL CYANOACRYLATE RELOAD
E-002	S-14, ICB-13,	1.0 pet	Epoxy resin, Bisphenol A	E-024	CAD-7	•	Erythromycin base
	IS-10, SH-18, DI	,		E-025	EP-15,		Etofenamate
	LA-14, NA-13, NA	,		E-026	F-37	'	Treemoss absolute PRELOAD
E 000	NAC-13, ECB-14,	AC- 14	(E4b = 10 (m) in)	E-027	C-58, AC-70	•	ETHYLHEXYLGLYCERIN
E-003	Deleted 2011	0.44	(Ethoxyquin)	F-001	6	1.0 pet	2,2'-THIOBIS(4-CHLOROPHENOL)
E-004	NA-39, NAE-39,	0.1 pet	Ethyl acrylate PRELOAD	F-002A	6	1.0 aq	FORMALDEHYDE PORNOT
	NAC-39, AC-50, N	ЛА-17		F-002B	S-18, ICB-77,		FORMALDEHYDE PO NOT PRELOAD
E-005	ICB-12, C-22,		Ethylenediamine dihydrochloride		DS-19, H-6, IS-5 SH-12, NA-11, N		
	O-15, E-8, P-9,	- 1	,,	F-002C			FORMALDEHYDE <sup>3</sup> PRENCE
	NA-12, NAE-12, N	AC-12, AC	-11	F-002C F-003	ICB-68, LU-2,	•	Fusidic acid sodium salt
E-006	V-2	·	Ethylenediaminetetraacetic acid disodium salt dihydrate	r-003	ME-13, NAE-62 NAC-68		i usidio aolu sodiditi sait
E-00	7	DS-4, M	A-5, 2.0 pet Ethylene glycol				

Art. No.		Conc %(\ & Vehicle		Art. No.	Serial no.	Conc %(\ & Vehicle	
F-004	F-27	5.0 pet	FARNESOL	H-016	C-37, DS-28,	1.0 pet	DROMETRIZOLE
F-005	LU-19, ME-8	20.0 pet	Framycetin sulphate		PG-6, DMP-21		
F-006	EPE-11		Fenofibrate	H-017	Deleted 2021		(Hydroxypropyl acrylate)
G-001	F-6	2.0 pet	GERANIOL PO NOT PRELOAD	H-018	MA-4, MN-5,		Hydroxypropyl methacrylate RELOAD
G-002	F-22	2.0 pet	Geranium oil PRELOAD	H-019	SH-5	'	Hydroquinone monobenzylether
G-003A	DS-34, SH-2,	0.2 pet	GLUTARAL <sup>2</sup> PO NOT RELOAD		EPE-2, SU-8		t BENZOPHENONE-10
	P-11, DMS-10			H-021A			Hydrocortisone-17-butyrate PORTION 17-
G-003B	ICB-29, NA-29	0.5 pet	GLUTARAL <sup>2</sup> DO NOT PRELOAD		LA-39, AC-31		Hydrocortisone-17-butyrate
	NAE-29, NAC-29			H-022	I-6	0.1 pet	Hexamethylene diisocyanate (HDI)
G-004	ICB-40, H-16,	1.0 pet	GLYCERYL THIOGLYCOLATE PRELOAD		Deleted 2019	0.0	(BENZOPHENONE-4)
G-005A	NAC-40 ICB-38, METE-5	0.5 pet	Gold(I)sodium thiosulfate dihydrate	H-023C	SU-10, AC-61	2.0 pet	BENZOPHENONE-4
	NAC-38			H-024A			HOMOSALATE
G-005B		, 2.0 pet	Gold(I)sodium thiosulfate dihydrate	H-024B	EPE-4		t HOMOSALATE
	MET-4, AC-28			H-025	F-29	10.0 pet	t Hexyl cinnamic aldehyde
G-006	ME-5		Gentamicin sulfate	H-026	Deleted 2021		(1,6-Hexanediol diglycidylether)
G-007	MET-24		Gallium(III)oxide	H-027	CAD-15		t Hydantoin
H-001	6	'	Hexachlorophene	H-028	CAD-24	1.0 pet	Hydroxyzine hydrochloride
H-002	C-20, O-10	1.0 aq	Hexahydro-1,3,5-tris-(2-hydroxyethyl) triazine RELOAD	H-029	CAD-25 ICB-74, F-43		t Hydrochlorotiazide  Hydroperoxides of Linalool RENOT
H-003	C-15, E-1, R-17	2.0 pet	METHENAMINE	11-031A	NA-40, NAE-40.		Trydroperoxides of Emailor PRECOALS
H-004	DS-27, MA-11, MN-8, DMP-10	0.1 pet	1,6-Hexanediol diacrylate	H_031B	NAC-74, ECB-3		Hydroperoxides of Linalool RENOT
H-005	O-23	1.0 pet	Hydrazine sulfate		ICB-60, B-15,		Hydroperoxides of Limonene PRELOAD
H-006	Deleted 2019	·	(HYDROGEN PEROXIDE)	11 002A	F-44, O-27,	0.0 pct	Trydroporoxidos of Eliffornorio mecono
H-007	H-13, PG-1, P-5	1.0 pet	HYDROQUINONE		NA-36, NAE-36	NAC-60,	, ECB-38
H-008	F-8	2.0 pet	HYDROXYCITRONELLAL	H-032B	F-47, ECB-39, AC-5	90.2 pet	Hydroperoxides of Limonene RELOAD
H-009 H-010	MN-12, MA-18 DMS-5, DMP-6		2-Hydroxyethyl acrylate PONOT 2-Hydroxyethyl methacrylate	H-033	H-34	2.0 pet	HYDROXYETHYL-p-PHENYLENE- DIAMINE SULFATE
	DS-13, ECB-8,	pot		H-034	CS-13	1.0 pet	Hydrocortisone-21-acetate
	ICB-55, MA-3, M NA-34, NAE-56,	,		I-001A	ICB-5, C-14, H-23, LU-26, LA-		IMIDAZOLIDINYL UREA
H-011	Deleted 2018	,	(HYDROXYLAMINE HCL PRELOAD)		NA-5, NAE-5, NA		-34. AC-29
H-012	Deleted 2018		(HYDROXYLAMINE SULFATE PRECOND)	I-001B	Deleted 2019	,	(IMIDAZOLIDINYL UREA)
H-013	DS-5, MA-10,	2.0 pet	,		B-3, F-5	2.0 pet	ISOEUGENOL PRELOZI
	DMP-4, DMS-4,		(BIS-GMA)	I-003	ICB-59, C-1,	•	t ISOPROPYL MYRISTATE
H-014C	ICB-34, C-25, FDS-7, SU-6, AC EP-1, NAE-34, N	C-55,	BENZOPHENONE-3	1-004	NAC-59 S-11, IS-28,		N-Isopropyl-N-phenyl-4-
H-015	O-21		TRIS(HYDROXYMETHYL)NITRO- METHANE		SH-1, R-7,		phenylenediamine (IPPD)

Art. No.	Serial no.	Conc %(\ & Vehicle		A	Art. No.		Conc %(v & Vehicle	
	LA-11, ECB-11				L-009	CAD-30	10.0 pet	Lamotrigine
I-005	Deleted 1999		(4-Isopropyl-dibenzoylmetha	ne)	M-001	TF-14	7.0 pet	Melamine formaldehyde <sup>3</sup> POR NOT
I-006	E-6, I-5	0.1 pet	Isophorone diamine (IPD)	IOT OAD	M-002	B-6	2.0 pet	MENTHOL PO NOT
I-007	I-4	1.0 pet	ISOPHORONE DIISOCYANATI	E (IPDI) PRELOAD	M-003A	S-17, O-16,	2.0 pet	2-Mercaptobenzothiazole (MBT)
I-008C	ICB-63, C-47, O-35, NA-37,	0.2 pet	IODOPROPYNYL BUTYLCA	ARBAMATE		R-8, SH-14, LA-17, ECB-17		
	NAE-37, NAC-6	3, AC-38		N	M-003B	ICB-2, NAE-2	1.0 pet	2-Mercaptobenzothiazole (MBT)
I-009	ICB-71, SU-15, EP-6, NAC-71	10.0 pet	t ISOAMYL p-METHOXYCINN		M-004	NAC-2, AC-32 METE-3	0.1 net	Mercury(II)chloride
I-010A	CAD-29	10.0 pet	t Ibuprofen	-	M-005	DS-11, DMP-12,	•	
I-010B	EPE-9		Ibuprofen	ľ	000	DMS-8, MET-9	0.0 pct	Williams
I-011	MET-21		Indium(III)chloride	ı	M-006B	DS-33, DMP-5,	2.0 pet	2,2-bis(4-(2-Methacryl-oxyethoxy)
I-012	MET-7		Iridium(III)chloride trihydrate			MA-20		phenyl)-propane (BIS-EMA)
I-013	METE-15		Indium(III)sulfate RELOAD	N	M-007	DS-9, MA-9	2.0 pet	Bisphenol A dimethacrylate (BIS-MA) RELOAD
I-014	METE-7	1.0 pet	, ,	N	M-008	LA-22, PL-18	0.01 pet	2-Methoxy-6-n-pentyl-4-benzoquinone
I-015	METE-8	1.0 pet		N	M-009	Deleted 2018		(p-METHYLAMINOPHENOL SULFATE)
I-016	MET-18		FERRIC CHLORIDE	N	M-010A	Deleted 2018		(6-METHYL COUMARIN)
I-017	F-38		t α-Isomethyl ionone RELOAD	N	M-010B	6	1.0 alc	6-METHYL COUMARIN PRIOR
I-018	Deleted 2018	·	(Imipenem monohydrate)	N	M-012	Deleted 2021		(METHYLPARABEN)
I-019	MA-16	0.1 pet	ISOBORNYL ACRYLATE	ľ	M-013	ICB-42, DS-1, MA-1, MN-3	2.0 pet	Methyl methacrylate PRELOAD
J-001	F-14	2.0 pet	Jasmine synthetic PRELOAD			DMP-1, DMS-1, NA-42, NAE-42, NAC-42, AC-46		AE-42, NAC-42, AC-46
J-002	F-23, AC-85	2.0 pet	Jasmine absolute PRELOAD	ı	M-014	O-13	0.1 pet	N-Methylolchloroacetamide
J-003	Only available as	s a part of	Mx-14 (Juniperus oxycedrus e	extract PO NOT (	M-015	PG-21	1.0 pet	2-Monomethylol phenol
K-001	ME-2	10.0 pet	t Kanamycin sulfate	ı	M-016	R-11	•	2-(4-Morpholinylmercapto)benzothiazol
K-002B	CAD-20, EP-11,	1.0 pet	Ketoprofen				·	(MOR)
L-001	F-18, AC-47	2.0 pet	Lavender absolute PRELOAD	N	M-018	Deleted 2021		(MUSK KETONE)
L-002A	V-25	5.0 pet	Lidocaine	M	M-019	F-12	1.0 pet	Musk moskene
L-002B	ICB-67, NAE-51	15.0 pet	t Lidocaine	N	M-020	Deleted 1999		(Musk tibetine)
	NAC-67, AC-36				M-021	F-10	1.0 pet	Musk xylene
L-003	S-28, ICB-72, F-25, IS-27,	5.0 pet	HYDROXYISOHEXYL 3-CYC ENE CARBOXALDEHYDE	CLOHEX-	M-022	METE-4	•	Mercury(II)amidochloride
	LA-28, ECB-28,		ENE CANBOXALDEITIBE	ı	M-023	MA-26	1.0 pet	N,N-Methylene-bisacrylamide
	NAE-58, NAC-7	2, AC-69		N	M-024B	SU-4, EP-3,	10.0 pet	4-METHYLBENZYLIDENE CAMPHOR
L-004	C-49, H-27, ECB-43, AC-89	3.0 pet	LAURYL POLYGLUCOSE	LOAD	M-025 M-026	DS-22 PL-9	•	Methylhydroquinone α-Methylene-γ-butyrolactone ΩΝΟΙ
L-005B	*	10.0 pet	t LINALOOL PRELOAD	ı	M-027	ME-10	•	Miconazole PRELOZI
L-006C			t d-Limonene PO NOT	ı	M-028	F-11	5.0 pet	METHYL ANTHRANILATE
L-007	Deleted 2019	•	(Lead(II)acetate trihydrate)		M-029	Deleted 2019	•	(Minocycline hydrochloride)
L-008	METE-17	0.2 aq	Lead(II)chloride RELOAT	ı	M-030	MET-13	5.0 pet	Molybdenum
			` '	ı	M-031	MET-15	•	MANGANESE CHLORIDE
94							•	95

Art. No.		Conc %(v & Vehicle		Art. No.		Conc %(		
M-032	Deleted 2018		(Methylene bis-benzotriazolyl tetramethylbutylphenol (Methylene bis-benzotriazolyl			0.1	-N-Isopropyl-N-phenyl-4-phenylene- diamine (IPPD) (I-004)	
M-033	F-42	5.0 pet	Majanthole	Mx-05A		2.0 pet		
M-034	F-41	0.2 pet	Methyl-2-octynoate PORTLOAD		LA-13, ECB-13	0.5	-N-Cyclohexyl-2-benzothiazyl-	
M-035A	Deleted 2021		(METHYLISOTHIAZOLINONE)			0.5	sulfenamide (C-023) -Dibenzothiazyl disulfide (MBTS) (D-003)	
M-035B	S-29, ICB-54, C-54,	0.2 aq	METHYLISOTHIAZOLINONE POR NOT			0.5 0.5	- 2-Mercaptobenzothiazole (MBT) (M-003) -2-(4-Morpholinylmercapto)benzo-	
		AE-50, N	AC-54, ECB-29, AC-9				thiazol (MOR) (M-016)	
M-035C	Deleted 2021		(METHYLISOTHIAZOLINONE)	Mx-05B	ICB-16, NAE-16	1.0 pet		
M-035D	V-39	0.2 pet	METHYLISOTHIAZOLINONE <sup>3</sup> DO NOT PRELOAD		NAC-16, AC-22		-N-Cyclohexyl-2-benzothiazyl-	
M-036	CS-11	1.0 pet	Methylprednisolone aceponate			0.25	sulfenamide (C-023)	
M-037	EP-14, SU-17	10.0 pet	Methylene bis-benzotriazolyl tetramethyl-butylphenol			0.25 0.25 0.25	-Dibenzothiazyl disulfide (MBTS) (D-003) - 2-Mercaptobenzothiazole (MBT) (M-003) -2-(4-Morpholinylmercapto)benzo-	
M-038	METE-21	0.5 pet	Molybdenum(V)chloride			0.20	thiazol (MOR) (M-016)	
M-039	H-33	1.0 pet	2-METHYLRESORCINOL	Mx-05C	IS-9	3.5 pet		
M-040	H-35	1.0 pet	p-METHYLAMINOPHENOL			0.5	-N-Cyclohexyl-2-benzothiazyl-	
Mx-01	S-3, ICB-10, IS-3, SH-6, LA-3, NA-10, NAE-10, NAC-10 ECB-3, AC-24	0.25	Thiuram mix -Dipentamethylenethiuram disulfide (D-019) -Tetraethylthiuram disulfide (TETD) (T-002)			0.5 2.0 0.5	sulfenamide (C-023) -Dibenzothiazyl disulfide (MBTS) (D-003) - 2-Mercaptobenzothiazole (MBT) (M-003 -2-(4-Morpholinylmercapto)benzothiazol (MOR) (M-016)	
	. ,	0.25 0.25	-Tetramethylthiuram disulfide (TMTD) (T-005) -Tetramethylthiuram monosulfide (TMTM) (T-006)	Mx-06	ICB-8, IS-21 LA-38, NA-8 NAE-8, NAC-8 AC-15	3.0 pet 1.0 1.0	-1,3-Diphenylguanidine 1.0 D-022 -ZINC DIBUTYLDITHIOCARBAMATE (ZBC) Z-002	
Mx-02	V-27	6.0 pet 3.0	Quinoline mix -Chlorquinaldol (C-012)	M 07	0.40.100.00	1.0	-Zinc diethyldithiocarbamate (ZDC) (Z-003)	
	ICB-26, NA-26 NAE-26, NAC-26 AC-8		-Clioquinol (C-015) Paraben mix -BUTYLPARABEN (B-020) -ETHYLPARABEN (E-010) -METHYLPARABEN (M-012) -PROPYLPARABEN (P-020)	Mx-07	S-19, ICB-28, IS-12, LA-19 NA-28, NAE-28, NAC-28, ECB-1 AC-6, F-45	9 1.0 1.0 1.0	-AMYL CINNAMAL (A-014) -CINNAMYL ALCOHOL (C-013) -CINNAMAL (C-014) -EUGENOL (E-016) -GERANIOL (G-001)	
Mx-03C	S-10, C-17, IS-29, LA-10 ECB-10	16.0 pet 4.0 4.0 4.0 4.0	Paraben mix -BUTYLPARABEN (B-020) -ETHYLPARABEN (E-010) -METHYLPARABEN (M-012) -PROPYLPARABEN (P-020)	Mx-08 Mx-09	Deleted 2021 Deleted 2014	1.0 1.0 1.0	-HYDROXYCITRONELLAL (H-008) -ISOEUGENOL (I-002) -Oakmoss absolute (O-001) (Perfume mix) (Wood mix)	
Mx-04	V-26, AC-16	0.6 pet 0.25 0.25	Black rubber mix -N-Cyclohexyl-N-phenyl-4-phenylene- diamine (C-024) -N,N'-Diphenyl-p-phenylenediamine (D-024)	Mx-10B Mx-11	C-55  Deleted 2018	3.0 pet 1.0 1.0 1.0	Musk mix -MUSK KETONE (M-018) -MUSK moskene (M-019) -MUSK xylene (M-021) (Naphthyl mix)	

Art. No.	Serial no.	Conc %(v & Vehicle		Art. No.		Conc %( & Vehicle	
Mx-12 Mx-13	Deleted 2018 V-19	2.5 5.0 2.5	(Caine mix I) Caine mix II -Dibucaine hydrochloride (D-005) -Lidocaine (L-002) -Tetracaine hydrochloride (T-025)		LA-27, NA-32 NAE-32, NAC-50 ECB-27, AC-34		-COUMARIN (C-038) -FARNESOL (F-004) -HYDROXYISOHEXYL 3-CYCLO- HEXENE CARBOXALDEHYDE (L-003) -CITRAL (C-036) -CITRONELLOL (C-037)
Mx-14	LU-27	12.0 pet 3.0 3.0 3.0 3.0	Wood tar mix  -Beech tar (B-002) -Birch tar (B-011) -Juniperus oxycedrus extract (J-003) -Pine tar (P-012)	Mx-26	ICB-65, TF-33 LA-35, NA-38, NAE-38, NAC-65 AC-35	1.0 pet 0.5	,
Mx-15	PL-12	0.3 pet 0.1 0.1 0.1	Lichen acid mix -Atranorin (A-016) -Evernic acid (E-017) -(+)-Usnic acid (U-005)	Mx-27	6	1.5 pet 0.5 0.5 0.5	Thiourea mix -N,N'-Dibutylthiourea (D-038) -N,N'-Diethylthiourea (D-039) -N,N'-Diphenylthiourea (D-025)
Mx-16	ICB-36, TF-12 NAC-36 AC-66	5.0 pet 4.0 1.0	Ethyleneurea, melamine formaldehyde mix <sup>2</sup> PRIMIT - Dimethylol dihydroxy ethylene urea (D-01 - Melamine formaldehyde (M-001)	Mx-28B	Deleted 2019 B-20, C-60	1.0 pet 0.25 0.5 0.25	(Gallate mix) Gallate mix -DODECYL GALLATE (D-042) -PROPYL GALLATE (P-021) -Octyl GALLATE (O-002)
Mx-17D Mx-18	Deleted 2011 S-20, ICB-31, IS-30, ECB-20, LA-20, NA-31 NAE-31, PL-8 NAC-31, AC-57	0.1 pet 0.033 0.033 0.033	(Euxyl K 400) Sesquiterpene lactone mix -Alantolactone (A-003) -Costunolide (C-039) -Dehydrocostus lactone (D-056)	Mx-29A	ICB-66, IS-23 NA-46, NAE-46, NAC-46, AC-65	5.0 pet 1.2 1.2 1.0 1.0	Compositae mix II RESS -Anthemis nobilis extract (C-029) -Chamomilla recutita extract (C-051) -Achillea millefolium extract (A-025) -Tanacetum vulgare extract (T-033)
Mx-19	ECB-6, LA-6 ME-9, S-6	10.0 pet 5.0 2.5 2.5	Caine mix III -Benzocaine (B-004) -Dibucaine hydrochloride (D-005) -Tetracaine hydrochloride (T-025)	Mx-29B	ECB-35 <sup>6</sup>	0.5 0.1 2.5 pet 0.6	-Arnica montana extract (A-024) -Parthenolide (P-029) Compositae mix II RESS -Anthemis nobilis extract (C-029)
Mx-20	ME-12		Caine mix IV -Lidocaine (L-002) -Amylocaine hydrochloride (A-020) -Prilocaine hydrochloride (P-027)			0.6 0.5 0.5	-Chamomilla recutita extract (C-051) -Achillea millefolium extract (A-025) -Tanacetum vulgare extract (T-033)
Mx-21C	Deleted 2019		(Dermatophagoides mix (Pteronyssinu Pharinae 50/50)	s/		0.25 0.05	-Arnica montana extract (A-024) -Parthenolide (P-029)
	Deleted 2011 CS-12 ICB-24, LA-36 NA-24, NAE-24 NAC-24, AC-41		(Compositae mix I) Corticosteroid mix -Hydrocortisone-17-butyrate (H-021) -Tixocortol-21-pivalate (T-031) -Budesonide (B-033) Mixed dialkyl thiourea -N,N'-Dibutylthiourea (D-038) -N,N'-Diethylthiourea (D-039)	Mx-30	S-30, ICB-48, TF-34, NA-2 NAE-47, NAC-48 ECB-30, IS-14	6.6 pet 1.0 1.0 1.0 1.0 1.0 1.0 0.3 0.3	Textile dye mix -Diperse Blue 35 (D-027) -Diperse Orange 1 (D-031) -DISPERSE ORANGE 3 (D-032) -Disperse Red 1 (D-034) -DISPERSE RED 17 (D-035) -Disperse Yellow 3 (D-036) -Disperse Blue 106 (D-040) -Disperse Blue 124 (D-041)
Mx-25	S-27, ICB-50, F-31, IS-25,		Fragrance mix II RESE -Hexyl cinnamic aldehyde (H-025)	Mx-31	6		Caine mix V

Art. No.		Conc %(\ & Vehicle		Art. No.	Serial no.	Conc %(v & Vehicle		Name
		5.0	-Benzocaine (B-004)	P-005	PG-12, IS-26	1.0 pet	Phen	ol formaldehyde resin (PFR2)
		1.0 1.0	-Dibucaine hydrochloride (D-005) -Tetracaine hydrochloride (T-025)	P-006		1.0 pet		ENYLENEDIAMINE (PPD)
N-001	S_4_ICB_0_IS_2		Neomycin sulfate		SH-9, IS-4, LA-2		D 2 A	C 20
14-001	LA-4, NA-9,	20.0 pe	Neomychi sunate	P-007	NA-4, NAE-4, N PG-17			
	NAE-9, NAC-9,					•		enylindole
	ECB-4, AC-3			P-008	C-18, LU-23, METE-12	0.01 aq	PHEI	NYL MERCURIC ACETATE PRINT
N-002A		, 5.0 pet	Nickel(II)sulfate hexahydrate	P-009	R-16	1 0 net	N-Ph	enyl-2-naphtylamine (PBN)
	DS-15, DMP-15	-T 22		P-010	O-5	•		ENYLPHENOL
NI OOOD	LA-7, ECB-7, MI		Nietal/II) authata la avalavalmata	P-011	C-24, PG-3			NYL SALICYLATE
N-002B	ICB-20, IS-13 NA-20, NAE-20,	2.5 pet	Nickel(II)sulfate hexahydrate	P-012	Only available a			
	NAC-20, NAC-1			P-012	ICB-62, C-4,	•		(Fille tai) (SORBATE 80
N-003	Deleted 2015		(SOLVENT BLACK 5)	F-013	NAC-62	3.0 per	FOLI	I SONDATE 60
N-004	H-3	1.0 pet	2-NITRO-p-PHENYLENEDIAMINE	P-014A	S-1. DS-10. SH-7	. 0.5 pet	Potas	ssium dichromate
N-005	ME-6, LU-5		Nitrofurazone		P-14, IS-1, DMP-			
N-006	F-9	2.0 pet	Narcissus poeticus absolute RELOXI		LA-1, ECB-1, ME	T-30		
N-007	CAD-12		Norfloxacin	P-014B	, ,		Potas	ssium dichromate
N-008	MET-28	0.2 pet	Niobium(V)chloride	5.44	NAE-18, NAC-1	•	Б.	· 1. (1) DO NOT
O-001	F-7	2.0 pet	Oakmoss absolute <sup>2</sup> PRECOND	P-015	METE-2	0.1 aq		ssium dicyanoaurate(I) PO NOT
O-002	B-14, C-8		: Octyl gallate	P-016	V-15	1.0 pet		aine hydrochloride
O-003	Deleted 2021		(Oligotriacrylate (OTA 480)		Deleted 2019		,	nethazine hydrochloride)
O-004	O-33, SH-22,	0.1 pet	2-n-Octyl-4-isothiazolin-3-one			0.0		nethazine hydrochloride)
	PG-23, ICB-64		,	P-018	B-13	•		PIONIC ACID PRELOAD
	NAC-64, ECB-4	1				•		PYLENE GLYCOL <sup>3</sup> DO NOTI
O-005	ICB-80, C-56, H-28, NA-48,	0.1 aq	OLEAMIDOPROPYL DIMETHYLAMINE RELATION	P-019B	ICB-79, NA-33 NAE-33, NAC-7		PRO	PYLENE GLYCOL PRELOAD
0.000	NAE-48, NAC-80	), AC-44	(OLEA EUDODAEA OUL)	P-019C	Deleted 2017		(PRC	PYLENE GLYCOL)
O-006	Deleted 2017	F 0 == 4	(OLEA EUROPAEA OIL)	P-020	Deleted 2021		,	PYLPARABEN)
U-007A	ICB-73, SU-13 NAC-73	5.0 pet	ETHYLHEXYL SALICYLATE	P-021	B-18, C-38, LA-32	2 1.0 pet	PRO	PYL GALLATE
O-007B		10.0 pet	ETHYLHEXYL SALICYLATE	P-022	ECB-22, ICB-33 NA-35, NAE-61,		Propo	olis
O-008	EPE-12	1.0 pet	Olaquindox		NAC-33, LU-12,			
O-009	SU-12, EP-5,	10.0 pet	OCTOCRYLENE		PL-6, AC-53			
				P-023	E-4	0.25 pet	2-Phe	enyl glycidyl ether RELOAD
O-010 P-001			ETHYLHEXYL TRIAZONE Palladium(II)chloride	P-024B	SU-9, EPE-3	10.0 pet	PHE	NYLBENZIMIDAZOLE SULFONIC
D 002	METE-19		(Dente on the ital triper data)	P-025	C-41, O-32, AC-7	5 1.0 pet	PHE	NOXYETHANOL PO NOT
P-002 P-003	Deleted 2021 V-5	100	(Pentaerythritol triacrylate)	P-026	ME-21, AC-39	5.0 pet	Polyr	nyxin B sulfate
P-003 P-004		100	PETROLATUM  (1. Phonyl 2. pyrozolidinono)	P-027A	V-1	5.0 pet	Prilo	caine hydrochloride
P-004	Deleted 2018		(1-Phenyl-3-pyrazolidinone)	P-028	Deleted 2018		(p-PF	HENYLENEDIAMINE HCL)

Art. No.		Conc %(		Art. No.	Serial no.	Conc %(v & Vehicle	
P-029	PL-13	0.1 pet	Parthenolide	S-009	F-24	2.0 pet	Sandalwood oil PO NOT
P-030	Deleted 2014		(Phosphorus sesquisulfide)	S-010	ME-4	5.0 pet	Sulfanilamide
P-031	Deleted 2018		(Penicillin G, potassium salt)	S-011	C-59, H-37	1.0 pet	SODIUM METABISULFITE
P-032	Deleted 2021		(Pristinamycin)		ECB-31		
P-033	CAD-21, EP-17,	1.0 pet	Piroxicam	S-012	CAD-8	10.0 pet	Spiramycin base
P-034	6	100	Polyethylene glycol 400 (PEG 400)	S-013	METE-16		STANNOUS CHLORIDE
P-035	EPE-6	10.0 pet	Polysilicone-15	S-014	METE-11	1.0 pet	Tin(II)oxalate
P-036	C-50, AC-86	2.0 pet	Peppermint oil PORT	S-015	C-51, AC-88	20.0 alc	SHELLAC DO NOT PRELOAD
P-038	I-7	2.0 pet	Polymeric diphenylmethane	S-016	V-30	100	Softisan 649
			diisocyanate (PMDI) PORLOAD	S-017		, 3.0 pet	Sodium tetrachloropalladate(II) hydrate
P-039	ME-18, AC-87		Pramoxine hydrochloride		MET-12, LA-33		
P-040	CAD-10	•	Potassium clavulanate	S-018	V-36		SODIUM LAURYL SULFATE PRICAD
P-041	ME-19		Phenylbutazone	S-019	METE-23	2.0 aq	Sodium tungstate dihydrate RELOAD
P-042	C-62, H-38		PANTHENOL	T-001	Deleted 2018		(3,3',4',5-Tetrachlorosalicylanilide (TCS))
P-043	C-63	2.5 aq		T-002	R-3	1.0 pet	Tetraethylthiuram disulfide (TETD)
Q-001	ME-3		Quinine sulfate	T-003	Deleted 1999		(Tetramethylol acetylenediurea)
R-001	H-9		RESORCINOL	T-004	Deleted 2014		(3,3´,5,5´-Tetramethylbenzidine)
R-002	PG-16		Resorcinol monobenzoate	T-005	R-1		Tetramethylthiuram disulfide (TMTD)
R-003	F-20	- 1	Rose absolute PRELOAD	T-006	R-2		Tetramethylthiuram monosulfide (TMTM)
R-004B		1.0 pet	Reactive Black 5	T-007	ICB-32, C-13,	0.1 pet	THIMEROSAL
R-005B		1.0 pet	Reactive Blue 21		O-22, LU-13, LA-34, NAC-32		
	Deleted 2016		(Reactive Blue 238)	T-008	DS-30, MET-12	50.0 pet	Tin
R-007B			Reactive Orange 107	T-009	I-1		Toluene-2,4-diisocyanate (TDI)
R-008B	TF-26	1.0 pet	Reactive Red 123	T-010	ICB-41,		Toluenesulfonamide formaldehyde resin
R-009B	Deleted 2018		(Reactive Red 238)	1-010	PG-15, LA-29,	10.0 per	Toluenesullonamide formaldenyde resin
R-010B	TF-28	1.0 pet	Reactive Red 228		NA-41, NAE-41,		
R-011B	TF-29	1.0 pet	Reactive Violet 5		NAC-41, AC-56		
R-012	MET-25	0.1 pet	Ruthenium	T-011	DS-20	2.0 pet	4-Tolyldiethanolamine
R-013	MET-23	2.0 pet	Rhodium(III)chloride hydrate	T-012	Deleted 2021		(3,4,5-Tribromosalicylanilide (TBS)
S-001	B-4, AC-62	5.0 pet	SODIUM BENZOATE	T-013	O-24, EPE-1	1.0 pet	TRICLOCARBAN
S-002	C-32,O-28	0.1 aq	Sodium-2-pyridinethiol-1-oxide PORT	T-014	C-9, O-18,	2.0 pet	TRICLOSAN
S-003	B-11, C-10, LU-14	1 2.0 pet	SORBIC ACID		EPE-8		
	AC-63			T-015	PG-11, P-16		Tricresyl phosphate
S-004	C-5, LU-22		SORBITAN OLEATE	T-016	ICB-47, C-3,	2.0 pet	TRIETHANOLAMINE
S-005	C-26, LU-20 AC-67, F-13	20.0 pet	SORBITAN SESQUIOLEATE		O-7, LU-18, NAC-47		
S-006	C-28	30.0 pet	STEARYL ALCOHOL	T-017	MA-25, MN-9		Triethylene glycol diacrylate PRELOAD
S-007	MET-26		SILVER NITRATE DO NOT PRELOAD	T-018	DS-2, MA-6,		Triethylene glycol dimethacrylate
S-008	F-48	2.0 pet	Styrax PRELOAD		DMP-2, DMS-2		

Art. No.		Conc %(\ & Vehicle	
T-019	E-3	0.5 pet	Triethylenetetramine (TETA) PO NOT PRELOAD
T-020	R-21	1.0 pet	2,2,4-Trimethyl-1,2-dihydroquinoline
T-021	MA-24	0.1 pet	Trimethylolpropane triacrylate ON NOT
T-022	PG-14	5.0 pet	Triphenyl phosphate
T-023	MA-23	0.1 pet	Tri(propylene glycol) diacrylate PO NOT RELOAD
T-024A	Deleted 2011		(Turpentine peroxides)
T-024B	C-53	0.4 pet	Turpentine oil oxidized PONOT
T-025A	V-22	5.0 pet	Tetracaine hydrochloride
T-026	R-26	0.1 pet	Thiourea
T-027	DS-29, MA-12, MN-10, DMP-8, DMS-6	2.0 pet	Tetrahydrofurfuryl methacrylate আজে
T-028	PG-9	0.5 pet	Triglycidyl isocyanurate, (TGIC)
T-029	MA-13	2.0 pet	Tetraethylene glycol dimethacrylate
T-030	CS-3, AC-71	1.0 pet	Triamcinolone acetonide
T-031A	ICB-44, NA-44 NAE-44, NAC-44	1.0 pet , AC-27	Tixocortol-21-pivalate
T-031B	S-25, IS-19, CS-4, LU-21, LA-25, ECB-25	0.1 pet	Tixocortol-21-pivalate
T-032	PL-4	2.5 pet	Taraxacum officinale extract PRELOAD
T-033	PL-10	1.0 pet	Tanacetum vulgare extract PRELOAD
T-034	ME-14	1.0 pet	Tioconazole
T-035B	ICB-49, C-46 NAE-64, NAC-49	5.0 pet , AC-51	Tea tree oil oxidized PORTO
T-036	ICB-22, C-43 NAE-60, NAC-22	100 , AC-49	TOCOPHEROL PORTO
T-037B	C-52	10.0 pet	TOCOPHERYL ACETATE
T-038	Deleted 2021		(Trimethylolpropane triglycidyl ether)
T-039	MET-8	5.0 pet	Titanium(III)nitride
T-040	METE-20	10.0 pet	TITANIUM DIOXIDE
T-041	MET-11	5.0 pet	Titanium(IV)oxalate hydrate
T-042	METE-22	10.0 pet	Titanium
T-043	MET-17	5.0 pet	Tungsten
T-044	Deleted		
T-045	Deleted		(Terephtalylidene dicamphor sulphonic acid (Mexoryl SX))
T-046	Deleted		(Turpentine peroxides)
T-047	MET-29	1.0 pet	Tantalum
<b>T-048</b> 104	E-11	0.5 pet	2,4,6-Tris(dimethylaminomethyl)phenol

Art. No.	Serial no.	conc %(w/w) Name a Vehicle	
T-049	H-30	1.0 pet TOLUENE-2,5-DIAMINE <sup>3</sup>	
T-050	ME-15	20.0 pet Tobramycin	
U-001	TF-13	10.0 pet Urea formaldehyde resin	
U-002	Deleted 2019	(Urethane diacrylate, aliphat	ic)
U-003	Deleted 2019	(Urethane diacrylate, aroma	tic)
U-004	DS-3, MA-8	2.0 pet Urethane dimethacrylate 🎎	OT AD
U-005	PL-15	0.1 pet (+)-Usnic acid	
V-001	B-1, F-17	10.0 pet VANILLIN	
V-002	METE-10	5.0 pet Vanadium	
V-003	MET-14	1.0 pet Vanadium(III)chloride	
V-004	ME-16	10.0 aq Vancomycin hydrochloride 🛭	NOT
V-005	METE-24	10.0 pet Vanadium(V)oxide	
W-001	S-12, IS-8, LA-12, ECB-12	30.0 pet LANOLIN ALCOHOL	
X-001	E-7	0.1 pet m-Xylylenediamine RELOAD	
Y-001	ICB-57, F-21 NA-16, NAE-65, NAC-57, AC-64	2.0 pet Ylang ylang oil MELLON	
Z-001	METE-1	2.5 pet Zinc	
Z-002	R-14	1.0 pet ZINC DIBUTYLDITHIOCARBA	AMATE (ZBC)
Z-003	R-13	1.0 pet Zinc diethyldithiocarbamate	(ZDC)
Z-004	R-20	1.0 pet Zinc dimethyldithiocarbamat	e (Ziram)
Z-005	O-17	1.0 pet Zinc ethylenebis-(dithiocarbar	nate) (Zineb)
Z-006	H-25	1.0 pet ZINC PYRITHIONE	
Z-007A	Deleted 2011	(ZINC CHLORIDE)	
Z-007B	MET-10	1.0 pet ZINC CHLORIDE	
Z-008	MET-16	1.0 pet Zirconium(IV)chloride	
Z-009	METE-25	0.1 pet ZIRCONIUM DIOXIDE	

# Abbreviations in Hapten Information

CAS: Chemical Abstract Service (CAS) registry numbers.

Cross: Antigens mentioned are primary sensitizers to which the compound might crossreact. For further information visit

www.contactderm.org.

FW: Formula weight.

ICU: Immunologic Contact Urticaria.

INCI: International Nomenclature of Cosmetic Ingredients, names displayed in Capitals in accordance to EUR-Lex 2006/257/EG. All the haptens with INCI names are written

in capital letters throughout the catalogue. **NSAID**: Non-steroidal anti-inflammatory drug

**NICU:** Nonimmunologic contact urticaria.

PA: Compound that may cause photoallergic reactions.
PL: Compound that may cause persistent light reactions.
PT: Compound that may cause phototoxic reactions.
UCU: Uncertain mechanism type contact urticaria.

Volatile hapten, not recommended for preloading

<sup>1</sup> Also present in European Baseline Series

<sup>2</sup> Emulsifier: SORBITAN SESQUIOLEATE 5%

<sup>3</sup> Emulsifier: SORBITAN SESQUIOLEATE 1%

<sup>4</sup> Emulsifier: SORBITAN SESQUIOLEATE 2%

<sup>5</sup> Contains DECYL GLUCOSIDE

# **Hapten Information**

Art. No. Formula FW Series



#### **ABIETIC ACID**

A-001  $C_{20}H_{30}O_2$  302.44 O

Component in tall oil used as deodorizing agent in cooling fluids. Major component of rosin used in adhesive tapes, glues, inks, sealants, cosmetics, dental impression materials. **Cross: COLOPHONIUM, dihydroabietyl alcohol. CAS** 514-10-3.

#### **ACETAMINOPHEN**

A-032 C<sub>g</sub>H<sub>0</sub>NO<sub>2</sub> 151.16 CAD

Paracetamol or acetaminophen, is the active metabolite of phenacetin, a so-called coal tar analgesic. It is an effective substitute for acetylsalicylic acid, due to its analgesic( to relieve minor aches and pains) and antipyretic (to reduce fever) properties. However, unlike aspirin, it is not a very effective anti-inflammatory agent though it lacks many of the side effects of aspirin, and is available over-the-counter. Paracetamol is also useful in the management of more severe pain, where it allows lower dosages of additional non-steroidal anti-inflammatory drugs (NSAIDs) or opioid analgesics to be used, thereby minimizing overall side effects. It is a major ingredient in numerous cold and flu medications. **CAS** 103-90-2.

## Acetylsalicylic acid

A-031 C<sub>o</sub>H<sub>s</sub>O<sub>4</sub> 180.16 CAD

Aspirin®, or acetylsalicylic acid, (acetosal) is a salicylate drug often used as an analgesic, antipyretic, and as an anti-inflammatory. It also has an antiplatelet ("blood-thinning") effect and is used long-term in low doses to prevent heart attacks and blood clot formation in people at high risk for developing blood clots. **CAS** 50-78-2.

<sup>&</sup>lt;sup>6</sup> Present in national series. Visit www.chemotechnique.se for further information.

EC Directive 2003/15/EC relating to cosmetic products

Art. No.	Formula	FW	Series				
Achillea millefolium extract							
A-025			PL				

Perennial compositae weed with white flowers. Grows in most of Europe and in N. America, New Zealand and southern Australia. The raw material for this product is made from an ethanol extraction of the plant/flowers of Achillea Millefolium. Contains the sesquiterpene lactone -peroxyachifolide. Also known as Yarrow. Also available as part of Mx-29A and Mx-29B. **May cause airborne contact dermatitis**.

#### **Acid Yellow 36**

A-019  $C_{18}H_{14}N_3NaO_3S$  375.38 SH

Dye used in leather. As indicator (pH) in laboratories. CAS 587-98-4.

#### **Acid Yellow 61**

A-026 TF

Azo dye belonging to the acid dye class for coloring wool and polyamide textiles, **CAS** 12217-38-8

#### Acid Red 118

A-027 TF

Azo dye belonging to the acid dye class for coloring wool and polyamide textiles.

### Acid Red 359

A-028 TF

Azo dye (chrome) belonging to the premetallic dye class for coloring wool and polyamide textiles. **CAS** 61814-65-1.

## **Acyclovir**

A-033 C<sub>8</sub>H<sub>11</sub>N<sub>5</sub>O<sub>3</sub> 225.21 CAD

Aciclovir, chemical name acycloguanosine, is a guanine analogue antiviral drug, marketed under trade names such as Zovirax and Zovir. One of the most commonly-used antiviral drugs, it is primarily used for the treatment of herpes simplex virus infections, as well as in the treatment of herpes zoster (shingles). **CAS** 59277-89-3.

Art. No.	Formula	FW	Series
Alantola	ctone		
A-003	$C_{15}H_{20}O_2$	232.31	S, ICB, IS, PL

Sesquiterpene lactone present in, e.g., species of Chrysanthemum plants (Helenin). Also available as part of Mx-18. **CAS** 546-43-0.

## Alclometasone-17, 21-dipropionate

A-023 C<sub>28</sub>H<sub>37</sub>CIO<sub>7</sub> 520.71 CS

Topical non-fluorinated corticosteroid with low systemic effects. **CAS** 66734-13-2.

#### **Aluminium**

Deleted 2017

Please refer to Aluminium(III)chloride hexahydrate (A-022) or ALUMINUM HYDROXIDE (A-038).

## Aluminium(III)chloride hexahydrate

 $\text{A-022} \qquad \qquad \text{AICI}_3 \cdot \text{6H}_2 \text{O} \qquad 241.43 \qquad \quad \text{DS, MET}$ 

This hapten is a marker for contact allergy to **aluminum**. Used in preserving wood, disinfecting stables, etc., in deodorants and antiperspirant preparations. Used in refining crude oil, dyeing fabrics. Found in dental ceramics and topical astringents. **CAS** 7784-13-6

#### **ALUMINUM HYDROXIDE**

A-038 AI(OH)<sub>3</sub> 78.0 MET

This hapten is a marker for contact allergy to **aluminum**. Most of this chemical is converted to aluminium oxide (alumina) that is used in the manufacture of aluminium metal. The chemical is also used as a fire retardant filler, producing water vapor and smoke suppressant for polymer applications. The gel form of the chemical is applied to make aluminium salts as flocculants in water purification.

The substance is also used as an antacid, to treat/control, or manage high levels of phosphate in the body. In addition it is also used with a low phosphate diet to prevent the formation of phosphate urinary stones. It can also be found in personal care products. Aluminum can in different forms be found in dental implants. **CAS** 21645-51-2

Art. No. Formula FW Series

Amerchol L-101

A-004

ICB, C, O, LU, AC,NA,NAE,NAC

Trade name of product containing lanolin alcohols obtained from hydrolysis of lanolin. Emulsifier and emollient in cosmetic and pharmaceutical bases, topical drugs, furniture polish, leather, metal corrosion prevention, paper, inks, textiles, furs, cutting oils, waxes. **IJCU**.

#### **Amidoamine**

A-029 ICB, NA, NAE, NAC, AC

Amidoamines are a class of chemical compounds used as intermediates in the synthesis of surfactants, such as cocamidopropylbetaine (CAPB), some of which are used in personal care products including soaps, shampoos, and cosmetics. Amidoamines are amides formed from fatty acids and diamines. Studies have concluded that most apparent allergic reactions to products containing CAPB are more likely due to amidoamine.

### 4-Aminoazobenzene

A-005  $C_{12}H_{11}N_3$  197.24 SH

Intermediate in the production of diazo dyes. Pigment in, e.g., plastic materials. Also known as Solvent yellow 1. **Cross: para group of compounds. CAS** 60-09-3.

## 4-AMINO-2-HYDROXYTOLUENE

A-039 H<sub>2</sub>NC<sub>6</sub>H<sub>2</sub>(CH<sub>2</sub>)OH 123.15 H

This substance is typically used in the formulation of hair dyes and colors. **CAS** 2835-95-2

### m-AMINOPHENOL

A-008 C<sub>6</sub>H<sub>7</sub>NO 109.13 H

Used as a coupler for hair dyes. Found as dye intermediate. Used in the manufacturing of 4-amino salicylic acid. **Cross: para group of compounds. CAS** 591-27-5.

Art. No.	Formula	FW	Series	
p-AMINOPHENOL				
A-009	C <sub>6</sub> H <sub>7</sub> NO	109.13	Н	

Primary intermediate for hair dyes. Photographic developer. Dye for furs and feathers. **Cross: para group of compounds. CAS** 123-30-8.

## Ammonium hexachloroiridate(IV)

A-034 H<sub>8</sub>Cl<sub>8</sub>IrN<sub>2</sub> 441.01 MET

This hapten is a marker for contact allergy to **iridium**. Ammonium hexachloroiridate (IV) is used in the production of photographic emulsions and in catalytic composites in the process of converting hydrocarbons. **CAS** 16940-92-4.

## Ammonium hexachloroplatinate(IV)

A-010 Cl<sub>8</sub>H<sub>8</sub>N<sub>2</sub>Pt 443.88 MET

This hapten is a marker for contact allergy to **platinum**. Precious metal salt which is used in platinum plating. **ICU. CAS** 16919-58-7.

## Ammonium molybdate (VI) tetrahydrate

A-035 H<sub>24</sub>Mo<sub>7</sub>N<sub>6</sub>O<sub>24</sub>·4H<sub>2</sub>O 1235.86 MET

This hapten is a marker for contact allergy to **molybdenum**. Ammonium Molybdate is an odourless crystalline compound ranging in colour from white to yellow-green. It is also called molybdic acid hexammonium salt tetrahydrate, ammonium molybdate tetrahydrate, and ammonium heptamolybdate tetrahydrate. Used as an analytical reagent to find the presence of phosphates, silicates, arsenates and lead in pigments. Used in the production of molybdenum metal and ceramics, in the fixing of metals and in electroplating, in fertilizers for crops and as a negative stain in biological electron microscopy. **CAS** 12054-85-2.

#### **AMMONIUM PERSULFATE**

A-011  $H_8 N_2 O_8 S_2$  228.20 B, H

Found in hair bleaches as oxidizer and bleacher. Used in decolorizing and deodorizing oils, electroplating, making starch soluble, yeast treatment. Used as reducer and retarder in photography. **May cause airborne contact dermatitis. UCU. CAS** 7727-54-0.

Art. No.	Formula	FW	Series		
AMMONIUM THIOGLYCOLATE					
A-012	$C_2H_7NO_2S$	109.15	Н		

Acts as reducing agent in permanent waving formulations for hair treatment. **CAS** 5421-46-5.

## Ammonium tetrachloroplatinate(II)

A-013 CI<sub>4</sub>H<sub>8</sub>N<sub>2</sub>Pt 372.98 MET

This hapten is a marker for contact allergy to **platinum**. Precious metal salt which is used in photography. **ICU. CAS** 13820-41-2.

## Amoxicillin trihydrate

A-030  $C_{16}H_{19}N_3O_5S$  365.40 CAD

Amoxicillin or amoxycillin is a moderate-spectrum  $\beta$ -lactam antibiotic used to treat bacterial infections caused by susceptible microorganisms. It is usually the drug of choice within the class because it is better absorbed, following oral administration, than other beta-lactam antibiotics. Amoxicillin is susceptible to degradation by  $\beta$ -lactamase-producing bacteria, and so may be given with clavulanic acid to decrease its susceptibility. Is currently marketed by GlaxoSmithKline (the inheritor company) under the original trade name Amoxil. **CAS** 61336-70-7.

#### **AMYL CINNAMAL**

A-014 C<sub>14</sub>H<sub>10</sub>O 202.30 I

Raw material in the production of perfumes. Also known as Amylcinnamalaldehyde. Also available as part of Mx-07. **Cross: amylcinnamic alcohol. CAS** 122-40-7.

## Amyl cinnamyl alcohol

A-036 C<sub>14</sub>H<sub>20</sub>O 204.31

Amyl cinnamyl alcohol is one of many ingredients in fragrances. It is found in soaps, detergent, beauty care products and household products. **CAS** 101-85-9.

F

Art. No. Formula FW Series

## Amylocaine hydrochloride

Used as a topical and local anesthetic agent. Also available as part of Mx-20. **Cross: Tetracaine. CAS** 532-59-2.

#### TRANS-ANETHOLE

A-015 C<sub>10</sub>H<sub>12</sub>O 148.21 B

Used as flavoring agent in food, dentifrices, pharmaceuticals etc. In perfumery for soap, etc. In photography and in embedding materials in microscopy. **CAS** 4180-23-8.

#### Anise alcohol

A-037  $C_8H_{10}O_2$  138.16 F

Anise alcohol (2-Methoxybenzyl alcohol) is one of many ingredients in fragrances. It is found in soaps, detergents, beauty care products and household products. **CAS** 105-13-5.

#### Anthemis nobilis extract

C-029 PL

Compositae plant growing in most of Europe, in N.Africa, S.America, Australia and New Zealand. A yellow dye is extracted from the dried flowers and is sometimes used in shampoos, hair rinses and ointments. Anaphylactic reaction following ingestion of camomile tea has been reported. The raw material for this product is made from an ethanol extraction of the plant/flowers of Anthemis nobilis. May be referred to as Chamomilla Romana. Also available as part of Mx-29A and Mx-29B.

#### Arnica montana extract

A-024 PL

Compositae plant that grows on prairies and in mountainous lands in Europe, and Asia. Tincture of arnica is used in trauma treatment. The raw material for this product is made from an ethanol extraction of the plant/flowers of Arnica Montana. Major haptens appear to be helenalin and its esters. Also available as part of Mx-29A and Mx-29B. Cross: a number of other Asteraceae plants.

Art. No.	Formula	FW	Series
Atranorin			
A-016	C <sub>19</sub> H <sub>18</sub> O <sub>8</sub>	374.33	PL

One of the most common substances found in lichens. Component in extracts of oak moss used as fragrance. Also available as part of Mx- 15. **Cross: oakmoss. PA. CAS** 479-20-9

## Azodiisobutyrodinitrile

Deleted 2021 C<sub>8</sub>H<sub>12</sub>N<sub>4</sub> 164.21

Foaming agent and inhibitor in plastic and elastomer materials. **CAS** 78-67-1.



#### **Bacitracin**

B-032 C<sub>66</sub>H<sub>103</sub>N<sub>17</sub>O<sub>16</sub>S 1421.79 ME, LU, NA, NAE, NAC, AC

Antibiotic agent effective against gram-positive organisms and spirochetes. In products for topical treatment, ear medications, and ophthalmic drugs. Common hapten in leg ulcer treatment. **Cross:** polymyxin B sulfate, neomycin sulfate. ICU. CAS 1405-87-4.

## **Balsam Peru**

Change of name as of January 2016; please refer to Peru balsam (Art. No. B-001).

#### **Basic Red 46**

B-026 TF

Monoazo dye used for acrylic and polyester textiles (sweaters, etc.).

#### Beech tar

Used in tar paper, insulation tapes and topical medicaments. Also known as FAGUS SYLVATICA. Available as part of Mx-14.

Art. No. Formula FW Series

BENZALKONIUM CHLORIDE

B-027 C., H, OCIN 283.88 ICB, LU, AC

Topical quaternary ammonium antiseptic agent found in ophthalmic (eye) preparations, skin disinfectants, cosmetics, deodorants, mouthwashes, dentifries, sterilization solutions, lozenges, and solutions for contact lenses. Cross: cetrimoniumbromide, benzethoniumchloride. May cause airborne contact dermatitis. CAS 63449-41-2

### **BENZISOTHIAZOLINONE**

B-003  $C_7H_5NOS$  151.19 ECB, O

Preservative used in cooling fluids, paints, adhesives paper and in the textile industry . Also known as BIT. **CAS** 2634-33-5.

#### Benzocaine

B-004 C<sub>9</sub>H<sub>11</sub>NO<sub>2</sub> 165.19 S, ICB, ME, NA, NAE, NAC, AC

Local and topical anesthetic used in products such as burn and sunburn remedies, hemorrhoidal creams, suppositories, creams for treatment of poison ivy, oral and gingival products, sore throat sprays/lozenges, astringents, appetite suppressants. Also known as Ethyl 4-aminobenzoate. Also available as part of Mx-19 and Mx-31. Cross: para group of compounds, butethamine, procainamide, hydrochlorothiazide, PABA and esters, azo/aniline dyes, PPD, sulfonamides, sulfonylureas, 4-aminosalicylic acid, parabens. PA. UCU. CAS 94-09-7.

#### BENZOIC ACID

B-005 C<sub>2</sub>H<sub>e</sub>O<sub>2</sub> 122.12 B, AC

Used in preserving foods, fats, fruit juices, etc (it and its salt is represented by E-numbers E210, E211, E212, and E213). Also used as an antifungal agent in pharmaceutical preparations and cosmetics. **Cross: Peru balsam. ICU. CAS** 65-85-0

Art. No.	Formula	FW	Series
BENZOPH H-014	<b>IENONE-3</b> C <sub>14</sub> H <sub>12</sub> O <sub>3</sub>	228.24	ICB, C, DS, EP, EPE, SU, NAE, NAC, AC

Common UV-adsorber in dental composite materials and other plastic materials. Used as a UV-adsorber in topical sunscreens, moisturizers, shampoos, hair care products, lipsticks, lip balms, nail polish, etc. Also known as 2-Hydroxy-4-methoxybenzophenone, Eusolex 4360, Escalol 567, Oxybenzone. **Cross: dioxybenzone. PA. CAS** 131-57-7.

## **BENZOPHENONE-4**

H-023  $C_{14}H_{12}O_6S$  308.31 SU, EP, EPE, AC

Sunscreen for use in various sunscreen products as well as in textiles, plastics, paints and cosmetics. Also known as 2-Hydroxy-4-methoxy-benzophenone-5-sulfonic acid, Sulisobenzone and Uvinul MS-40. **CAS** 4065-45-6.

#### **BENZOPHENONE-10**

H-020 C<sub>15</sub>H<sub>14</sub>O<sub>3</sub> 242.26 SU, EPE

UV absorbing agent in sunscreen cosmetics of the type creams, lotions, lipsticks, sun oils, etc. Also known as 2-Hydroxy-4-methoxy-4'-methylbenzophenone, Mexenone. Cross (photo): BENZOPHENONE-3. PA. CAS 1641-17-4

## **BENZOTRIAZOLE**

B-006 C<sub>e</sub>H<sub>e</sub>N<sub>e</sub> 119.13 O, P

Anticorrosive agent in cooling fluids fuels, photographic development, antifreeze, dry cleaning, etc. Also known as 1H-Benzotriazole. **CAS** 95-14-7.

## Benzoylperoxide

B-007  $C_{14}H_{10}O_4$  242.23 ICB, B, PG, LU NAC

Used as initiator in the polymerization of plastics, as oxidizer in bleaching oils, flour etc. Is a keratolytic agent in acne medications. May cause discoloration of the hair and postinflammatory pigmentation and hypopigmentation. May cause airborne contact dermatitis. UCU. CAS 94-36-0.

Art. No.	Formula	FW	Series			
Benzydamine hydrochloride						
B-041	$C_{19}H_{23}N_3O\cdot HCI$	345.87	EP, EPE			

Benzydamine hydrochloride is a NSAID, with local anesthetic and analgesic properties for pain relief and anti-inflammatory treatment of inflammatory conditions of the mouth and throat. **CAS** 132-69-4

#### **BENZYL ALCOHOL**

B-008 C<sub>7</sub>H<sub>8</sub>O 108.13 ICB, C, F, P; NAE, NAC, AC

Solvent in photography, perfumery and for dyestuffs, inks, pharmaceutical products, etc. Used as preservative in injectable drugs, ophthalmic solutions, and oral liquids. Cross: Peru balsam, benzoin tincture. May cause pigmentation of the face. ICU. CAS 100-51-6.

#### **BENZYL BENZOATE**

B-038  $C_{14}H_{12}O_2$  212.24 F

Benzyl benzoate is the ester of BENZYL ALCOHOL and BENZOIC ACID. This easily prepared compound has a variety of uses. Benzyl benzoate, as a topical solution, may be used as an antiparasitic insecticide to kill lice and the mites responsible for the skin condition scabies. It has other uses such as a fixative in fragrances to improve the stability and other characteristics of the main ingredients; a food additive in artificial flavors; a plasticizer in cellulose and other polymers; a solvent for various chemical reactions; a treatment for sweet itch in horses. **CAS** 120-51-4.

#### **BENZYL CINNAMATE**

B-039 C<sub>16</sub>H<sub>14</sub>O<sub>2</sub> 238.29 F

Used as flavoring agent (sweet, floral, fruity) and as a perfumery fixer. **CAS** 103-41-3

## **BENZYL SALICYLATE**

B-010 C<sub>14</sub>H<sub>12</sub>O<sub>3</sub> 228.26 ICB, C, F, NAC

Used as organic solvent for perfumes, also found in tanning creams and lotions. **May cause pigmentation of the face. CAS** 118-58-1.

Art. No.	Formula	FW	Series		
Beryllium(II)sulfate tetrahydrate					
B-044	$\mathrm{BeSO_4}\cdot\mathrm{4H_2O}$	177.14	MET		

This hapten is a marker for contact allergy to **beryllium**. Beryllium improves many physical properties when added as an alloying element to aluminum, copper, iron and nickel. It can be found in tools and in the aerospace industry where it is used for aircraft components, missiles, spacecraft and satellites. It is a common window material for X-ray equipment and components of particle physics experiments. It is also used in thermal management applications. **CAS** 7787-56-6.

## Betamethasone-17,21-dipropionate

B-042  $C_{28}H_{37}FO_7$  504.59 CS

Betamethasone dipropionate is a glucocorticoid steroid with antiinflammatory and immunosuppressive abilities. It is applied as a topical cream, ointment, lotion, aerosol sprays or gel to treat itching and other minor skin conditions such as eczema. **CAS** 5593-20-4.

#### Betamethasone-17-valerate

B-031 C<sub>27</sub>H<sub>27</sub>FO<sub>6</sub> 476.26 CS

Topical and systemic corticosteroid of group C type with a C-16 methyl substitution. **CAS** 2152-44-5

#### **BHT**

D-006 C<sub>45</sub>H<sub>24</sub>O 220.36 B, C, PG, LU, AC

Used as an antioxidant in foods (beverages, gum, ice cream, fruits, cereals), cosmetics, topical medications, animal feeds, petroleum products, jet fuels, rubber, plastics, paints, glues. Also known as Butyl hydroxy toluene and 2,6-Di-tert-butyl-4-cresol. **Cross: Lidocaine. UCU. CAS** 128-37-0

#### Bioban CS 1135

D-015

Trade name of a product that consists of two components: 4,4-Dimethyl-oxazolidine and 3,4,4-Trimethyl-oxazolidine. See the respective component for further information. **CAS** 75673-43-7

0

Art. No.	Formula	FW	Series	
Bioban P 1487				
E-014			0	

Trade name of a product that consists of two components: 4-(2-Nitrobutyl) morpholine and 4,4-(2-Ethyl-2-nitro-trimethylene) dimorpholine. See the respective name for further information.

#### Birch tar

Birch tar derived from the dry distillation of the bark of the birch tree. It is compounded of guaiacol, phenols, cresol, xylenol and creosol. Used as a component in pharmaceutical preparations. Available as part of Mx-14.

# BIS-ETHYLHEXYLOXYPHENOL METHOXYPHENOL TRIAZINE

B-037  $C_{38}H_{49}N_3O_5$  627.81 SU, EP, EPE

Used in sunscreens to absorb UV rays and is highly photostable. It is a broad spectrum UV absorber, absorbing UVB as well as UVA rays. Also known as Tinosorb S and Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine. **CAS** 187393-00-6

## **Bisphenol A dimethacrylate**

M-007  $C_{23}H_{24}O_4$  364.44 DS, MA

Methacrylic monomer based on bisphenol A. Used in dental restorative composite and adhesive materials. Also known as 2,2-bis(4-Methacryloxy)phenylpropane and BIS-MA. **CAS** 3253-39-2.

## Bisphenol A glycerolate dimethacrylate

H-013  $C_{29}H_{36}O_{8}$  512.61 DS, MA, DMP, DMS

Common methacrylic monomer in dental composite restorative materials and dental sealants. This monomer is also extensively used in industrial applications. Also known as 2,2-bis(4-(2-Hydroxy-3-methacryloxypropoxy)phenyl)propane and BIS-GMA. **CAS** 1565-94-2.

Art. No. Formula FW Series

Bisphenol A

B-013  $C_{4e}H_{4e}O_{2}$  228.29 PG

Comes from raw material in the production of epoxy and acrylic resins. Is a component in semisynthetic waxes. Also known as 4,4-Isopropylidene diphenol. Cross: diethylstilbestrol, hydroquinonemonobenzyl ether. CAS 80-05-7.

## **Bithionol**

B-014  $C_{12}H_6CI_4O_2S$  356.07

Used as antibacterial agent in soaps, cosmetics, agricultural fungisides, veterinaryantiseptic and antihelminthic products, industrial cleansers, etc. 2,2-Thiobis (4,6-dichlorophenol). **PA. PL. CAS** 97-18-7

#### **BORNANEDIONE**

C-026 C<sub>10</sub>H<sub>14</sub>O<sub>2</sub> 166.22 DS

An initiator for visible light cured dental acrylic composite materials. Also known as Camphoroguinone and Camphoroguinone. **CAS** 10373-78-1

## 2-BROMO-2-NITROPROPANE-1,3-DIOL

B-015  $C_3H_6BrNO_4$  199.99 ICB,C,H,O,NA, AC,NAE,NAC,ECB

Used a preservative in cooling fluids, hand & face creams, shampoos, hair dressings, mascaras, cleansing lotions, milk sampling, paints, textiles, humidifiers, pharmaceutical products, washing detergents (Bronopol). **CAS** 52-51-7.

# Budesonide NAE, NAC, S, ICB,CS, LA, AC B-033 C<sub>96</sub>H<sub>24</sub>O<sub>6</sub> 430.55 IS, LU, NA, ECB

A nonhalogenated corticosteroid for use in topical preparations and for the treatment of rhinitis and asthma. Belongs to the group B (triamcinolone acetonide) type of corticosteroids. Good marker of corticosteroid allergy. Also available as part of Mx-23. Cross: Fluocinolone acetonide, Hydrocortisone, Hydrocortisone-17-butyrate, Prednisolone Acetate, Tixocortol-21-Pivalate, Triamcinolone acetonide. CAS 51333-22-3

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Bufexamac

Drug used as an anti-inflammatory agent on the skin, as well as rectally. Ointments and lotions containing bufexamac are used for the treatment of subacute and chronic eczema of the skin, including atopic eczema, as well as sunburn and other minor burns, and itching. Suppositories containing bufexamac in combination with local anaesthetics are used against haemorrhoids. **CAS** 2438-72-4.

223.27

ME

## 1,4-Butanediol diacrylate

B-043

B-016  $C_{10}H_{14}O_4$  198.24 MP

A cross-linking monomer for use in inks, adhesives, textile product modifiers, photo resists, etc. Also known as BUDA. **CAS** 1070-70-8.

## 1,4-Butanediol diglycidyl ether

Deleted 2021 C<sub>10</sub>H<sub>18</sub>O<sub>4</sub> 202.25

C<sub>42</sub>H<sub>47</sub>NO<sub>2</sub>

A difunctional glycidylether of butyl alcohol; containing 2 epoxide groups (three-membered ring cyclic ethers that are also known as oxiranes or alkylene oxides). It is used as a general purpose diluent to reduce the viscosity of epoxy resins. Also used as rubber adhesive. Also known as Araldite RD-2; 1,4-Bis(2,3-epoxypropoxy) butane. **CAS** 2425-79-8.

**1,4-Butanediol dimethacrylate**B-017

C<sub>12</sub>H<sub>18</sub>O<sub>4</sub>

226.28

MA, DS, DMP, DMS

A cross-linking methacrylic monomer for use in dental composite materials, sealants, prostheses, etc. Also known as BUDMA. **CAS** 2082-81-7.

## **Butyl acrylate**

B-018  $C_7H_{12}O_2$  128.17 MN

A cross-linking acrylic monomer for use in textile and leather finishes, paint formulations, etc. Aslo known as BA. **CAS** 141-32-2.

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4-tert-Butylbenzoic acid

B-019 C<sub>44</sub>H<sub>44</sub>O<sub>2</sub> 178.24 O

Used as corrosion inhibitor in cooling fluids. CAS 98-73-7.

## 4-tert-Butylcatechol

B-030 C<sub>40</sub>H<sub>44</sub>O<sub>2</sub> 166.22 PG

An antioxidant found in polyester resins and as polymerization inhibitor in PVC. Also described as hapten in photocopying paper and as antioxidant in oil. Also known as PTBC. **May cause depigmentation. CAS** 98-29-3.

#### t-BUTYL HYDROQUINONE

B-028  $C_{10}H_{14}O_2$  166.22 C

Used as an antioxidant in cosmetic products like lipsticks. **CAS** 1948-33-0.

#### **BUTYL METHACRYLATE**

B-021  $C_8H_{14}O_2$  142.20 MA, MN, MP

A cross-linking methacrylic monomer for use in dental composite materials, artificial nails, etc. Also known as BMA. **CAS** 97-88-1.

#### **BUTYL METHOXYDIBENZOYLMETHANE**

B-029 C<sub>20</sub>H<sub>22</sub>O<sub>2</sub> 310.20 SU, EP, EPE

A UV-A-ray adsorbing agent in sunscreen cosmetics of the type creams, lotions, lipsticks, sun oils, etc. (Parsol 1789). Also known as tert-Butyl-4'-methoxydibenzopylmethane. **CAS** 70356-09-1.

## 2-tert-Butyl-4-methoxyphenol

B-022  $C_{11}H_{16}O_2$  180.25 ICB, B, C, PG, NAC

Used as an antioxidant in foods (beverages, gum, ice cream, fruits, cereals), cosmetics, topical medications, animal feeds, petroleum products, jet fuels, rubber, plastics, paints, glues. Also known as BHA. May cause depigmentation. May cause airborne contact dermatitis. UCU. CAS 121-00-6.

Art. No.	Formula	FW	Series		
BUTYLPARABEN					
Deleted 2021	$C_{11}H_{14}O_3$	194.23			

Used as preservative in foods (salad dressings, mayonnaise, spiced sauces, mustard, frozen dairy products, baked products), cosmetics and pharmaceutical preparations. Also known as Butyl-4-hydroxybenzoate. Also available as part of Mx-03A, Mx-03C. **CAS** 94-26-8.

## 4-tert-Butylphenol

B-023 C<sub>10</sub>H<sub>14</sub>O 150.21 PG

An intermediate in the production of lacquer and varnish resins. Antioxidant in plastics, adhesives, etc. **May cause depigmentation. CAS** 98-54-4.

## 4-tert-Butylphenolformaldehyde resin

B-024 ICB, PG, S, SH, IS NA, NAE, NAC, ECB, LA, AC

Resin used in adhesives for shoes and watch straps. Also found in do-it-yourself glues, plywood, insulation, automobiles, motor oils, inks, papers, film developers, disinfectants, deodorants. Also known as PTBP. **May cause depigmentation.** 

#### **BUTYLPHENYL METHYLPROPIONAL**

B-040 C<sub>14</sub>H<sub>20</sub>O 204.30 F

Common fragrance found in soaps, detergents, beauty care products and household products. It is also used as an intermediate for the synthesis of agrochemicals. Also known as Lilial and Lilialdehyde. **CAS** 80-54-6.

C

Art. No. Formula FW Series

C

## Cadmium chloride

C-001 CdCl<sub>2</sub> 183.32 MET

This hapten is a marker for contact allergy to **cadmium**. Used in photography, the production of cadmium yellow. Works as fungicide and anticorrosive agent. Also used in pigments for glass, tattoos, and paints. **CAS** 10108-64-2.

#### **CALCIUM TITANATE**

C-049 CaO<sub>3</sub>Ti 135.96 MET

This hapten is a marker for contact allergy to **titanium**. Used in a method of manufacturing a ceramic capacitor suitable for high energy density and high temperature application. Uses are for example, as an antenna material, a capacitor material, a layered circuit substrate material, a connector material, and the like which are required to be dielectric. **CAS** 12049-50-2

## Camphoroquinone

Change of name as of January 2015; please refer to BORNANEDIONE (Art. No. C-026).

#### **CANANGA ODORATA OIL**

Change of name as of January 2016; please refer to Ylang ylang oil (Art. No. Y-001).

## Cananga oil

C-002 F

This substance is used as a fragrance in household products and cosmetic products like washing detergents, skin lotion and perfumes. The oil is steam distilled from the flowers of Cananga odorota macrophylla. The oil has a warm, sweet floral scent with a hint of tree and leather. Contains among other substances beta-Caryophyllene, Geranyl acetate, Benzyl benzoate, Linalool, Methyl benzoate, Benzyl salicylate, Farnesol, Geraniol, Eugenol and Citral.

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Cross: benzyl salicylate. May cause pigmentation of the face. CAS 68606-83-7.

## Captan

C-025 C<sub>0</sub>H<sub>8</sub>Cl<sub>3</sub>NO<sub>2</sub>S 300.57 H

Used as a fungicide on vegetables, fruits, and different types of plants. Used as bacteriostat in soaps, shampoos, hair tonics, animalflea removers and tick sprays. Also known as N-trichloromethylthio-4-cyclohexene-1,2-dicarboximide, Vancide, Dangard and Merpan. **May cause airborne contact dermatitis. CAS** 133-06-2

## Captopril

C-045 C<sub>9</sub>H<sub>15</sub>NO<sub>3</sub>S 217.28 CAD

Captopril is an angiotensin-converting enzyme inhibitor (ACE inhibitor) used for the treatment of hypertension and some types of congestive heart failure. Captopril's main uses are based on its vasodilatation and inhibition of some renal function activities. **CAS** 62571-86-2.

## Carbamazepine

C-044 C<sub>15</sub>H<sub>12</sub>N<sub>2</sub>O 236.27 CAD

Carbamazepine is an anticonvulsant and mood stabilizing drug, used primarily in the treatment of epilepsy and bipolar disorder. It is also used to treat ADD, ADHD, schizophrenia and trigeminal neuralgia. Also known as CBZ and 5H-dibenz[b,f]azepine-5-carboxamide. **CAS** 298-46-4.

#### CARVONE

C-035 C<sub>10</sub>H<sub>14</sub>O 150.22 DS, DMP

Found in several essential oils and is used for flavouring liqueurs, soaps, dental materials and perfumes. Also known as 2-Cyclohexen-1-one, 2-methyl-5-(1-methylethenyl)-, (5R)-(9Cl) and (R)- Carvone. **CAS** 6485-40-1

Art. No.	Formula	FW	Series
Cefalexin			
C-048	$C_{16}H_{17}N_3O_4S$	347.39	CAD

First-generation cephalosporin antibiotic and it is an orally-administered agent with a similar antimicrobial spectrum to the intravenous agents cefalotin and cefazolin. It is used to treat urinary tract infections, respiratory tract infections (including sinusitis, otitis media, pharyngitis, tonsillitis and pneumonia), skin and soft tissue infections. Although it is not generally considered first-line therapy for any indication, it is a useful alternative to penicillins in patients with penicillin hypersensitivity. There is, however, cross-reactivity in 10% of patients with hypersensitivity to penicillins and carbapenems. **CAS** 23325-78-2

## Cefixime trihydrate

C-054 C<sub>16</sub>H<sub>16</sub>N<sub>6</sub>O<sub>7</sub>S<sub>2</sub> 507.50 CAD

This substance is a second-generation cephalosporin antibiotic. It is a broad spectrum cephalosporin antibiotic and is commonly used to treat bacterial infections of the ear, urinary tract and upper respiratory tract. **CAS** 125110-14-7.

## Cefotaxim sodium salt

C-040  $C_{16}H_{16}N_5NaO_7S_2$  477.04 CAD

A cephalosporin that belongs to a group of broad-spectrum antibiotic derived from species of fungi of the genus Cephalosporium and are related to the penicillins in both structure and mode of action but relatively penicillinase-resistant antibiotics. Third-generation cephalosporins are more active against gram-negative organisms but less active against gram-positive organisms than second-generation agents; examples are cefoperazone, cefotaxime, ceftriaxone, ceftazidime, ceftizoxime, and moxalactam. **CAS** 64485-93-4

## Cefpodoxime proxetil

C-055 C<sub>21</sub>H<sub>27</sub>N<sub>5</sub>O<sub>9</sub>S<sub>2</sub> 557.60 CAD

This substance is an oral, third-generation cephalosporin antibiotic. It is active against most Gram-positive and Gram-negative organisms. It is commonly used to treat acute otitis media, pharyngitis, sinusitis, and gonorrhea. Veterinary uses is also found. **CAS** 87239-81-4.

Art. No.	Formula	FW	Series
Cefradine			
C-047	$C_{16}H_{19}N_3O_4S$	349.40	CAD

Cefradine or cephradine is a first generation cephalosporin antibiotic. Effective against a wide range of gram-positive and a limited range of gram-negative bacteria.

#### Cefuroxime sodium

C-053 C<sub>16</sub>H<sub>15</sub>N<sub>4</sub>NaO<sub>8</sub>S 446.37 CAD

This substance is an enteral second-generation cephalosporin antibiotic. It is used to treat pneumonia and other lower respiratory tract (lung) infections; meningitis, gonorrhea, and skin, blood, bone, joint and urinary tract infections. Injections of the medicine may also be used before, during, and sometimes for a brief period after surgery. **CAS** 56238-63-2.

#### **CETYL ALCOHOL**

C-003 C<sub>16</sub>H<sub>24</sub>O 242.45 C

Used as emulsifier and emollient in cosmetics and pharmaceutical preparations. **UCU. CAS** 36653-82-4.

#### **CETEARYL ALCOHOL**

C-033 LU, AC

A combination of cetyl (C16) and stearyl (C18) alcohols 50/50 used as emulsifier and emollient in cosmetic lotions, creams, ointments and pharmaceutical preparations. Also known as Lanette O. **UCU. CAS** 67762-27-0

#### **CETEARYL GLUCOSIDE**

C-056 C

Used as an emulsifier in peg-free lotions and creams. Suitable for low viscosity lotions (sprays), lotions, creams and foams. **CAS** 246159-33-1

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 CETRIMONIUM BROMIDE

 C-050
 C<sub>40</sub>H<sub>40</sub>BrN
 364.45
 H

One of the components of the topical antiseptic cetrimide. The cetrimonium (or hexadecyltrimethylammmonium) cation is an effective antiseptic agent against bacteria and fungi. It is a cationic surfactant. Its uses include providing a buffer solution for the extraction of DNA. It is also widely used in hair conditioning products. Also known as Cetrimide. **CAS** 57-09-0.

## Chamomilla recutita extract

C-051 PL

Chamomilla Recutita; Matricaria recutita or German chamomile, also spelled camomile, is an annual plant of the composite family Asteraceae. Chamomilla chamomilla, Chamomilla recutita (accepted name according to the Flora Europaea), Matricaria chamomilla, and Matricaria suaveolens. It usually grows near populated areas all over Europe and temperate Asia. It is widely introduced in temperate North America and Australia. As the seeds need open soil to survive, it often grows near roads, around landfills and in cultivated fields as a weed. The raw material for this product is made from an ethanol extraction of the plant/flowers of Chamomilla Recutita. Also available as part of Mx-29A and Mx-29B.

## Chloramphenicol

C-032 C<sub>44</sub>H<sub>42</sub>Cl<sub>2</sub>N<sub>2</sub>O<sub>5</sub> 323.14 ME, LU

An antibiotic substance produced by Streptomyces venezuelae. Present in eye drops, ointments and for systemic use. Used as bactericide against the rot of potatoes and other root vegetables. **Cross: Azidamfenicol. ICU. CAS** 56-75-7.

#### CHLORHEXIDINE DIACETATE

C-004  $C_{26}H_{38}CI_2N_{10}O_4$  625.56

An antimicrobial agent used in cosmetic and disinfection solutions, eye drops, uterine antiseptics, toothpaste, mouthwash, hand and wound cleansers. **PA. ICU. CAS** 56-95-1

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#### CHLORHEXIDINE DIGLUCONATE

C-005  $C_{34}H_{54}CI_2N_{10}O_{14}$  897.88 C, LU, AC

An antimicrobial agent used in cosmetic and pharmaceutical creams, surgical soaps, anticaries solutions, toothpaste, mouthwash, hand and wound cleansers etc. **PA. ICU. CAS** 18472-51-0.

#### **CHLOROACETAMIDE**

C-006 C<sub>2</sub>H<sub>4</sub>CINO 93.51 C, H, O, LU

A preservative in cosmetic and pharmaceutical creams, shampoos, bath lotions, etc. Also as preservative in glues and cooling fluids. Also known as 2-Chloroacetamide. **May cause airborne contact dermatitis. CAS** 79-07-2.

## p-CHLORO-m-CRESOL

C-008 C<sub>7</sub>H<sub>7</sub>CIO 142.59 C, H, O, LU, AC

A fungicide found in creams, topical antiseptics, pharmaceutical products, protein shampoos, baby cosmetics, and cooling fluids. (PCMC). Also known as 4-Chloro-3-cresol. **Cross: 4-chloro-3-xylenol. ICU. CAS** 59-50-7.

## **CHLOROXYLENOL (PCMX)**

C-010 C<sub>8</sub>H<sub>9</sub>CIO 156.61 C, H, O, NAE, NAC, AC

A preservative found in cooling fluids, creams, topical and urinary antiseptics. Can also be found in pharmaceutical products, hair conditioners, toilet and deodorants, soaps, electrocardiogram paste, etc. Also known as 4-Chloro-3,5-xylenol. **Cross: 4-chloro-3-cresol. CAS** 88-04-0.

## Chlorpromazine hydrochloride

Deleted 2021 C<sub>17</sub>H<sub>20</sub>Cl<sub>2</sub>N<sub>2</sub>S 355.35

An antiemetic and antipsychotic agent found in pills, injections, and suppositories. Cross: diethazine HCI, promethazine HCI, thiazinamium, ethopropazine HCI. May cause airborne contact dermatitis. PA, PT (systemic). CAS 69-09-0.

A fungicide and antibacterial agent found in topical pharmaceutical preparations. Also known as 5,7-dichloro-2-methyl-8-quinolinol and Sterosan. Also available as part of Mx-02. **Cross; clioquinol. CAS** 72-80-0.

## **Chrysanthemum Cinerariaefolium extract**

C-031 PL

A compositae plant that grows on rocky ground in Europe, Australia, Japan and N.America. The raw material for this product is made from an ethanol extraction of the plant/flowers of Chrysanthemum Cinerariaefolium. Pyrethrum is the main source of the pyrethrum insecticide. Principal hapten is pyrethrosin. **ICU.** 

#### **CINNAMAL**

C-014 C<sub>9</sub>H<sub>8</sub>O 132.16 ICB, B, F, NA NAE, NAC, AC

A common ingredient in perfumes for household products like deodorizers, detergents, and soap. Flavor in toothpaste, sweets, ice cream, soft drinks, chewing gums, and cakes. Also present in Tolu balsam absolute and Peru balsam, hyacinth plant, spices, cinnamon, Ceylon and cassia oil. Also known as Cinnamic aldehyde. Also available as part of Mx-07. Cross: CINNAMYL ALCOHOL, cinnamon oil. May cause depigmentation. PA. NICU. CAS 104-55-2.

#### CINNAMYL ALCOHOL

C-013 C<sub>0</sub>H<sub>40</sub>O 134.18 B, F

A component found in perfumed cosmetic products and deodorants. Also known as Cinnamic alcohol. Also available as part of Mx-07. Cross: Peru balsam, Propolis. May cause pigmentation of the face. CAS 104-54-1.

Art. No.	Formula	FW	Series		
Ciprofloxacin hydrochloride					
C-043	$C_{17H_{21}CIFN_3O_4}$	385.82	CAD		

A quinolone, which is an antibiotic drug used mainly to treat the respiratory infections (pneumoniae, pseudomonas, influenzae), urinary tract infections, the gastrointestinal surgery, typhoid fever, gonorrhoea (enterotoxigenic strains of Escherichia coli), and septicaemia. Ciprofloxacin act by inhibiting the bacterial enzymes DNA gyrase. Other quinolones include cinoxacin; levofloxacin; nalidixic acid; norfloxacin; ofloxacin. **CAS** 86393-32-0

#### **CITRAL**

C-036 C<sub>10</sub>H<sub>16</sub>O 152.24 F

Fragrance for use in various perfumes. Examples of usage: in citrus notes and floral fragrance blends and as an intermediate to form other compounds. Also known as Geranial; Geranialdehyde; 3,7-Dimethyl-2,6-octadienal. Also available as part of Mx-25. **CAS** 5392-40-5.

#### **CITRONELLOL**

C-037 C<sub>10</sub>H<sub>20</sub>O 156.27 F

A fragrance used in various perfumed products. Citronella oil is a yellowish essential oil distilled from the leaves of either of two grasses, Cymbopogon nardus or C. winterianus. This aromatic oil is inexpensive, and widely used in cheap perfumes and as a fragrance in soaps. It is also best known as an insect repellent. Citronellol, derived form citronella oil, is a chief constituent of geranium oil, another is GERANIOL. Both are used in the production of perfumes. (smells sweet, rose, lilac, geranium). Also known as 3,7-dimethyl-6-Octen-1-ol. Also available as part of Mx-25. **CAS** 106-22-9.

## Clarithromycin

C-041 C<sub>38</sub>H<sub>60</sub>NO<sub>13</sub> 747.96 CAD

Clarithromycin, belonging to the macrolide group, has a close structural and biological similarity with erythromycin. It is effective against a broad spectrum of gram-positive and gram-negative bacteria. It is used to treat respiratory tract infections and soft tissue infections. It is used to treat duodenal ulcer associated with Helicobacter pylori infections in combination with omeprazole. Also known as 6-0-methylerythromycin. **CAS** 81103-11-9

Formula Art. No. FW Series Clindamycin phosphate C<sub>40</sub>H<sub>34</sub>CIN<sub>2</sub>O<sub>0</sub>PS C-046 504.96 CAD

Clindamycin (phosphate) is a lincosamide antibiotic used in the treatment of infections caused by susceptible microorganisms. Such infections might include infections of the respiratory tract, septicemia and peritonitis. In patients with hypersensitivity to penicillins. clindamycin (phosphate) may be used to treat infections caused by susceptible aerobic bacteria as well. It is also used to treat bone infections caused by Staphylococcus aureus. Topical application of clindamycin phosphate can be used to treat moderate to severe acne. CAS 24729-96-2.

## Clioquinol

C-015 C<sub>0</sub>H<sub>c</sub>CIINO 305.50 C. LA

An antiinfective and antiamebic agent used in topical pharmaceutical preparations. Also known as 5-chloro-7-iodo-8-quinolinol, Chinoform and Vioform. Also available as part of Mx-02. May cause brown discoloration of the nails and erythema multiforme like eruptions. UCU. CAS 130-26-7.

## Clobetasol-17-propionate

C-028 C<sub>25</sub>H<sub>22</sub>CIFO<sub>5</sub> 466.73 ICB, CS, NAE, NAC, AC

A topical corticosteroid belonging to the group D (Hydrocortisone-17-butyrate) type of steroids. Cross: Alclometasone dipropionate, Betamethasone-17 Valerate, Clobetasol-17-propionate, Desoximetasone, Dexamethasone-21-Phospate. UCU. CAS 25122-46-7.

#### Coal tar

C-016

A by-product in the distillation of coal. Topical antieczematic agent. PA. PT. PL. May cause postinflammatory hyperpigmentation. CAS 8007-45-2.

Art. No.	Formula	FW	Series
Cobalt(II)chloride hexahydrate			
C-017	CoCl <sub>2</sub> ·6H <sub>2</sub> O	237.93	S, ICB, DS, H, LA, DMP, ECB, NA, NAE, NAC, AC

This hapten is a marker for contact allergy to **cobalt**. A component used in coloring of glass and porcelain. Works as a siccative in paints. Used in various alloys (dental, etc.). May produce erythema multiforme like eruptions. May cause airborne contact dermatitis, NICU, CAS 7791-13-1.

#### COCAMIDE DEA

C-019 ICB. O. NAE. NAC. AC

Mixture of ethanolamides of coconut acid. Found in bath, shower and body cosmetics and in cooling fluids. Also known as Coconut diethanolamide. CAS 68603-42-9.

#### COCAMIDOPROPYL BETAINE

C-018 C<sub>4</sub>H<sub>6</sub>NO ICB. C. H. NA. AC. NAE. NAC. LA

A surfactant found in liquid soaps, shampoos, hair colorants, shower & bath formulations. Also known as Tegobetaine. Cross: cocobetaine. CAS 61789-40-0

#### COLOPHONIUM

ICB. DS. C-020 SH, IS, DMP. ECB, NA, NAE, NAC, LA, AC

A vellow resin used in the production of varnishes, printing inks. paper, soldering fluxes, cutting fluids, glue tackifiers, adhesives, surface coatings, polish, waxes, cosmetics (mascara, rouge, eve shadow), topical medicaments, violin bow rosin, athletic grip aid, pine oil cleansers. Component in dental impression materials and periodontal packings. (rosin). Also known as Colophony

Cross: Peru balsam, dihydroabietyl alcohol, wood tars. May cause airborne contact dermatitis, ICU, CAS 8050-09-7.

Art. No.	Formula	FW	Series
Copper(I)ox	ride		
C-021	Cu <sub>2</sub> O	143.08	MET

This hapten is a marker for contact allergy to **copper**. Used as fungicide and as pigment to make glass red. Found in antifouling paints Also known as Cuprous oxide. **CAS** 1317-39-1

## Copper(II)sulfate pentahydrate

C-022 CuSO<sub>4</sub> . 5H<sub>2</sub>O 249.68 DS, MET

This hapten is a marker for contact allergy to **copper**. Works as a fungicide. Used as pigment in paints and reagent toner in photography. Copper metal is used in, e.g., dental alloys. Also known as Cupric sulfate. **ICU. CAS** 7758-99-8.

#### Costunolide

Mx-18 S, ICB, IS, PL

Sesquiterpene lactone isolated from the Compositae plant Saussurea lappa. The oil which is extracted from Saussurea lappa is used in perfumery and in the Orient for all kinds of diseases. Costunolide is present in the plant together with dehydrocostus lactone. May cause airborne contact dermatitis. Only available in mix (Mx-18). **CAS** 553-21-9.

#### Cotrimoxazole

Cotrimoxazole is an antibiotic combination of trimethoprim and sulfamethoxazole, in the ratio of 1 to 5, used in the treatment of a variety of bacterial infections. The name cotrimoxazole is the British Approved Name, and has been marketed worldwide under many trade names. Other sources list this antibiotic as bacteriostatic. **CAS** 8064-90-2

#### **COUMARIN**

C-038 C<sub>o</sub>H<sub>e</sub>O<sub>o</sub> 146.15 F

A fragrance used in various perfumed products. Coumarin (anhydride of o-coumaric acid) is white, crystalline lactone, obtainable naturally

#### Art. No. Formula FW Series

from several plants, such as tonka bean, lavender, sweet clover grass, strawberries, and cinnamon, or produced synthetically from an amino acid, phenylalanine. Coumarin has the characteristic odour like that of vanilla beans. It is used for the preparation of perfumes, soaps, flavourings. Also known as 2H-1-Benzopyran-2-one. Also available as part of Mx-25. **CAS** 91-64-5.

## Cyclohexanone resin

Deleted 2019

Formed by the condensation of cyclohexanone. Used to enhance the adhesive properties of products like alkyd-, nitro-, and chlorocaoutchouc lacquers. Most often used in floor paints. **May cause airborne contact dermatitis.** 

## N-Cyclohexyl-2-benzothiazolylsulfenamide

C-023 C<sub>12</sub>H<sub>16</sub>N<sub>2</sub>S<sub>2</sub> 264.41 R

An accelerator in natural and styrene-butadienethiazyl sulfenamide rubber Also known as CBS. Also available as part of Mx-05A, Mx-05B. **CAS** 95-33-0

## N-Cyclohexyl-N-phenyl-4-phenylenediamine

C-024 C<sub>10</sub>H<sub>22</sub>N<sub>2</sub> 266.42 R

Used as antidegradant in natural rubber, styrene-butadiene and chloroprene rubber. Also known as CPPD. Also available as part of Mx-04. **CAS** 101-87-1.

## N-(Cyclohexylthio) phthalimide

C-034  $C_{14}H_{15}NO_2S$  261.34 R

A vulcanization retarder widely used in various rubber products. Brand name include Santogard PVI. **CAS** 17796-82-6.

#### CYSTEAMINE HCL

C-052 C<sub>2</sub>H<sub>7</sub>NS·HCI 113.61 H

This substance is used in hair dye products. **CAS** 156-57-0

Art. No. Formula FW Series

D

#### **DECYL GLUCOSIDE**

D-065 C<sub>16</sub>H<sub>32</sub>O<sub>6</sub> 320.43 ICB,AC, C, EP, EPE, ECB, NA, NAE, NAC

Decyl glucoside is a mild non-ionic surfactant used in cosmetic formulations including baby shampoo and in products for individuals with a sensitive skin. Many natural personal care companies use this cleanser because it is plant-derived, biodegradable, and gentle for all hair types. Cross: Variety of Alkyl polyglucosides, for example Octylododecyl xyloside, Cetearyl Glucoside and Lauryl Glucoside. CAS 54549-25-6

## **Dehydrocostus lactone**

Mx-18 S, ICB, IS, PL

Sesquiterpene lactone isolated from the Compositae plant Saussurea lappa. The oil which is extracted from Saussurea lappa is used in perfumery and in the Orient for all kinds of diseases. Dehydrocostus lactone is present in the plant together with costunolide. **May cause airborne contact dermatitis.** (Only available in mix). **CAS** 477-43-0.

## **Dermatophagoides Pteronyssinus/Pharinae**

Mx-21 SA

House dust mite aerohapten causing atopic dermatitis. . Mix of 2 species for "Atopic" patch testing. **May cause airborne contact dermatitis**.

#### Desoximetasone

D-057  $C_{22}H_{29}FO_4$  376.46 ICB, CS, NAE, NAC

Like other topical corticosteroids, desoximetasone has antiinflammatory, antipruritic, and vasoconstrictive properties. Once absorbed through the skin, topical corticosteroids are handled through pharmacokinetic pathways similar to systemically administered corticosteroids. Cross: Alclometasone dipropionate, Art. No. Formula FW Series

Betamethasone-17 Valerate, Clobetasol-17-propionate, Dexamethasone-21-Phospate. CAS 382-67-2

## Dexamethasone-21-phosphate disodium salt

D-046 C<sub>22</sub>H<sub>28</sub>FNa<sub>2</sub>O<sub>8</sub>P 516.40 CS

Corticosteroid of the group C (betamethasone) type. Used in eye and ear preparations and in systemic preparations. **CAS** 2392-39-4.

## Dexketoprofen

Deleted 2021 C<sub>16</sub>H<sub>15</sub>O<sub>3</sub> 254.28

A NASID that is used to treat moderate pain, including dysmenorrhea. It acts by inhibiting the body's production of prostaglandin. Also know as (S)-(+)-Ketoprofen, (S)-(+)-3-Benzoyl-α-methylbenzeneacetic acid and (S)-2-(3-Benzoylphenyl)propionic acid. **CAS** 22161-81-5.

## Diallyl disulfide

D-048 C<sub>e</sub>H<sub>10</sub>S<sub>2</sub> 146.28 PL

One of the three principal low molecular weight haptens of garlic. Allylpropyl disulfide and allicin are the other haptens in garlic. **CAS** 2179-57-9.

## 4,4'-Diaminodiphenylmethane (MDA)

D-001 C<sub>13</sub>H<sub>14</sub>N<sub>2</sub> 198.27 E, I, R

A curing agent for epoxy resins and urethane elastomers. Used as corrosion inhibitor and rubber additive (accelerator, antidegradant, retarder) in tires and heavy rubber products. Also used in adhesives and glues, laminates, paints and inks, PVC products, handbags, eyeglass frames, plastic jewelry, electric encapsulators, surface coatings, spandex clothing, hairnets, eyelash curlers, earphones, balls, shoe soles, face masks. Crossreacts with other p-amino substituted benzene compounds such as benzocaine and PABA. May produce erythema multiforme like eruptions. CAS 101-77-9.

Art. No.	Formula	FW	Series
<b>DIAZOLIDIN</b> D-044	NYL UREA C <sub>8</sub> H <sub>14</sub> N <sub>4</sub> O <sub>7</sub>	278.22	ICB, C, IS, H, LU, ECB, NA, NAE,
			NAC, LA, AC

A preservative used in cosmetic creams, lotions, shampoos, hair gels, etc. (Germall II). Also known as 2,5-Diazolidinylurea. **Cross: IMIDAZOLIDINYL UREA, FORMALDEHYDE. CAS** 78491-02-8.

## Dibenzothiazyl disulfide (MBTS)

D-003 C<sub>14</sub>H<sub>8</sub>N<sub>2</sub>S<sub>4</sub> 332.50 R

An accelerator for natural rubber, nitrile-butadiene, butyl and styrene-butadiene rubber. Also used as retarder for chloroprene rubber. Also available as part of Mx-05A, Mx-05B. **CAS** 120-78-5.

## Dibucaine hydrochloride

D-005 C<sub>20</sub>H<sub>30</sub>CIN<sub>3</sub>O<sub>2</sub> 379.92 ICB, NAE, NAC

Used as local anesthetic agent. Also known as Cinchocaine HCl, Nupercaine HCl, Percaine and Cincaine. Also available as part of Mx-13 and Mx-19. **Cross: Lidocaine. PA. CAS** 61-12-1.

## Dibutyl phthalate

D-007 C<sub>48</sub>H<sub>22</sub>O<sub>4</sub> 278.35 PG

Used as emollient in aerosol antiperspirants, insect repeller and as plasticizer in various plastic materials. **CAS** 84-74-2.

## N,N´-Dibutylthiourea

D-038 (C<sub>4</sub>H<sub>9</sub>NH)<sub>2</sub>CS 188.33 SH, R

An accelerator for mercaptan-modified chloroprene rubber. Used as activator for ethylene-propylene-diene terpolymers and natural rubber. An antidegradant for natural rubber-latex and thermoplastic styrene-butadiene rubber. Also available as part of Mx-24 and Mx-27. **CAS** 109-46-6.

Art. No.	Formula	FW	Series
DICHLOR	OPHENE		
D-008	$C_{13}H_{10}CI_2O_2$	269.13	0

Used as bactericide, fungicide, and algicide in soaps, cosmetics, shampoos, dentifrices, toothpaste, mouthwashes, deodorants, foot powders, papers, adhesives and bandages, and cooling fluids. **Cross: hexachlorophene. CAS** 97-23-4.

#### Diclofenac sodium salt

D-061 C<sub>14</sub>H<sub>10</sub>Cl<sub>2</sub>NNaO<sub>2</sub> 318.13 CAD, EPE

Diclofenac (marketed as Voltaren, Voltarol, Diclon, Dicloflex Difen, Difene, Cataflam, Pennsaid, Rhumalgan, Modifenac, Abitren, Arthrotec and Zolterol, with various drug dose combinations) is a NSAID taken to reduce inflammation and an analgesic reducing pain in conditions such as in arthritis or acute injury. It can also be used to reduce dysmenorrhea. The name is derived from its chemical name: 2-(2,6-dichloranilino) phenylacetic acid. **CAS** 15307-79-6.

## Dicloxacillin sodium salt hydrate

D-058  $C_{19}H_{16}CI_2N_3$  510.32 CAD NaO<sub>5</sub>S·H<sub>2</sub>O

Dicloxacillin is a narrow spectrum  $\beta$ -lactam antibiotic of the penicillin class. It is used to treat infections caused by susceptible Grampositive bacteria. Notably, it is active against  $\beta$ -lactamase-producing organisms such as Staphylococcus aureus, which would otherwise be resistant to most penicillins. It is very similar to flucloxacillin and these two agents are considered interchangeable. Dicloxacillin is available under a variety of trade names. **CAS** 13412-64-1.

# 2-(4-Diethylamino-2-hydroxy-benzoyl)-benzoic acid hexylester

D-062 C<sub>24</sub>H<sub>31</sub>NO<sub>4</sub> 366.24 SU, EP, EPE

The UV-A sun filter 2-(4-Diethylamino-2-hydroxybenzoyl)-benzoic acid hexylester provides efficient protection in the long-wave UVA-I range with an absorption spectrum of up to 400 nm it provides high absorption specifically in the deep-acting wavelengths. Uvinul A+. Diethylamino Hydroxybenzoyl Hexyl Benzoate. **CAS** 302776-68-7.

Art. No. Formula FW Series Di(ethylene glycol) diacrylate D-009  $C_{10}H_{14}O_5$  214.21 MP

A cross-linking acrylate monomer for use in coatings, adhesives, and printing plates of prepolymer type. Also known as DEGDA. **CAS** 4074-88-8.

## Diethylenetriamine

D-010  $C_4H_{13}N_3$  103.17

Used as hardener for epoxy resins. Also known as DETA. **Cross:** ethylenediamine dihydrochloride. CAS 111-40-0.

F

#### DIETHYLHEXYL BUTAMIDO TRIAZONE

D-063  $C_{44}H_{59}N_{7}O_{5}$  765.50 SU, EP, EPE

A sun filter for use in sunscreen products. Also known as Dioctyl butamido triazone and Uvasorb HEB. **CAS** 154702-15-5.

## N,N-DIETHYL-p-PHENYLENEDIAMINE SULFATE

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## N,N'-Diethylthiourea

D-039 (C<sub>2</sub>H<sub>5</sub>NH)<sub>2</sub>CS 132.25 R, SH

An accelerator for mercaptanmodified chloroprene rubber. Used as antidegradant for natural, nitrile-butadiene, styrene-butadiene, and chloroprene rubbers. Also available as part of Mx-24 and Mx-27. **CAS** 105-55-5.

## N,N-DIETHYLTOLUENE-2,5-DIAMINE HCL

Deleted 2018

Art. No. Formula FW Series

Diltiazem hydrochloride

D-060  $C_{22}H_{26}N_2O_4S$ HCI 450.98 CAD

Diltiazem HCl is a member of the group of drugs known as benzothiazepines, which are a class of calcium channel blockers, used in the treatment of hypertension, angina pectoris, and some types of arrhythmia. It is a class 3 anti-anginal drug, and a class IV antidysrhythmic. It incites very minimal reflex sympathetic changes. **CAS** 33286-22-5.

#### DIMETHYLAMINOETHYL METHACRYLATE

D-045  $C_8H_{15}NO_2$  157.21 DS, MA, DMP

Used as amine activator in visible light-cured dental acrylic composite materials. Also known as N,N-Dimethylaminoethyl methacrylate. **CAS** 2867-47-2.

## 3-(Dimethylamino)-1-propylamine

D-053 C<sub>E</sub>H<sub>14</sub>N<sub>2</sub> 102.18 C, E, AC

This is an intermediate substance in the synthesis of alkylamidopropyldimethylamines/alkylamidobetaines and found as an impurity in cosmetic surfactants present in e.g. shampoos. 3-(Dimethylamino)propylamine is also used as a hardener of epoxy resins, as an additive in fuel, dyes, pesticides and binding agents. It is also used in the production of ion-exchangers. Also known as DMPA. **CAS** 109-55-7.

## Dimethyl dihydroxy ethylene urea

D-052 TF

A non-Formaldehyde type of textile resin for "wash and wear" colored and white fabrics and shirtings, draperies and sheeting. Chlorine resistant. (Fixapret NF).

## **Dimethyl fumarate**

D-066  $C_{6}H_{8}O_{4}$  144.12 SH

This compound is used as an antifungal substance in products such as sofas, helmets, clothes etc. It is packed normally in pads where the substance sublimates and might penetrate leather etc. **CAS** 624-49-7

#### Art. No. **Formula FW** Series Dimethylol dihydroxy ethylene urea D-012 $C_{E}H_{10}N_{2}O_{E}$ 178.14 TF

A formaldehyde type of textile resin (Fixapret CPN, 74% active component). Also available as part of Mx-16.

# Dimethylol dihydroxy ethylene urea, modified

D-050 TF

A low-Formaldehyde type of textile resin for "wash and wear" colored and white fabrics and shirtings. Viscose and mixtures with synthetic materials. (Fixapret ECO).

## 4,4-Dimethyl-oxazolidine

Comp. in D-015 C<sub>E</sub>H<sub>44</sub>NO 101.15 0

Used as a preservative for latex paints, emulsions and for cooling fluids (component in Bioban CS 1135 by 74.7%). D-015: Bioban CS 1135 also contains 3.4.4-Trimethyloxazolidine. Neither of the substances can be ordered separately. Also known as DIMETHYL OXAZOLIDINE. CAS 51200-87-4.

## N,N-Dimethyl-4-toluidine

D-016 C<sub>0</sub>H<sub>40</sub>N 135.21 DS

An amine accelerator for the polymerization of e.g. dental methacrylic restorative materials. CAS 99-97-8.

## N,N-Di-2-naphtyl-4-phenylenediamine

D-017 C26H20N2 360.46

An antidegradant for latex, nitrile rubber, styrene-butadiene, and nitrile-butadiene rubber Also known as DBNPD. CAS 93-46-9.

## **Dioctyl phtalate**

D-018  $C_{24}H_{38}O_4$ 390.57 PG

Used as plasticizer in various plastic materials. Also known as Diethylhexyl phthalate, DEHP and DOP. CAS 117-81-7.

Art. No.	Formula	FW	Series		
Dipentamethylenethiuram disulfide					
D-019	(C <sub>E</sub> H <sub>40</sub> NCS <sub>2</sub> ) <sub>2</sub>	320.60	S, IS, R		

Used as accelerator and vulcanizing agent for latex (gloves) and butyl rubber. Also known as PTD. Also available as part of Mx-01. CAS 94-37-1

## Diphenhydramine hydrochloride

C<sub>47</sub>H<sub>20</sub>CINO D-021 291.82 ME

An antihistaminic drug, which blocks the effect of histamine at H1 receptor sites, which results in an increase in vascular smooth muscle contraction. It has also been shown to have inhibitive tumor promotion properties. PA. CAS 147-24-0.

## 1,3-Diphenylquanidine

C,,H,,N, D-022 211.27 ICB, R, SH, NA, NAE, NAC, AC

A medium accelerator for use with thiazoles and sulfenamides in various rubber products. Also available as part of Mx-06. CAS 102-06-7.

## Diphenylmethane-4,4'-diisocyanate

D-023 C<sub>15</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub> 250.26

A diisocyanate in the production of polyurethane lacquers, foam plastics, rubber, and glues. Also known as MDI. CAS 101-68-8.

## N,N'-Diphenyl-p-phenylenediamine

D-024 C<sub>18</sub>H<sub>16</sub>N<sub>2</sub> 260.34 R

Used as antidegradant for nitrile-butadiene rubber, natural, styrenebutadiene, isoprene, butadiene, and chloroprene rubbers. Also known as DPPD. Also available as part of Mx-04. CAS 74-31-7.

## N,N'-Diphenylthiourea

D-025 C<sub>40</sub>H<sub>40</sub>N<sub>0</sub>S 228.32 PG. R. SH

An accelerator and activator for neoprene rubber and ethylenepropylene-diene terpolymers used for rubber products such as wet suits, goggles, knee brace and gloves. In sulfur dves and as

#### Art. No. Formula FW Series

heat stabilizer in PVC adhesive tape backing. Also known as Thiocarbanilide and DPTU. Also available as part of Mx-27. **CAS** 102-08-9.

#### **Direct Orange 34**

D-051 TF

An azo dye (stilbene) belonging to the direct dye class for coloring cellulosic textiles.

#### Disodium phenyl dibenzimidazole tetrasulfonate

D-064 C<sub>20</sub>H<sub>12</sub>N<sub>4</sub> Na<sub>2</sub>O<sub>12</sub>S<sub>4</sub> 674.59 SU, EPE

A sun filter used in sunscreen products. Also known as: Neo Heliopan AP, Bisimidazylate and 2,2'-(1,4-Phenylene)bis-(1-H-benzimidazole-4,6-disulfonic acid, monosodium salt). **CAS** 180898-37-7.

#### **DISPERSE BLUE 3**

D-026  $C_{17}H_{16}N_2O_3$  296.33 TF

A textile dye of antraquinone type. Used as dye for nylon, acrylic, polyester and acetate. Also used as stocking dye. **CAS** 2475-46-9.

#### **Disperse Blue 35**

D-027 362.34 TF

Textile dye of antraquinone type. Dye in nylon, acrylic, polyester, and acetate. Also available as part of Mx-30. **PT. CAS** 12222-75-2.

#### **Disperse Blue 85**

D-028 TF

A textile dye of azo type.

#### Disperse Blue 106

D-040 TF

A monoazo dye used for secondary cellulose fabrics (polyester blouses, garment linings, etc.) Also available as part of Mx-26 and Mx-30. **CAS** 68516-81-4.

Art. No.	Formula	FW	Series	
Disperse Blue 124				
D-041	$C_{15}H_{21}N_5O_4S$	367.47	TF	

Am azo dye used for secondary cellulose acetate fabrics (stockings, garment linings, etc.). Also available as part of Mx-26 and Mx-30. **CAS** 61951-51-7.

#### Disperse Blue 153

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A textile dye of antraquinone type.

#### Disperse Brown 1

D-030  $C_{16}H_{15}CI_3N_4O_4$  433.68 TF

A textile dye of azo type.

#### **Disperse Orange 1**

D-031  $C_{18}H_{14}N_4O_2$  318.34 TF

A textile dye of azo type. Dye in terylene. Also available as part of Mx-30. **CAS** 2581-69-3.

#### **DISPERSE ORANGE 3**

D-032  $C_{12}H_{10}N_{4}O_{2}$  242.24 AC,ICB,SH,TF,NAC

A textile dye of azo type. Also available as part of Mx-30. CAS 730-40-5.

#### Disperse Red 1

D-034 C<sub>18</sub>H<sub>18</sub>N<sub>4</sub>O<sub>3</sub> 314.35 TF

A textile dye of azo type. Used to dye nylon and polyester. Also used as stocking dye. Also available as part of Mx-30. **CAS** 2872-52-8.

#### **DISPERSE RED 17**

D-035  $C_{17}H_{20}N_4O_4$  344.37 TF

A textile dye of azo type. Used to dye acetate, silk, wool, and cotton. Also used as stocking dye. Also available as part of Mx-30. **CAS** 3179-89-3.

Art. No.	Formula	FW	Series
Disperse Y	'ellow 3		
D-036	$C_{15}H_{15}N_3O_2$	269.31	ICB, TF, NAC

A textile dye of azo type. Used to dye acetate and nylon. Also used as stocking dye. Also available as part of Mx-30. **CAS** 2832-40-8.

#### **Disperse Yellow 9**

D-037  $C_{12}H_{10}N_4O_4$  274.24 TF

A textile dye of nitro type. Used to dye in terylene. CAS 6373-73-5.

#### 4,4'-Dithiodimorpholine

D-054 C<sub>8</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub>S<sub>2</sub> 236.35 SH, R

A vulcanizing agent and promoter of natural and synthetic rubber, it can release the sulphur in the vulcanizing temperature. It can be used in the butyl rubber to produce tyre, butyl inner tube of tire, rubber belt and anti-heat rubber products, it also can be used as pitch stabilizer in the expressway. Also known as DTDM. **CAS** 103-34-4.

#### **DMDM HYDANTOIN**

D-047  $C_7H_{12}N_2O_4$  188.07 ICB, C, NA, NAE, NAC, AC

Functions as a formaldehyde donor and is used as a preservative in cosmetic products and is active against fungi, yeasts, and bacteria. Products preserved are of the type shampoos, skin-care products, hair conditioners, makeup, hair rinses, and cleanliness products. Also used in herbicides, polymers, color photography, latex paints, floor waxes, cutting oils, adhesives, copying paper, inks.

#### DODECYL GALLATE

D-042  $C_{19}H_{30}O_5$  338.45 B, C

An antioxidant in cosmetic and pharmaceutical creams and emulsions, various fats, oils, waxes, and foods such as margarine. Also known as Lauryl gallate. Also available as part of Mx-28B. **CAS** 1166-52-5.

Art. No.	Formula	FW	Series	
Dodecyl mercaptan				
D-043	$C_{12}H_{26}S$	202.41	R, SH	

A polymerization inhibitor added to polyurethane resins and Neoprene glues for use, e.g., in the shoe industry. **CAS** 112-55-0.

#### **Doxycycline monohydrate**

D-059 C<sub>22</sub>H<sub>24</sub>N<sub>2</sub>O<sub>8</sub>·H<sub>2</sub>O 462.45 CAD

A semisynthetic broad-spectrum antibiotic or antibacterial which belongs to the tetracycline family. It is used to treat urinary tract infections, gum disease, and bacterial infections such as gonorrhea, chlamydia and Bacillus anthracis. It is also used to treat acne. **CAS** 17086-28-1.

#### **DROMETRIZOLE**

H-016  $C_{13}H_{11}N_3O$  225.25 C, DS, PG, DMP

An UV-adsorber used in plastics, cosmetics, dental materials, acrylic materials, dyes, etc. Also known as 2(2-Hydroxy-5-methylphenyl) benzotriazol. Tinuvin P. **CAS** 2440-22-4.

#### DROMETRIZOLE TRISILOXANE

D-055 C<sub>24</sub>H<sub>20</sub>N<sub>2</sub>O<sub>2</sub>Si<sub>2</sub> 501.84 SU, EP, EPE

An UV-B adsorbing agent in sunscreen cosmetics of the type creams, lotions, lipsticks, sun oils, etc. Trade name is Silatrizole & Mexoryl XL. Also known as 2-(2H-Benzotriazole-2-yl)-4-methyl-6-[2-methyl-3-[1,3,3'-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl] propyl]phenol. **CAS** 155633-54-8.



#### **Econazole nitrate**

E-021 C<sub>10</sub>H<sub>16</sub>Cl<sub>2</sub>N<sub>2</sub>O<sub>4</sub> 444.69 ME

An antifungal agent of the imidazole type used in topical and vaginal preparations to prevent growth of dermatophytes, yeast, and mold. **Cross: miconazole, nilconazole. May produce erythema multiforme like eruptions. CAS** 24169-02-6.

Art. No.	Formula	FW	Series
Eosin			
E-022	$C_{20}H_8Br_4O_5$	647.90	LU

Red dye belonging to the xanthene group. Used as coloring agent in nail polish, wool, silk, and paper. It is now approved by the FDA for use in inks. drugs, and cosmetics except for eve cosmetics. and as topical low concentrated antiseptics. Also known as 2'.4'.5'.7'-Tetrabromofluorescein. CAS 15086-94-9.

#### **Epoxy acrylate**

Deleted 2019

An acrylate oligomer for use in UV-reactive inks and varnishes.

#### **Epoxy resin, Bisphenol A** F-002

S. ICB. SH. IS. DMP. ECB. NA AC. NAE. NAC. LA

A resin, based on epichlorhydrin and bisphenol A, used in adhesives, surface coatings, electrical insulation, plasticizers, polymer stabilizers, laminates, surface coatings, paints and inks, product finishers, PVC products, vinyl gloves, etc. Also found in the building industry, electron microscopy, and sculptures. Oligomers may vary in molecular weight from 340 and higher. The higher the molecular weight, the less sensitizing the compound. May produce erythema multiforme like eruptions. May cause airborne contact dermatitis. UCU.

#### **Epoxy resin, Bisphenol F**

B-035 Ε

A resin, based on Epichlorhydrin and Bisphenol F, used in adhesives, casting and tooling, epoxy coatings, coil coatings, marine and protective coatings, potting and encapsulation. Typical uses include compositions for the building and civil engineering industries, e.g. flooring compounds, adhesives, mortars and grouts. Often used in combination with Bisphenol A liquid epoxy resin. Also known as EPIKOTE Resin 862. CAS 28064-14-4.

Art. No.

**Formula** 

FW

Series

#### Epoxy resin, cycloaliphatic

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A resin based on diglycidyl ester of hexahydrophthalic acid. Its main use is for the manufacture of electrical insulating components (bushings, apparatus parts, insulators).

#### **Erythromycin base**

E-024 C<sub>27</sub>H<sub>67</sub>NO<sub>13</sub> 733.94 CAD

A macrolide antibiotic that has an antimicrobial spectrum similar to or slightly wider than that of penicillin, and is often used for people that have an allergy to penicillins. For respiratory tract infections, it has better coverage of atypical organisms, including mycoplasma and Legionellosis. It is also used to treat outbreaks of chlamydia, syphilis. acne, and gonorrhea. Erythromycin is produced from a strain of the actinomycete Saccharopolyspora erythraea, formerly known as Streptomyces erythraeus. CAS 114-07-8.

#### **Etofenamate**

 $C_{10}H_{10}F_{2}NO_{4}$ E-025 369.33 EP. EPE

A NASID used for the treatment of joint and muscular pain. It acts by inhibiting the body's production of prostaglandin. CAS 30544-47-9.

#### 7-ETHYLBICYCLOOXAZOLIDINE

 $C_7H_{13}NO_9$ 0 A-017

A preservative in cooling fluids. Trade name, Bioban CS 1246. CAS 7747-35-5.

#### Ethyl acrylate

F-004  $C_5H_8O_2$ 100.12 ICB. MN. MP. AC, NA, NAE, NAC

An acrylic monomer used in the production of textile and paper coatings, leather finish resins, and adhesives. Also known as EA. CAS 140-88-5.

Art. No. Formula FW Series

ETHYL CYANOACRYLATE

E-023 C<sub>2</sub>H<sub>2</sub>NO<sub>2</sub> 125.10 MA, AC

A acrylate compound used in instant glues to mend broken nails and to adhere glue-impregnated silk or linen to the nail plate, which is then filed to shape the nail. Instant glues are also used in medicine to glue tissues and skin cracks. The glue is also used to attach hair and to glue shoes, plastics, and many other materials. Also known as Rite-Lok, Super Glue, Krazy Glue. **May cause airborne contact dermatitis. CAS** 7085-85-0.

#### Ethylenediamine dihydrochloride

E-005 C<sub>2</sub>H<sub>10</sub>Cl<sub>2</sub>N<sub>2</sub> 133.02 ICB, C, E, P, O, AC, NA, NAE, NAC

A stabilizer in steroid creams and rubber latex. Used as inhibitor in antifreeze solutions and cooling fluids and an epoxy curing agent. May also be present in floor-polish removers. Found as component in nystatin cream and aminophylline. Used as accelerator in color development baths in photography. Used also in veterinary preparations, electroplating and electrophoretic gels, dyes, fungicides, insecticides, synthetic waxes, textile lubricants, eye and nose drops, and as solvent for casein, albumin, shellac. Also known as EDA. Cross: EDTA, antazoline, aminophylline, promethazine HCI, piperazine. May produce erythema multiforme like eruptions. UCU. CAS 333-18-6

## Ethylenediamine tetraacetic acid disodiumsalt dihydrate

E-006 C<sub>10</sub>H<sub>14</sub>N<sub>2</sub> 372.24 Na<sub>2</sub>O<sub>8</sub>·2H<sub>2</sub>O

Used as a chelating agent for metals and as pharmaceutic aid (chelating agent). Also used as preservative in cosmetic products and anticoagulant. **CAS** 6381-92-6.

**Ethylene glycol dimethacrylate** DS, MA, MN, E-007 C<sub>10</sub>H<sub>14</sub>O<sub>4</sub> 198.22 DS, MA, MN, MP, DMP, DMS

A cross-linking methacrylic monomer in dental composites, sealants, prostheses, adhesives, artificial nails, printing inks, etc. Also known as EGDMA. **May cause airborne contact dermatitis. CAS** 97-90-5.

Art. No. Formula FW Series

#### Ethylene urea

Deleted 2018

#### 2-Ethylhexyl acrylate

Deleted 2021 C<sub>11</sub>H<sub>20</sub>O<sub>2</sub> 184.28

An acrylic monomer for use in UV-curable coatings and inks. Ingredient in some acrylic-based adhesive tapes. Also known as EHA. **CAS** 103-11-7.

#### ETHYLHEXYL DIMETHYL PABA

E-018  $C_{17}H_{27}NO_2$  277.41 SU

An UV-B absorbing agent in sunscreens and cosmetic creams, lotions, lipsticks, sun oils, moisturizers, nail polish, etc. Also known as Eusolex 6007, Escalol 507, Octyldimethyl-PABA and 2-Ethylhexyl-4-dimethylaminobenzoate. **CAS** 21245-02-3.

#### ETHYLHEXYL METHOXYCINNAMATE

E-019 C<sub>18</sub>H<sub>26</sub>O<sub>3</sub> 290.18 AC,SU,EP,EPE

An UV-B absorbing agent in sunscreens and cosmetic creams, lotions, lipsticks, sun oils, etc. Also known as Parsol MCX and Escalol 557. **CAS** 5466-77-3.

#### ETHYLHEXYL SALICYLATE

O-007  $C_{15}H_{22}O_3$  250.34 ICB, SU, EPE, NAC

An UV-B adsorbing agent in sunscreen cosmetics of the type creams, lotions, lipsticks, sun oils, etc. Also known as Octyl salicylate, 2-Ethylhexyl salicylat and trade name is Escalol 587. **CAS** 118-60-5.

#### ETHYLHEXYL TRIAZONE

O-010 SU, EP, EPE

An UV-B adsorbing agent in sunscreen cosmetics of the type creams, lotions, lipsticks, sun oils, etc. Also known as 2,4,6-trianilino-p-(carbo-2-ethylhexyl-1-oxi)-1,3,5-triazine. Trade name is Uvinyl T 150. **CAS** 88122-99-0.

Art. No.	Formula	FW	Series	
ETHYLHEXYLGLYCERIN				
E-027	$C_{11}H_{24}O_3$	204.3	C, AC	

This substance is a topical skincare ingredient and deodorizing agent, often indicated as a conditioning ointment in the treatment of eczema. It can services as a surfactant and preservative-enhancer and can be found as a substituent for parabens. The chemical is a synthetic compound derived from vegetable glycerin. **CAS** 70445-33-9.

#### **ETHYLPARABEN**

E-010  $C_9H_{10}O_3$  166.17

A preservative used in foods (salad dressings, mayonnaise, spiced sauces, mustard, frozen dairy products, baked products), cosmetics, and pharmaceutical preparations. Also known as Ethyl-4-hydroxybenzoate. Also available as part of Mx-03A, Mx-03C. **CAS** 120-47-8.

## N-Ethyl-N-(2-hydroxyethyl)-2-methyl-1,4-phenylene-diamine sulfate salt

Deleted 2018

#### **ETHYL METHACRYLATE**

E-012  $C_6H_{10}O_2$  114.15 MN, MP

A methacrylic monomer for use in, e.g., artificial nail products, dentures, hearing aids, printing plates, and bone cement. Also known as Ethyl methacrylate and EMA. **CAS** 97-63-2.

## N-Ethyl-N-(2-methane-sulfonamidoethyl)-2-methyl-1,4-PPD-sesquisulfate, hydrate, (CD-3)

Deleted 2018

Art. No. Formula FW Series

4,4-(2-Ethyl-2-nitro-trimethylene)dimorpholine

Comp. in E-014 C<sub>10</sub>H<sub>0</sub>-N<sub>0</sub>O<sub>1</sub> 287.36 O

A preservative used in cooling fluids, crude oil, diesel fuel, heating oil, etc. 4,4-(2-Ethyl-2-nitro-trimethylene)dimorpholine is present in Bioban P 1487 (trade name) by 20 %. Bioban P 1487 also contains 4-(2-Nitrobutyl) morpholine. Neither of the substances can be ordered separately. **CAS** 37304-88-4.

#### N-Ethyl-p-toluenesulfonamide

E-015  $C_9H_{13}NO_2S$  199.27 DS, DMP

A resin carrier found in dental materials used for isolating cavities below restorations. Plasticizer in PVA lacquers, polyamides, cellulose acetate etc. **CAS** 80-39-7.

**EUGENOL** B, DS, F, DMP, E-016 C<sub>10</sub>H<sub>12</sub>O<sub>2</sub> 164.21 DMS

Used as fragrance in perfumery as substitute for oil of Cloves. Dental analgesic in impression materials and periodontal packings. Used in the production of Vanillin. Also used as insect attractant. Also available as part of Mx-07. **May elicit contact urticaria. Cross: Peru balsam, isoeugenol, benzoin, propanidid. CAS** 97-53-0.

#### Evernia furfuracea

Change of name as of January 2016; please refer to Treemoss absolute (Art. No. E-026).

#### **Evernic acid**

E-017 C<sub>17</sub>H<sub>16</sub>O<sub>7</sub> 332.32 PL

An acid present in different lichens. One of the three most common lichen haptens. Also available as part of Mx-15. **Cross: oak moss. PA. CAS** 537-09-7.

Art. No. Formula FW Series

F

#### **FARNESOL**

F-004 C<sub>15</sub>H<sub>26</sub>O 222.37 F

A fragrance used in various perfumed products. FARNESOL is a nature identical ingredient originally found in orange blossoms, rose, jasmin or linden flowers. It inhibits the bacterial activity responsible for unpleasant odors, acne and the athlete's foot, while at the same time not affecting the natural skin flora. Also used as a pesticide. Also known as 3,7,11-trimethyl-2,6,10-dodecatrien-1-ol. Also available as part of Mx-25. **CAS** 4602-84-0.

#### **Fenofibrate**

F-006 C<sub>20</sub>H<sub>21</sub>CIO<sub>4</sub> 360.83 EPE

A drug of the fibrate class, mainly used to reduce cholesterol levels in patients at risk of cardiovascular disease. Like other fibrates, it reduces both low-density lipoprotein (LDL) and very low density lipoprotein (VLDL) levels, as well as increasing high-density lipoprotein (HDL) levels and reducing triglycerides level. **CAS** 49562-28-9.

#### **FERRIC CHLORIDE**

I-016 Cl<sub>a</sub>Fe 162.2 MET

This hapten is a marker for contact allergy to **iron**. Also generally known as Iron(III)chloride, is an industrial scale commodity chemical compound. In industrial application used in sewage treatment and drinking water production. It is necessary for the etching of photogravure plates for printing photographic and fine art images in intaglio and for etching rotogravure cylinders used in the printing industry. Also used in veterinary practice. **CAS** 7705-08-0.

Art. No.	Formula	FW	Series
FORMALI F-002	DEHYDE CH <sub>2</sub> O	30.03	S, ICB, DS, H, LA O, SH, IS, ECB, AC, NA, NAE, NAC,

Used in the production of urea, phenolic melamine and acetale resins. Found in textile products. Used as astringent, disinfectant, preservative in cosmetics, metalworking fluids, shampoos, etc. Other exposure areas include antiperspirant in cosmetics, anticracking agent in dental plastics, anhidrotics, chipboard production, cleaning products, disinfectants and deodorizers, dry-cleaning materials, glues, mineral wool production, paints and coatings, paper industry, phenolic resins and urea plastics in adhesives and footwear. photographic paper and solutions, polishes, printing materials, tanning agents, wart remedies, embalming solutions, fertilizers, wood composites, insulation, Formaldehyde releasers; Bakzid P. Biocide DS 5249, Bronopol, Dantoin MDMH, DMDM HYDANTOIN, Dowicil 200. Germall 115. Germall II. Grotan BK. Hexamethylenetetramine. KM 103. Paraformaldehyde. Parmetol K50. Polyoxymethylene urea. Preventol D1, -D2, -D3. Cross: aryl-sulfonamide resin, chloroallylhexaminium chloride. May produce erythema multiforme like eruptions. PA. PT. May cause airborne contact dermatitis. NICU. CAS 50-00-0.

#### Framycetin sulphate

F-005 C<sub>23</sub>H<sub>AE</sub>N<sub>E</sub>O<sub>13</sub>H<sub>2</sub>SO<sub>4</sub> 712.72 LU, ME

A broad spectrum aminoglycoside antibiotic, is usually bactericidal in action. For local use in the treatment of infections caused by pyogenic organisms, in particular S. aureus, the proteus group of bacteria, coliforms and P. aeruginosa. Cross sensitization may occur among the group of Streptomyces derived antibiotics (neomycin, paromomycin, kanamycin) of which framycetin is a member, but this is not invariable. Also known as Neomycin B, Framycetin, Soframycin. ICU. **CAS** 4146-30-9.

#### Fusidic acid sodium salt

An antibiotic agent used in the treatment or prevention of cutaneous infections, mainly Staphylococcus aureus. Contact dermatitis often associated with treatment of leg ulcers or atopic dermatitis. **CAS** 751-94-0.

Art. No. Formula FW

Gallium(III)oxide

G-007 Ga<sub>2</sub>O<sub>3</sub> 187.44 MET

This hapten is a marker for contact allergy to **gallium**. This is a chemical compound used as part of the manufacturing of semiconductor devices. It might also be found in dental implants. **CAS** 12024-21-4.

Series

Gentamicin sulfate

G-006  $C_{19,21}H_{39,43}$  ME  $N_{\scriptscriptstyle E}O_{\scriptscriptstyle 7}^{}2.5H_{\scriptscriptstyle 9}SO_{\scriptscriptstyle A}$ 

A topical and systemic broad-spectrum antibiotic with bactericidal action. Also used in ophthalmic drugs. **Cross: neomycin sulfate**. **CAS** 1405-41-0.

**GERANIOL** 

G-001  $C_{10}H_{18}O$  154.25

As fragrance in perfumery. As insect attractant. Also available as part of Mx-07. **CAS** 106-24-1.

Geranium oil

G-002 F

A fragrance used in various perfumes. Used as odorant for tooth and dusting powders, ointments, etc. The raw material for this product is made from an steam destillation of the whole plant of Pelargonium graveolens. Contains among other substances DL-Citronellol, Geraniol, Linalool, Menthone and Citral. Also known as Geranium oil Bourbon. **CAS** 8000-46-2.

#### Geranium oil Bourbon

Change of name as of January 2016; please refer to Geranium oil (Art. No. G-002).

Art. No.	Formula	FW	Series
<b>GLUTARAL</b> G-003	$C_5H_8O_2$	100.12	ICB, DS, P, SH, DMS, NA, NAE, NAC

Used in the sterilization of endoscopic instruments, dental and barber equipment. Used as embalming fluid, in electron microscopy. A tanning agent for leather. A hardener for photographic gelatin. A pharmacological agent used for hyperhidrosis and antifungal purposes and for treatment of warts and some bullous diseases as well as herpes infections. Also known as Glutaraldehyde.

May cause airborne contact dermatitis. CAS 111-30-8.

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**GLYCERYL THIOGLYCOLATE** 

G-004  $C_5H_{10}SO_4$  166.22 ICB, H, NAC

A component in "acid" permanent waving formulations, mainly for use in hairdressing salons. **CAS** 30618-84-9.

Gold(I)sodium thiosulfate dihydrate

G-005 AuNa<sub>3</sub>(S<sub>2</sub>O<sub>3</sub>)<sub>2</sub>2H<sub>2</sub>O 526.27 ICB, DS, MET, DMP, NAC, AC

A gold derivative used for screening of contact allergy to dental gold materials. **CAS** 10233-88-2.



Hexachlorophene

H-001  $C_{13}H_{e}CI_{e}O_{2}$  406.91

Atopical antiseptic in germicidal soaps, creams, deodorants, cleansers, shampoos, after-shave creams, pHisoHex surgical cleanser. **Cross: bithionol, halogenated salicylanilides. PA. CAS** 70-30-4.

Hexahydro-1,3,5-tris-(2-hydroxyethyl)triazine

H-002  $C_{0}H_{21}N_{3}O_{3}$  219.29 C, O

A bactericide used in cooling fluids and various cosmetic products, acting as formaldehyde liberator. Active component in **Grotan BK**. **CAS** 4719-04-4.

# Art. No. Formula FW Series Hexamethylene diisocyanate H-022 $C_8H_{12}N_2O_2$ 168.20 I

An isocyanate monomer in polyurethane paints and lacquers. Also known as HDI. **CAS** 822-06-0.

#### 1,6-Hexanediol diacrylate

			DS, MA, MN,
H-004	$C_{12}H_{18}O_4$	226.28	MP, DMP

A common acrylic monomer in UV-cured inks, adhesives, coatings, photoresists, castings, artificial nails, etc. Also known as HDDA. A monomer in dental composite materials. **CAS** 13048-33-4.

#### 1,6-Hexanediol diglycidylether

Deleted 2021	$C_{12}H_{22}O_4$	230.30

Used as a general purpose diluent to reduce viscosity of epoxy resins, favoring improved filler loading and substrate wetting and resulting in faster curing time. End applications include coating, adhesive, casting, laminating, encapsulation or foam. It is also used as a stabilizer for chlorinated vinyl resins and rubber. Also known as 2,2'-(1,6-hexanediylbis(oxymethylene))bis-oxirane. **CAS** 16096-31-4.

#### Hexyl cinnamic aldehyde

H-025	$C_{15}H_{20}O$	216.35	F

A fragrance used in various perfumed products. Odor profile: floral, jasmin, waxy. Olfactory description: Similar to  $\alpha$ -amyl cinnamic aldehyde but with a finer, more floral and delicate character. Found in acid cleaner liquid, detergent TAED, alcoholic lotion, fabric softener, anti perspirant, bath foam, bleach, hard surface cleaner, deo-stick shampoo, detergent perborate and soap. Also known as  $\alpha$ -Hexylcinnamaldehyde. Also available as part of Mx-25. **CAS** 101-86-0.

#### **HOMOSALATE**

H-024	$C_{16}H_{22}O_3$	262.35	SU, EPE
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An UV adsorbing agent found in sunscreen cosmetics of the type creams, lotions, lipsticks, sun oils, etc. Found in e.g. Coppertone products. Also known as 3,3,5-trimethylcyclohexyl salicylate. **CAS** 118-56-9.

Art. No.	Formula	FW	Series
Hydantoin			
H-027	$C_3H_4N_2O_2$	100.08	CAD

Hydantoin, also known as glycolyurea, is an imidazole analogue. Hydantoin and its derivatives are used in the preperation of textile softeners, lubricants, resins, and agrochemicals. They have antibacterial, antifungal, antiprotozoal, and anthelmintic activity. They are used in manufacturing pharmaceuticals especially anticonvulsant drugs such as phenytoin, ethotoin, and methyphenytoin. **CAS** 461-72-3.

#### Hydrazine sulfate

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H-005	$H_6N_2O_4S$	130.12	0

Used as flux for soldering brass, copper, aluminium, and other metals. Also used as pressure stabilizer in cutting oils. **May cause airborne contact dermatitis. CAS** 10034-93-2.

#### HYDROABIETYL ALCOHOL

A-002	$C_{20}H_{34}O$	290.54	C, PG

An organic alcohol derived from wood rosin. Used in adhesives, mascara, inks, sealants, etc. Also used as plasticizer in plastic materials. Also known as Abitol. **CAS** 13393-93-6.

#### Hydrochlorothiazide

H-029	C <sub>7</sub> H <sub>8</sub> CIN <sub>3</sub> O <sub>4</sub> S <sub>2</sub>	297.73	CAD
11020	071 18 O11 13 O 10 2	201.10	٠, ١٤

Hydrochlorothiazide, sometimes abbreviated HCT, HCTZ, or HZT is a popular diuretic drug that acts by inhibiting the kidneys' ability to retain water. This reduces the volume of the blood, decreasing blood return to the heart and thus cardiac output and, by other mechanisms, is believed to lower peripheral vascular resistance. Hydrochlorothiazide is sold both as a generic drug and under a large number of brand names, including: Apo-Hydro, Aquazide H, Dichlotride, Hydrodiuril, HydroSaluric, Microzide, Oretic. **CAS** 58-93-5.

#### **Hydrocortisone-17-butyrate**

H-021	$C_{25}H_{36}O_{6}$	432.62	CS, LA, AC

Used as a topical corticosteroid with anti inflammatory properties. Marker for topical corticosteroid allergy. Also available as part of Mx-23. Cross: Budesonide, Fluocinolone acetonide, Hydrocortisone, Prednisolone Acetate, Tixocortol-21-Pivalate, Triamcinolone acetonide. CAS 13609-67-1

Art. No. Formula FW Series

Hydrocortisone-21-acetate

H-034  $C_{23}H_{32}O_6$  404.50 CS

Atopical corticosteroid with anti-inflammatory and immunosuppressive properties, belonging to the group A type of steroids. Used in medication to treat a variety of skin conditions (e.g., eczema, dermatitis, allergies, rash).

Cross: Budesonide, Fluocinolone acetonide, Hydrocortisone, Hydrocortisone 17-butyrate, Prednisolone acetate, Methylprednisolone aceponate, Tixocortol-21-pivalate, Triamcinolone acetonide. CAS 50-03-3

#### **HYDROGEN PEROXIDE**

Deleted 2019 H<sub>2</sub>O<sub>2</sub> 34.02

A component in hair bleaches and a topical antiseptic agent. **CAS** 7722-84-1.

#### **Hydroperoxides of Limonene**

H-032

ICB, B, F, O, ECB, NA, NAE, NAC, AC

Limonene is found in cosmetics, fine fragrances and hygiene products as well as in household and industrial products. Limonene is one of the most commonly found fragrance ingredients in consumer products presently available. Limonene is a naturally occurring terpene, present in large amounts in various citrus fruits. Limonene autoxidize on air exposure at room temperature forming hydroperoxides. Compared to pure unoxidized limonene the hydroperoxides of oxidized limonene have shown to be far more allergenic. NOTE: The preparation contains oxidized d-limonene. The concentration of the active haptens in the preparation is measured from the total amount of the hydroperoxides of d-limonene.

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#### **Hydroperoxides of Linalool**

H-031 ICB, F, ECB, NA, NAE, NAC, AC

Linalool is found in fine fragrances, cosmetics, and hygiene products as well as in household and industrial products. Linalool is among the most commonly found fragrance ingredients in consumer products presently available. Linalool is a naturally occurring terpene, present in large amounts in various plants, for example in lavender, rosewood, bergamot and jasmine. Linalool autoxidize on air exposure at room temperature forming hydroperoxides. Compared to pure unoxidized linalool the hydroperoxides of oxidized linalool have shown to be far more allergenic. NOTE: The preparation contains oxidized linalool. The concentration of the active haptens in the preparation is measured from the total amount of the hydroperoxides of linalool.

#### **HYDROQUINONE**

H-007 C<sub>e</sub>H<sub>e</sub>O<sub>2</sub> 110.11 H, PG

A inhibitor in acrylic monomers, used as antioxidant e.g. in animal feed. Also used as photographic reducer and developer. Also known as HQ. Cross: resorcinol. May cause depigmentation. CAS 123-31-9.

#### Hydroquinone monobenzylether

H-019 C<sub>13</sub>H<sub>12</sub>O<sub>2</sub> 200.23 SH

A antidegradant added to rubber products. Used as inhibitor in acrylic resins. **May cause depigmentation. CAS** 103-16-2.

#### **HYDROXYCITRONELLAL**

H-008  $C_{10}H_{20}O_2$  170.25 F

A fragrance used in various perfumes, antiseptics, insecticides and household products. Also known as Hydroxycitronellal. Also available as part of Mx-07. Cross: citronellal, geranial, methoxy-citronellal. May produce hyperpigmentation. CAS 107-75-5.

#### 2-Hydroxyethyl acrylate

H-009 C<sub>5</sub>H<sub>8</sub>O<sub>3</sub> 116.12 MN, MP

An acrylic monomer used in UV-inks, adhesives, lacquers, artificial nails etc. Also known as HEA. **CAS** 818-61-1.

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2-Hydroxyethyl methacrylate

ECB, DMP, DMS, AC,DS,ICB,MA,MP, MN.NA.NAE.NAC.S

Н

A methacrylic monomer used in UV-inks, adhesives, lacquers, dental materials, artificial nails etc. Also known as HEMA, **CAS** 868-77-9.

130.15

#### HYDROXYETHYL-p-PHENYLENEDIAMINE SULFATE

H-033 C<sub>8</sub>H<sub>12</sub>N<sub>2</sub>O · H<sub>2</sub>O<sub>4</sub>S 250.27

C<sub>6</sub>H<sub>10</sub>O<sub>3</sub>

This substance is a hair dye ingredient used in the formulation of permanent hair dyes and colors. **CAS** 93841-25-9.

## HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE

C<sub>13</sub>H<sub>22</sub>O<sub>2</sub>

L-003

H-010

210.00

S, ICB, F, IS, LA, ECB, NAE,

NAC, AC

A fragrance known for it's soft delicate floral, lily, cyclamen note reminiscent of hydroxycitronellal. Used in producs such as Alcoholic Lotion, Anti Perspirant, Deo Stick, Detergent Perborate, Detergent TAED, Fabric Softener, Hard Surface Cleaner, Shampoo and soap. Stabilized with 0.1% BHT. Also known as 3-cyclohexene-1-carboxaldehyde, 4-(4-hydroxy-4-methylpentyl)-3-cyclohexene-1-carboxaldehyde, HICC and Lyral. Also available as part of Mx-25. **CAS** 31906-04-4.

#### HYDROXYLAMINE HCL

Deleted 2018

#### **HYDROXYLAMINE SULFATE**

Deleted 2018

#### Hydroxypropyl acrylate

Deleted 2021

C<sub>6</sub>H<sub>10</sub>O<sub>3</sub>

130.15

An acrylic monomer used in UV inks, lacquers, adhesives, etc. Also known as 2-Hydroxy-1-propylacrylate. **CAS** 25584-83-2.

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#### Hydroxypropyl methacrylate

H-018  $C_7H_{12}O_3$ 

144.17

MA, MN, MP

A monofunctional methacrylic monomer found in dental composites and sealants, UV-curable resins for inks etc. Also known as HPMA. **CAS** 27813-02-1.

#### Hydroxyzine hydrochloride

H-028

C<sub>21</sub>H<sub>27</sub>CIN<sub>2</sub>O<sub>2</sub>·2HCI 447.83

CAD

This substance is a first-generation antihistamine, of the piperazine class that is an H1 receptor antagonist. It is used primarily as an antihistamine for the treatment of itches and irritations, an antiemetic for the reduction of nausea, as a weak analgesic by itself and as an opioid potentiator, and as an anxiolytic for the treatment of anxiety. The drug is available in two formulations, the pamoate and the dihydrochloride or hydrochloride salts. Vistaril®, Equipose®, Masmoran®, Paxistil®, and Vistaril Pamoate® are preparations of the pamoate salt whilst Atarax®, Alamon®, Aterax®, Durrax®, Tran-Q®, Orgatrax®, Quiess®, Vistaril Parenteral®, and Tranquizine® are hydroxyzine hydrochloride. **CAS** 2192-20-3.

#### **Ibuprofen**

I-010

 $C_{13}H_{18}O_{2}$ 

206.3

CAD, EPE

A NSAID originally marketed as Nurofen and since under various trademarks, including Act-3, Advil, Brufen, Dorival, Herron Blue, Panafen, Motrin, Nuprin and Burana, Ipren or Ibumetin, Ibuprom, IbuHEXAL, Ibusal, Fenpaed, Moment, Ibux, Íbúfen, Ibalgin, Bupuren, Neofen, Eve and Advil. It is used for relief of symptoms of arthritis, primary dysmenorrhoea, fever, and as an analgesic, especially where there is an inflammatory component. Ibuprofen has no antiplatelet (blood-thinning) effect. **CAS** 15687-27-1.

A preservative used in lotions, creams, hair conditioners, shampoos, deodorants and topical drugs. Works as a formaldehyde releaser. Also known as Germall 115, Imidurea NF, Sept 115, Unicide U-13, Tristat IU and Biopure 100. **CAS** 39236-46-9.

#### Imipenem monohydrate

Deleted 2018

#### Indium

I-015 In 114.82 MET

Indium is a rare, soft, malleable and easily fusible poor metal. Its current primary application is to form transparent electrodes from indium tin oxide in liquid crystal displays. It is widely used in thin-films to form lubricated layers, it is also used for making particularly low melting point alloys, and is a component in some lead-free solders. It is sometimes present in dental alloys. **CAS** 7440-74-6.

#### Indium(III)chloride

I-011 Cl<sub>a</sub>In 221.18 MET

This hapten is a marker for contact allergy to **indium**. This metal is a colorless salt and also the most available soluble derivative of indium. Indiclor Indium In-111 Chloride is a diagnostic radiopharmaceutical intended for radiolabeling ProstaScint (capromab pendetide) used for in vivo diagnostic imaging procedures and for radiolabeling Zevalin (ibritumomab tiuxetan) in preparations used for radioimmunotherapy procedures. **CAS** 10025-82-8.

#### Indium(III)sulfate

I-013  $In_2(SO_4)_3$  517.83 MET

This hapten is a marker for contact allergy to **indium**. Indium sulfate is readily soluble in water for uses such as in water treatment. Indium sulfate is being marketed as a miracle dietary supplement and is falsely advertised as a dietary aid as an enhancer of food

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and mineral absorption, an anti-aging supplement, a blood pressure lowering supplement. **CAS** 13464-82-9.

#### IODOPROPYNYL BUTYLCARBAMATE

A compound used as fungicide and bactericide for wood and paint preservation and in cooling fluids. Now also permitted and used as a cosmetics preservative in products such as shampoos, lotions, creams, powders and baby products. Also known as Troysan KK-108a and under trade name Glycasil<sup>TM</sup>. **CAS** 55406-53-6.

#### Iridium

I-014 Ir 192.22 MET

Iridium is a dense, very hard, brittle, silvery-white transition metal of the platinum family. Iridium is notable for being the most corrosion-resistant element known. It is used in high-temperature apparatus, electrical contacts, but the principal use of iridium is as a hardening agent in platinum alloys. Other uses: Crucibles and devices that require high temperatures. Electrical contacts (notable example: Pt-Ir spark plugs). Used in high-dose-radiation therapy for the treatment of prostate and other forms of cancer. **CAS** 7439-88-5.

#### Iridium(III)chloride trihydrate

I-012 CI<sub>3</sub>Ir3H<sub>2</sub>O 352.62 MET

This hapten is a marker for contact allergy to **iridium**. Iridium(III) chloride trihydrate is the principal starting material for most iridium chemistry. Among other uses it is used in the production of hydrogen peroxide. **CAS** 13569-57-8.

#### ISOAMYL p-METHOXYCINNAMATE

I-009  $C_{15}H_{20}O_3$  248.40 ICB, SU, EP, EPE, NAC

A UV-B adsorbing agent in sunscreen cosmetics of the type creams, lotions, lipsticks, sun oils, waterproof sunscreens products etc. Trade name is Neo Heliopan E1000. **CAS** 71617-10-2.

# Art. No. Formula FW Series Isobornyl Acrylate I-019 $C_{13}H_{20}O_2$ 208.30 MA, MP

Isobornyl acrylate is a chemical used in plastics, it polymerizes when exposed to free radicals to form monomers. It can be found in adhesives, sealants, intermediates, photosensitive chemicals, pigments (ink, toner and colorant products), paints, coatings, agricultural products (non-pesticidal) as well as in glucose monitoring systems, such as the FreeStyle® Libre. Also known as IBOA. CAS 5888-33-5.

#### **ISOEUGENOL**

I-002 C<sub>10</sub>H<sub>12</sub>O<sub>2</sub> 164.21 B, F

A fragrance used in perfumery, over-the-counter medicines, dental materials and foods. Also used in the production of Vanillin flavor. Found in oils of nutmeg, ylang-ylang etc. Also available as part of Mx-07. **Cross: EUGENOL. CAS** 97-54-1.

#### α-Isomethyl ionone

I-017 C<sub>14</sub>H<sub>22</sub>O 206.32

 $\alpha$ -Isomethyl ionone is used in many floral fragrances, particularly violet. Blends with and supports woody, leathery and oriental accords. **CAS** 127-51-5.

F

#### Isophorone diamine

I-006 C<sub>10</sub>H<sub>22</sub>N<sub>2</sub> 170.29 E, I

A common hardener for epoxy resins. Also a degradation product from Isophorone diisocyanate. Also known as IPD. **CAS** 2855-13-2.

#### ISOPHORONE DIISOCYANATE

I-007  $C_{12}H_{18}N_2O_2$  222.28 I

Used in the manufacture of polyurethane plastics and lacquers. Also known as IPDI. **Cross: Isophorone diamine. CAS** 4098-71-9.

## Art. No. Formula FW Series ISOPROPYL MYRISTATE

An emollient found in cosmetic and pharmaceutical bases. Has solvent properties. **CAS** 110-27-0.

270.44

ICB, C, NAC

#### N-Isopropyl-N-phenyl-4-phenylenediamine

C<sub>17</sub>H<sub>24</sub>O<sub>2</sub>

I-004 C<sub>15</sub>H<sub>18</sub>N<sub>2</sub> 226.32 S,IS,R,SH,ECB,

An antidegradant in natural rubber, styrene-butadiene, nitrile-butadiene, butadiene and chloroprene rubber. Also known as IPPD. Also available as part of Mx-04. **CAS** 101-72-4

J

I-003

#### Jasmine synthetic

J-001 F

Synthetic jasmine for use as fragrance in perfumery. **Cross:** benzylsalicylate.

#### Jasmine absolute

J-002 F

Natural jasmine for use as fragrance in perfumery. The raw material for this product is made from an hexane extraction of the Jasminum Grandiflorum giving a concrete, then the absolute is obtained by extrating the concrete with ethanol. Contains among other substances Benzylbenzoate, Phytol, Isophytol, Linalool, Eugenol, Benzylalcohol, Benzyl salicylate. **Cross: benzylsalicylate. May produce hyperpigmentation. CAS** 84776-64-7.

#### Juniperus oxycedrus extract

Tar obtained from distillation of Juniperus oxycedrus for use in, e.g., eczema and psoriatic medications and perfumes. Also known as Juniper tar. Available as part of Mx-14. **CAS** 8013-10-3.

FW

Series

## K

#### Kanamycin sulfate

K-001

$$C_{18}H_{36-37}N_{4-5}O_{10-11}H_2SO_4$$

ME

An antibacterial agent similar to neomycin. Cross: neomycin, streptomycin, gentamicin sulfate, dihydrostreptomycin. CAS 25389-94-0.

#### Ketoprofen

K-002B

 $C_{16}H_{14}O_3$ 

254.28

CAD, EP, EPE

Ketoprofen, (RS)2-(3-benzoylphenyl)-propionic acid, is one of the propionic acid NSAIDs with analgesic and antipyretic effects. **CAS** 22071-15-4.

#### LANOLIN ALCOHOL

W-001

S, IS, ECB, LA

Different types of alcohols (aliphatic, steroid, triterpenoid) present in wool fat (lanolin). Used as ointment base in cosmetic and pharmaceutical products. Also known as Wool alcohols. **Cross:** eucerin, lanette wax. CAS 8027-33-6.

#### Lamotrigine

L-009

C<sub>0</sub>H<sub>7</sub>Cl<sub>2</sub>N<sub>5</sub>

256.09

CAD

This substance is an anticonvulsant drug used in the treatment of epilepsy and bipolar disorder. It is believed to work in adjunct with other drugs when treating clinical depression. It is used in slow-releasing tablets to prevent episodes of seizures. **CAS** 84057-84-1

Art. No.

**Formula** 

FW

Series

#### LAURYL POLYGLUCOSE

L-004

C, H, ECB

A  $\rm C_{10}$ - $\rm C_{16}$  non-ionic surfactant with good dermatological compatibility and viscosity enhancing effects. Therefore it is suitable for use as an additive or a co-surfactant in cosmetic surfactant cleansing preparations in e.g. shampoos. Also known as Lauryl glycoside, PLANTACARE® 1200 and D-Glucopyranoside. **CAS** 110615-47-9.

#### LAVANDULA ANGUSTIFOLIA OIL

Change of name as of January 2016; please refer to Lavender absolute (Art. No. L-001).

#### Lavender absolute

L-001

F, AC

A fragrance used in various perfumes. Also used as flavor and carminative. The raw material for this product is made from the freshly cut flowering tops of Lavendula Angustfolia, these are extracted with hexane giving a concrete, then the absolute is obtained by extrating the concrete with ethanol. Also known as LAVANDULA ANGUSTIFOLIA OIL. Cross: Geranial. CAS 8000-28-0.

#### Lead(II)acetate trihydrate

Deleted 2019

Pb(C<sub>2</sub>H<sub>3</sub>O<sub>2</sub>)<sub>2</sub>·3H<sub>2</sub>O 379.33

This hapten is a marker for contact allergy to **lead**. A white crystalline substance used as a reagent to make other lead compounds and as a fixative for some dyes. In low concentrations, it is the principal active ingredient in progressive types of hair coloring dyes. Lead(II) acetate is also used as a mordant in textile printing and dyeing, as a drier in paints and varnishes. **CAS** 6080-56-4.

#### Lead(II)chloride

L-008

PbCl<sub>2</sub>

278.10

MET

This hapten is a marker for contact allergy to **lead**. Occurs naturally in the form of the mineral cotunnite. It is used in production of infrared transmitting glass and of ornamental glass called aurene glass. A basic chloride of lead, PbCl<sub>2</sub>Pb(OH)<sub>2</sub>, is known as Patteson's white lead and is used as pigment in white paint. **CAS** 7758-95-4.

168

Art. No.	Formula	FW	Series
Lidocaine			
L-002	$C_{14}H_{22}N_2O$	234.33	ICB, ME, NAE, NAC, AC

Used as a local anesthetic and as antiarrhythmic agent. Also available as part of Mx-13 and Mx-20. **CAS** 137-58-6.

#### d-Limonene

L-006 C<sub>10</sub>H<sub>16</sub> 136.24 F

Limonene is a hydrocarbon, classified as a cyclic terpene. It is a colourless liquid at room temperatures with an extremely strong smell of oranges. It takes its name from the lemon, as the rind of the lemon, like other citrus fruits, contains considerable amounts of this chemical compound, which is responsible for much of their smell. Limonene is a chiral molecule, and as is common with such forms, biological sources produce one enantiomer: the principal industrial source, citrus fruit, contains d-limonene ((+)-limonene), which is the R-enantiomer. Racemic limonene is known as dipentene. **CAS** 5989-27-5.

#### **LINALOOL**

L-005 C<sub>10</sub>H<sub>10</sub>O 154.25 F

Linalool is a naturally-occurring terpene alcohol chemical found in many flowers and spice plants with many commercial applications, the majority of which are based on its pleasant scent (floral, with a touch of spiciness). It is a main constituent of oils of rosewood, Ho, lavender, lavandin, clary sage, bergamot, petitgrain; minor of neroli, tangerine and jasmine. It has other names such as Linalool synthetic,  $\beta$ -linalool, linalyl alcohol, linaloyl oxide, p-linalool, allo-ocimenol, 2,6-dimethyl-2,7-octadien-6-ol and linalool synthetic. **CAS** 78-70-6.

#### Lyral

Change of name as of January 2015; please refer to HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE (Art. No. L-003).

Art. No. Formula FW Series

M

#### Majanthole

M-033 C<sub>12</sub>H<sub>18</sub>O 178.27 F

Majantol has a fresh and intensely floral note. The recommended use level of this colorless liquid-to-crystalline product is 5–20%. This ingredient can be used in lily of valley and fruity floral fragrances for detergent powder, fabric softener and soap applications. Also known as 2,2-dimethyl-3-(3-methylphenyl)propan-1-ol. **CAS** 103694-68-4.

#### MANGANESE CHLORIDE

M-031 Cl<sub>2</sub>Mn 125.84 MET

This hapten is a marker for contact allergy to **manganese**. This chemical is used as a catalyst in the chlorination of organic compounds, in animal feed, and in dry-cell batteries. Metallic manganese is used primarily in steel production to improve hardness, stiffness, and strength. It is also used in carbon steel, stainless steel, and high-temperature steel, along with cast iron and superalloys. **CAS** 7773-01-5.

#### Melamine formaldehyde

M-001  $C_{k}H_{12}N_{k}O_{3}$  216.20 TF

A textile resin of formaldehyde releasing type for the treatment of draperies, collars, apparel, etc. Also known as Kaurit M70. Also available as part of Mx-16.

#### **MENTHA PIPERITA OIL**

Change of name as of January 2016; please refer to Peppermint oil (Art. No. P-036).

#### **MENTHOL**

M-002  $C_{10}H_{20}O$  156.26 B

Found in confectionery, perfumery, cough drops, cigarettes, liqueurs, etc. Also used as a topical antipruritic, local anesthetic, gastric sedative. **ICU. CAS** 89-78-1.

Art. No.	Formula	FW	Series
<b>2-Mercaptol</b> M-003	benzothiazole C <sub>7</sub> H <sub>5</sub> NS <sub>2</sub>	167.25	S, ICB, O, R, LA SH, ECB, NAE, NAC, AC

An accelerator, retarder, and peptizer for natural and other rubber products such as shoes, gloves, rubber in undergarments and clothing, condoms and diaphragms, medical devices, toys, tires and tubes, renal dialysis equipment, swimwear. Can also be uesed as a fungicide and works as a corrosion inhibitor in soluble cutting oils and antifreeze mixtures. Also used in greases, adhesives, photographic film emulsions, detergents, veterinary products such as tick and flea powders and sprays. Also known as MBT. Also available as part of Mx-05A, Mx-05B. **CAS** 149-30-4.

#### Mercury(II)chloride

M-004 HgCl<sub>2</sub> 271.50 MET

This hapten is a marker for contact allergy to **mercury**. Used in tanning leather and an intensifier in photography. Can also be used a topical antiseptic and disinfectant. **Cross: other mercurials. CAS** 7487-94-7.

Mercury			DS, DMP, DMS
M-005	Hg	200.59	MET

Is a chemical reagent and can be found in thermometers and dental amalgams. But also in pharmaceuticals, antifouling paints, agricultural chemicals. **May cause airborne contact dermatitis. CAS** 7439-97-6.

#### Mercury(II)amidochloride

M-022 (HgNH<sub>2</sub>)Cl 252.07 MET

This hapten is a marker for contact allergy to **mercury**. Inorganic mercurial compound used in creams as a topical antiinfective agent (formerly used in the treatment of psoriasis and in skin-lightening formulations). **May cause pigmentation and depigmentation. CAS** 10124-48-8.

#### Mercury ammonium chloride

Change of name as of January 2014; please refer to Mercury(II) amidochloride (Art. No. M-022).

Art. No.	Formula	FW	Series
2.2 bio/4	(2 Motheomil	ovvothov.	ahanul\nrana

**2,2-bis(4-(2-Methacryl-oxyethoxy)phenyl)propane** M-006 C<sub>27</sub>H<sub>22</sub>O<sub>6</sub> 452.55 DS, MP, DMP

A methacrylic monomer based on bisphenol A. Used in dental restorative composite materials and as a reactive monomer in adhesive products Also known as BIS-EMA. **CAS** 24448-20-2.

#### **METHENAMINE**

H-003  $C_6H_{12}N_4$  140.19 C, E, R

Used as an urinary antiseptic agent but also as a rubber accelerator and formaldehyde liberator. Used in the production of phenol-formaldehyde resins and can be found as a preservative in cosmetic products. Other uses inclue epoxy curing agent and corrosion inhibitor for steel. Also known as Hexamine and Hexamethylenetetramine. **May cause airborne contact dermatitis. CAS** 100-97-0.

#### 2-Methoxy-6-n-pentyl-4-benzoquinone

M-008  $C_{12}H_{16}O_3$  208.26 LA, PL

The primary hapten of the plant Primula Obconica found in glandular hairs on the leaves and the stem. Also known as Primin. **May cause airborne** contact dermatitis from contact with Primula. **CAS** 15121-94-5.

#### p-METHYLAMINOPHENOL

M-040 C<sub>2</sub>H<sub>0</sub>NO 123.15 H

The free form of this chemical is known to be present in many hair dyes, as well as in photographic developing and dyeing of furs. **CAS** 150-75-4.

#### p-METHYLAMINOPHENOL SULFATE

Deleted 2018

#### **METHYL ANTHRANILATE**

M-028 151.16 F

Used in a wide variety of fragrances and flavors. Used as perfume in ointments and in the manufacture of synthetic perfumes; flavorings. Odor Description: orange-flower, fruity, grape-like odor. Some perfumery uses: cherry, banana, strawberry, blueberry, grape. Natural occurrences: grape, concord. Also known as Methyl anthranilate. **CAS** 134-20-3.

Art. No. Formula FW Series

#### 4-METHYLBENZYLIDENE CAMPHOR

M-024

C<sub>18</sub>H<sub>22</sub>O

254.37

SU, EP, EPE

A UV-B absorbing agent in sunscreen cosmetics of the type creams, lotions, lipsticks, sun oils, etc. Also known as Eusolex 6300. **CAS** 36861-47-9

#### **6-METHYL COUMARIN**

M-010

 $\mathsf{C}_{\mathsf{10}}\mathsf{H}_{\mathsf{8}}\mathsf{O}_{\mathsf{2}}$ 

160.17

A Synthetic fragrance found in cosmetics, toiletries and soaps. **Cross (photo): 7-methylcoumarin, COUMARIN, 7-methoxycoumarin. PA. CAS** 92-48-8.

#### METHYLDIBROMO GLUTARONITRILE

D-049

 $\mathsf{C_6H_6Br_2N_2}$ 

265.94

S, ICB, C, O, IS, ECB, NA,

AC, NAE, NAC, LA

A preservative for metalworking fluids, cosmetics, adhesives, latex emulsions and paints, dispersed pigments and detergents. Active ingredient in Euxyl K 400 and Tektamer 38. Also known as 1,2-Dibromo-2,4-dicyanobutane and MDBGN. **CAS** 35691-65-7.

#### N,N-Methylene-bisacrylamide

M-023

 $C_7 H_{10} N_2 O_2$ 

154.17

MP

An acrylamide compound cross-reacting with unidentified primary sensitizers in NAPP and Nyloprint UV-cured printing plates. **CAS** 110-26-9.

#### Methylene bis-benzotriazolyl tetramethylbutylphenol

Deleted 2018

#### Methylene bis-benzotriazolyl tetramethylbutylphenol

M-037

 $C_{44}H_{50}N_{6}O_{2}$ 

658.86

SU, EP, EPE

UV absorbing agent present in sunscreens as a UV-A and UV-B filter. Main component in Tinosorb M (see M-032). This hapten does not contain DECYL GLUCOSIDE. **CAS** 103597-45-1

Art. No. Formula FW Series

#### α-Methylene-y-butyrolactone

M-026

 $C_5H_6O_2$ 

98.10

PL

Tulipaline A, hapten in the Liliaceae family of plants to which species such as Tulip, Alstromeria Erythronium dens canis & americanum belong. **CAS** 547-65-9.

#### Methylhydroquinone

M-025

C<sub>7</sub>H<sub>8</sub>O<sub>2</sub>

124.14

DS

A stabilizer and antioxidant in acrylic monomers to prevent polymerization. **CAS** 95-71-6.

#### **METHYLISOTHIAZOLINONE**

M-035

C<sub>4</sub>H<sub>5</sub>NOS

115.15

S, ICB, C, IS, ECB, NA, NAE, NAC, LA, AC

A component in Kathon CG which is used as preservative for use in cosmetics, shampoos, cooling fluids, detergents etc. Also present as a component in Art. No. C-009 (see this compound for further information). Also known as MI. **CAS** 2682-20-4.

## METHYLISOTHIAZOLINONE + METHYLCHLOROISOTHIAZOLINONE

C-009

C<sub>4</sub>H<sub>4</sub>CINOS

149.60

S, ICB, C, H, LA O, SH, IS, ECB, AC, NA, NAE, NAC

This product, a component in biocides, is used as a preservative in oil and cooling fluids, soaps, latex emulsions, slime control in paper mills, jet fuels, milk sampling, radiography, printing inks, moist toilet paper, detergents, shampoos, hair conditioners, hair & body gels, bubble baths, skin creams & lotions, mascaras, etc. The following biocides contain METHYLISOTHIAZOLINONE + METHYLCHLOROISOTHIAZOLINONE: Acticide, Algucid CH 50, Amerstat 250, Euxyl K 100, Fennosan IT 21, GR 856 Izolin, Grotan TK2, Kathon CG, Kathon 886MW, Kathon LX, Kathon WT, Mergal K7, Metatin GT, Mitco CC 31 L, Mitco CC 32 L, Special Mx 323, Parmetol DF 35,-DF 12, -A23,-K50,-K40,-DF 18, P3 Multan D, Piror P109. Also known as ProClin 150, MI/MCI. METHYLISOTHIAZOLINONE is also available separately as Art. No. M-035 May cause airborne contact dermatitis. CAS 55965-84-9.

A methacrylic monomer in plastics for dentures, bone cement, artificial nails, hearing aids etc. Also known as MMA. **CAS** 80-62-6.

#### Methyl-2-octynoate

M-034  $C_9H_{14}O_2$  154.21

Methyl-2-octynoate is one of many ingredients in fragrances. It's end applications include soap, detergents, beauty care products, household products. **CAS** 111-12-6.

#### N-Methylolchloroacetamide

M-014 C<sub>3</sub>H<sub>6</sub>CINO<sub>2</sub> 123.54 C

A preservative in cooling fluids and cosmetics. Also known as Grotan HD II and Parmetol K 50. **May cause airborne contact dermatitis. CAS** 2832-19-1.

#### **METHYLPARABEN**

Deleted 2021 C<sub>8</sub>H<sub>8</sub>O<sub>3</sub> 152.15

A preservative in foods (salad dressings, mayonnaise, spiced sauces, mustard, frozen dairy products, baked products), cosmetics and pharmaceutical preparations. Also known as Methyl-4-hydroxybenzoate and Nipagin. Cross: other parabens, hydroquinonemonobenzylether, para group of compounds. Also available as part of Mx-03A, Mx-03C. ICU. NICU. CAS 99-76-3.

#### Methylprednisolone aceponate

M-036  $C_{27}H_{26}O_7$  472.58 CS

A topical corticosteroid used for treating eczema and psoriasis, it suppresses inflammatory and allergic skin reactions and thus relaxes symptoms originating from the skin problem like redness (erythema), thickening of the skin, coarseness of the skin surface, fluid build-up (edema), itchiness, and other complaints (burning sensation or pain. Due to its high lipophilicity and the fact that it is bioactivated in the skin, enables single daily application without any loss of efficacy. Also known as Advantan. **CAS** 86401-95-8

Art. No. Formula FW Series

#### 2-METHYLRESORCINOL

M-039 CH<sub>3</sub>C<sub>6</sub>H<sub>3</sub>(OH)<sub>2</sub> 124.14 H

This substance is typically used in the formulation of hair dyes and colors. **CAS** 608-25-3.'

#### Miconazole

M-027 C<sub>10</sub>H<sub>44</sub>Cl<sub>4</sub>N<sub>2</sub>O 416.12 ME

An antifungal agent of the imidazole type which is used in topical and vaginal preparations to prevent growth of dermatophytes, yeast and molds. **Cross: econazole. enilconazole. CAS** 22916-47-8.

#### Minocycline hydrochloride

Deleted 2019 C<sub>23</sub>H<sub>27</sub>N<sub>3</sub>O<sub>7</sub>·HCI 493.94

Minocycline hydrochloride, also known as minocycline, is a member of the broad spectrum tetracycline antibiotics, and has a broader spectrum than the other members. It is a bacteriostatic antibiotic. **CAS** 13614-98-7.

#### Molybdenum

M-030 Mo 95.94 MET

This metal is often used in high-strength steel alloys. It is found in trace amounts in plants and animals, although excess molybdenum can be toxic in some animals. The ability of molybdenum to withstand extreme temperatures without significantly expanding or softening make it useful in applications that involve intense heat, including aircraft parts, electrical contacts, industrial motors, and filaments. Molybdenum is also used in alloys, such as dental alloys for its high corrosion resistance and weldability. Most high-strength steel alloys are 0.25% to 8% molybdenum. **CAS** 7439-98-7.

Art. No.	Formula	FW	Series		
Molybdenum(V)chloride					
M-038	MoCl <sub>5</sub>	273.21	MET		

This hapten is a marker for contact allergy to **molybdenum**. This chemical is an inorganic compound, a dark volatile solid which is mainly used in research to prepare other molybdenum compounds. For testing purpose this is also used to test allergy for Molybdenum. Molybdenum compounds are found in the manufacture of aircraft parts, electrical contacts, motors, filaments, and high-strength steel alloys. It can also be found in dental implants. **CAS** 10241-05-1.

#### 2-Monomethylol phenol

M-015 C<sub>7</sub>H<sub>8</sub>O<sub>2</sub> 124.14 PG

An intermediate in the production of phenol formaldehyde resins which may remain after condensation of the resin. Sensitizer in phenol formaldehyde resins. Also used in local anesthetic. Also known as Saligenin. **CAS** 90-01-7.

#### 2-(4-Morpholinylmercapto)benzothiazol (MOR)

R

M-016  $C_{11}H_{12}N_2OS_2$  252.47

An accelerator for natural rubber, isoprene butadiene, styrenebutadiene, nitrilebutadiene rubber products. Also available as part of Mx-05A, Mx-05B. **CAS** 102-77-2.

#### **MUSK KETONE**

Deleted 2021 C<sub>14</sub>H<sub>18</sub>N<sub>2</sub>O<sub>5</sub> 294.30

A synthetic nitro musk compound used as fragrance and fixative in after shave lotions, perfumes etc. Also available as part of Mx-10B. **CAS** 81-14-1.

#### Musk moskene

M-019  $C_{14}H_{18}N_2O_4$  280.33 F

A synthetic nitro musk compound used as fragrance and fixative in after shave lotions, perfumes etc. Also available as part of Mx-10B. **CAS** 116-66-5.

Art. No.	Formula	FW	Series		
Musk xylene					
M-021	$C_{12}H_{15}N_3O_6$	297.45	F		

A synthetic nitro musk compound used as fragrance and fixative in after shave lotions, perfumes etc. The musk compound of choice for soap and detergent fragrances. Also available as part of Mx-10B. Cross (photo): musk ambrette. PA. CAS 81-15-2.

#### **MYROXYLON PEREIRAE RESIN**

Change of name as of January 2016; please refer to Peru balsam (Art. No. B-001).

N

#### Narcissus poeticus absolute

N-006 F

A fragrance used in various perfumed products. The raw material for this product is made from an solvent extraction of the flowers of Narcissus poeticus. Also known as Narcissus absolute. **CAS** 90064-26-9.

#### Neomycin sulfate

N-001  $C_{23}H_{46}N_6O_{13}\cdot H_2SO_4$  712.72 S, ICB, IS, ECB, NA, NAE, NAC, LA. AC

A broad-spectrum antibiotic found in topical creams, powders, ointments, eye and ear drops. Also used as systemic antibiotic and growth promotor in veterinary use. Cross: streptomycin, gentamycin, framycetin, dihydrostreptomycin, kanamycin, spectinomycin, tobramycin, paromomycin, butirosin, bacitracin, UCU, CAS 1405-10-3.

Nickel metal: a common hapten present in various alloys, electroplated metal, earrings, watches, buttons, zippers, rings, utensils, tools, instruments, batteries, machinery parts, working solutions of metal cutting fluids, nickel plating for alloys, coins, pigments, dentures, orthopedic plates, keys, scissors, razors, spectacle frames, kitchenware etc. May produce erythema multiforme like eruptions. May cause airborne contact dermatitis. ICU. CAS 10101-97-0.

#### Niobium(V)chloride

N-008 NbCl<sub>5</sub> 270.17 MET

In patch testing this chemical is used to diagnose contact allergy to Niobium. Niobium is a metal which can be found in steel, alloys, magnets and electro ceramics. The metal can also be found in medical devices such as pacemakers or joint replacements. It is also used in jewelry. **CAS** 10026-12-7.

#### 4-(2-Nitrobutyl)morpholine

Comp. in E-014 C<sub>0</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub> 188.23 O

A preservative used in cooling fluids, crude oil, diesel fuel, heating oil etc. 4-(2-Nitrobutyl)morpholine is present in Bioban P 1487 by 70%. Bioban P 1487 also contains 4,4-(2-Ethyl-2-nitrotrimethylene) dimorpholine. Neither of the substances can be ordered separately. **CAS** 2224-44-4.

#### **Nitrofurazone**

N-005 C<sub>e</sub>H<sub>e</sub>N<sub>4</sub>O<sub>4</sub> 198.14 ME, LU

A topical antibiotic used in human and veterinary medicine and is sometimes also added to animal feeds. Also known as Furacin. **May cause airborne contact dermatitis. CAS** 59-87-0.

Art. No. Formula FW Series

#### 2-NITRO-p-PHENYLENE-DIAMINE

N-004 C<sub>6</sub>H<sub>7</sub>N<sub>3</sub>O<sub>2</sub> 153.14 H

A dye present in different hair dyeing preparations. These are of the semipermanent type and do not require the use of HYDROGEN PEROXIDE. Also known as 2-Nitro-4-phenylenediamine. **CAS** 5307-14-2.

#### **Norfloxacin**

N-007 C<sub>10</sub>H<sub>10</sub>FN<sub>2</sub>O<sub>2</sub> 319.33 CAD

An oral broad-spectrum fluoroquinolone antibacterial agent used in the treatment of urinary tract infections. The mechanism of action of norfloxacin involves inhibition of the A subunit of bacterial DNA gyrase, an enzyme which is essential for DNA replication. Also known as 1-ethyl-6-fluoro-4-oxo-7-piperazin-1-yl-1H-quinoline-3-carboxylic acid. **CAS** 70458-96-7.



#### Oakmoss absolute

O-001 F

An extract of oak moss for use as fragrance in many perfume mixtures, after-shave lotions etc. The raw material for this product is made from an hexane extraction of the moss giving a concrete, then the absolute is obtained by extrating the concrete with ethanol. The moss used is Evernia Prunastri. Also known as tree moss. Contains atranorin, evernic acid and usnic acid. Also available as part of Mx-07. NOTE: The preparation is based on the raw material of oakmoss absolute that has NOT been subject to chemical reduction of atranol and chloroatranol PA. CAS 9000-50-4.

#### **OCTOCRYLENE**

O-009 C<sub>24</sub>H<sub>27</sub>NO<sub>2</sub> 361.48 SU, SF, EP, EPE

An UV-B adsorbing agent in sunscreen cosmetics of the type creams, lotions, lipsticks, sun oils, etc. Also known as 2-ethylhexyl 2-cyano-3,3-diphenylacrylate. Trade name is Eusolex OCR. **CAS** 6197-30-4.

Art. No.	Formula	FW	Series		
Octyl gallate					
O-002	$C_{15}H_{22}O_5$	282.34	B, C		

An antioxidant for use in cosmetic and pharmaceutical products and in food products such as margarine and peanut butter. Also available as part of Mx-28B. **May cause airborne contact dermatitis. CAS** 1034-01-1.

#### 2-n-Octyl-4-isothiazolin-3-one

O-004	C <sub>11</sub> H <sub>19</sub> NOS	213.34	ICB, O, PG, SH
	11 13		ECB, NAC

A fungicide used in paints, cutting oils, wallpaper adhesives, etc. Also used for the preservation of leather. Also known as Skane M-8, Kathon 893. **CAS** 26530-20-1.

#### **Olaquindox**

O-008	$C_{12}H_{13}N_3O_4$	263.25	EPE	
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A widespread growth promotor in pig breeding acting as a chemotherapeutic agent prophylactically used to lower the frequency of bacterial enteritis in pigs. Also known as N-(2-Hydroxyethyl)-3-methyl-2-quinoxalinecarboxamide-1,4-dioxide and Bayo-n-ox. **May casue airborne photodermatitis. PA. PL. PT. CAS** 23696-28-8.

#### OLEAMIDOPROPYL DIMETHYLAMINE

O-005	$C_{23}H_{46}N_2O$	366.25	ICB, C, O, NA NAE, NAC, AC
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A cationic emulsifier used in cosmetics such as body lotions, creams, shampoos, hair rinse preparations, etc. **CAS** 109-28-4.

#### Oligotriacrylate (OTA 480)

Deleted 2021	480

A multifunctional acrylic monomer used in lithographic inks, overprinting varnishes, coatings on wood, paper, etc. cured by UV-light. **CAS** 52408-84-1.

#### **OLEA EUROPAEA OIL**

Deleted 2017

PABA
A-006
C,H,NO,
137.14
SU, EP, EPE

A sun screening agent in cosmetics, moisturizers, shampoos, hair care products, nail polish, lipstick, lip balms, oral vitamin supplements. Used in the production of local anesthetics, folic acid and azo dyes. Also known as 4-Aminobenzoic acid. **Cross: para group of compounds. PA. CAS** 150-13-0.

#### Palladium(II)chloride

P-001	PdCl <sub>2</sub>	177.31	DS, DMP, MET
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This hapten is a marker for contact allergy to **palladium**. A chemical catalyst. Can be found in jewelry, dental alloys and electroplating parts of clocks and watches. **CAS** 7647-10-1.

#### **PANTHENOL**

P-042	205.254	C. F

Used as a humectant, emollient and moisturizer. As panthenol easily binds to hair follicles it is commonly used in shampoos and hair conditioners. **CAS** 16485-10-2

#### **Parthenolide**

P-029	$C_{15}H_{20}O_3$	248.32	PL	
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Sesquiterpene lactone found in Feverfew (Chrysanthemum Parthenium) which is a Compositae plant growing throughout Europe and in southern USA near homes, on roadsides and in uncultivated places. It is also found in several other Compositae plants and Magnoliaceae. Also available as part of Mx-29A and Mx-29B.

CAS 20554-84-1.

#### Penicillin G, potassium salt

Deleted 2018

SU. EPE

Art. No. Formula FW Series

Pentaerythritol triacrylate

P-002 C,,H,,O, 298 30 MP

A trifunctional cross-linking acrylic monomer for use in adhesives. coatings, inks, photoresists, castings, etc. cured by UV radiation. CAS 3524-68-3

Peppermint oil

P-036 136.2 TF C<sub>10</sub>H<sub>10</sub>

True peppermint oil is steam distilled from the partially dried herb of Mentha Piperita which is a hybrid from three other species of Mentha. all natives of southern Europe. Uses include antiemetic agent. Autonomic agent, central nervous system agent, gastrointestinal agent, parasympatholytic agent, Pharmaceutic aid, Flavor and Fragrance agent, Essential Oil, Also known as MENTHA PIPERITA OIL. Mentha x piperita L. Peppermint oil. Peppermint terpenes and Pfefferminz oel. CAS 8006-90-4.

Peru balsam

B-001 S, ICB, DMP, H,

IS. ECB. NA. AC NAE. NAC. LA

Found as flavor in tobacco, drinks, pastries, cakes, wines, liquors, spices etc. Used as a fixative and fragrance in perfumery. Alos used in topical medicaments, dentistry, etc. Consists of esters of cinnamic and BENZOIC ACID. Vanillin, styracine, Also known as Balsam Peru, MYROXYLON PEREIRAE RESIN, Indian balsam, China oil. Black balsam. Honduras balsam and Surinam balsam. Cross: COLOPHONIUM, tolu balsam absolute, cinnamates, benzoates, styrax, benzoin, tiger balm, beeswax, benzaldehyde, benzylsalicylate, coniferyl alcohol, COUMARIN, EUGENOL, Isoeugenol, FARNESOL, propanidid, propolis, diethylstilbestrol. May produce erythema-multiforme like eruptions. PT. NICU. CAS 8007-00-9

#### PETROLATUM

P-003

A white petrolatum which is a purified mixture of semisolid hydrocarbons. As ointment base in cosmetics. Leather grease and shoe polish component. Supplier of Chemotechniques petrolatum is Penreco. May cause hyperpigmentation. CAS 8009-03-8.

Art. No. **Formula** FW Series

Phenol formaldehyde resin (PFR2)

P-005 PG. IS

A resin based on phenol and formaldehyde which contain methylol phenols. Used in binders, adhesives, laminates, impregnation products, surface coatings, casting sand, etc. Simultaneous contact allergic reactions to Peru balsam and COLOPHONIUM over represented. May cause airborne contact dermatitis.

**PHENOXYETHANOL** 

P-025 138.16 C. AC C<sub>0</sub>H<sub>40</sub>O<sub>2</sub>

A fixative for perfumes, used as bactericide in conjunction with METHYLDIBROMO GLUTARONITRILE (Euxyl K 400) as well as quaternary ammonium compounds. Also used as insect repellent and topical antiseptic. CAS 122-99-6.

#### 1-Phenyl-3-pyrazolidinone

Deleted 2018

#### PHENYLBENZIMIDAZOLE SULFONIC ACID

P-024  $C_{13}H_{10}N_{2}O_{3}S$ 274.30

A sun-screening agent for use in various sunscreen products. Trade names: Eusolex 232 and Novantisol. Also known as 2-Phenylbenzimidazol-5-sulfonic acid. CAS 27503-81-7.

**Phenylbutazone** 

P-041  $C_{10}H_{20}N_2O_2$ 308.37 ME

An anti-inflammatory agent with antipyretic and analgesic activities. It is used in the treatment of ankylosing spondylitis and rheumatoid arthritis. In some countries the drug is only approved for use in veterinary medicine. CAS 50-33-9.

Art. No.	Formula	FW	Series
p-PHENY	LENEDIAMIN	IE (PPD)	
P-006	$C_6H_8N_2$	108.14	S, ICB, IS, H, SH, ECB, NA, AC, NAE, NAC,
LA			

The primary intermediate in permanent hair dyes and fur dyes (valid for p-PHENYLENEDIAMINE (PPD)). Also used in photographic developers, lithography, photocopying, oils, greases, gasoline and as antioxidant/accelerator in the rubber and plastic industry. The hydrochloride is used as blood reagent. Cross: parabens, PABA, para compounds. May produce erythema multiforme like eruptions. May cause airborne contact dermatitis. PA. UCU. CAS 106-50-3.

#### p-PHENYLENEDIAMINE HCL

Deleted 2018

#### 2-Phenyl glycidyl ether

P-023  $C_9H_{10}O_2$  150.18

A reactive diluent in epoxy resin systems. Forms chemical bonds with the resin during cure and accelerates the curing process. **CAS** 122-60-1.

Ε

#### 2-Phenylindole

P-007 C<sub>14</sub>H<sub>11</sub>N 193.25 PG

A stabilizer in PVC-plastic products. Also known as  $\alpha$ -phenylindole. **CAS** 948-65-2.

#### PHENYL MERCURIC ACETATE

P-008 C<sub>8</sub>H<sub>8</sub>HgO<sub>2</sub> 336.74 C, LU, MET

Used as herbicide and fungicide. As preservative in antibiotic eye drops, eye cosmetics, shampoos, etc. Also known as Advacide PMA 18, Cosan PMA, Mergal A25, Metasol 30, Nildew AC 30, Nuodex PMA 18 and Nylmerate. Cross: p-chloromercuriphenol. ICU. CAS 62-38-4.

Art. No.	Formula	FW	Series	
N-Phenyl-2-naphtylamine				
P-009	$C_{16}H_{13}N$	219.29	R	

An antidegradant for various rubber products such as natural rubber, styrene-butadiene, nitrile, butadiene and chloroprene. Also known as phenyl-beta-naphtylamine and PBN. **CAS** 135-88-6.

#### o-PHENYLPHENOL

P-010 C<sub>12</sub>H<sub>10</sub>O 170.20 O

A preservative used in cosmetics, cooling fluids, detergents and as agricultural fungicide for citrus fruits, etc. Also known as 2-phenylphenol and Dowicide 1. **Photosensitizer. May cause depigmentation. CAS** 90-43-7.

#### PHENYL SALICYLATE

P-011  $C_{13}H_{10}O_3$  214.22 C, PG

Used as UV-light adsorber in plastics, suntan oils, and creams. Also found in waxes, adhesives, polishes etc. Used as analgesic, antipyretic, and anti-rheumatic agent. Can also be found in veterinary use as external disinfectant and intestinal antiseptic agent. Also known as Salol. **CAS** 118-55-8.

#### Pine tar

A product obtained by dry-distillation of wood from pine. Consists of turpentine, various phenols, xylene, etc. Topical antieczematic and rubefacient. Also known as PINUS PALUSTRIS TAR. Available as part of Mx-14. **CAS** 8011-48-1.

#### **Piroxicam**

P-033 C<sub>15</sub>H<sub>13</sub>N<sub>3</sub>O<sub>4</sub>S 331.35 CAD, EP, EPE

Piroxicam (marketed in the U.S. under the trade name Feldene) is a NSAID used to relieve the symptoms of rheumatoid and osteoarthritis, primary dysmenorrhoea, postoperative pain; and act as an analgesic, especially where there is an inflammatory component. It is also used in veterinary medicine to treat certain neoplasias expressing cyclooxygenase (COX) receptors, such as bladder, colon, and prostate cancers. Other brand names for Piroxicam include Brexin, Erazon, Felden, Feldoral, Hotemin, Pirox von ct, Proponol, Reumador, Veral, and Vurdon. **CAS** 36322-90-4.

Hapten info.

Art. No. Formula FW Series

#### POLYAMINOPROPYL BIGUANIDE

P-043 C

A preservative found in cosmetics, personal care products, fabric softeners, contact lens solutions, wet wipes and more. Also used as deodorizer and disinfectant. **CAS** 27083-27-8

#### Polymeric diphenylmethane diisocyanate (PMDI)

P-038

Diphenylmethane diisocyanate (MDI), see D-023, is the generic name of a product used in industrial settings. Polymeric MDI (PMDI), the primary technical/commercial form of MDI, is actually a mixture that contains 25–80% monomeric 4,4'-MDI as well as oligomers containing 3–6 rings and other minor isomers, such as the 2,2'-isomer. The exact composition of PMDI varies with the manufacturer. PMDI is used to make rigid and flexible foam, foundry resin sand binders, and heat insulating material.

#### Polymyxin B Sulfate

P-026 C<sub>56</sub>H<sub>100</sub>N<sub>16</sub>O<sub>17</sub>S 1385.63 ME, AC

An antibacterial peptide produced from Bacillus polymyxa. Polymixin B is commonly found in topical antibiotic ointments and creams. **CAS** 1405-20-5

#### Polysilicone-15

P-035 > 6000 EPE

Is an organic compound used in hair products like shampoos, conditioners, hair sprays, pomades and color treatment products to absorb UVB radiation. In the EU, it is also approved for use in sunscreens and cosmetics. Also known as Parsol SLX. **CAS** 207574-74-1.

#### Polyethylene glycol 400 (PEG 400)

P-034 H(OCH<sub>2</sub>CH<sub>2</sub>)nOH approx. 400 <sup>6</sup>

Polyethylene glycol PEG400 refers to a polymer of ethylene oxide with a molecular mass below 20,000 g/mol, in this case 400. This chemical has many industrial, foods, cosmetic and medical applications. It is added to skin lotions, creams, jellies, soaps and toothpastes. It is the basis for many laxatives and bowel irrigation preparations. It is also

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used as a lubricant in tire manufacturing; plasticizer for sponges and synthetic leather; a paper softener; anti-curl agent; and an intermediate in resin manufacturing. **CAS** 25322-68-3

#### **POLYSORBATE 80**

P-013 ICB, C, NAC

An emulsifier and dispersing agent for medicinal products for internal use. Used as emulsifier in cosmetics, pharmaceuticals & food. Also known as Polyoxyethylenesorbitan monooleate and Tween 80. **CAS** 9005-65-6.

#### Potassium clavulanate

P-040 C<sub>8</sub>H<sub>8</sub>NO<sub>5</sub>K 237.25 CAD

This chemical is a drug which is given with antibiotics. While not effective by itself as an antibiotic, when combined with penicillingroup antibiotics, it can overcome antibiotic resistance in bacteria that secrete  $\beta$ -lactamase, which otherwise inactivates most penicillin's. **CAS** 61177-45-5.

Potassium dichromate

P-014 Cr<sub>2</sub>K<sub>2</sub>O<sub>7</sub> 294.21

S, ICB, DS, P, SH, IS, DMP, ECB, NA, NAE, NAC, LA, AC

This hapten is a marker for contact allergy to **chromium**. The hexavalent form of chromium, which is used in cement, tanning of leather, textile dyes, wood preservatives, alloys in metallurgy, safety matches, photography, electroplating, anticorrosives, engraving and lithography, ceramics, automobile industry, TV manufacturing, photocopy paper, tattoos, mascara/eye shadow pigments (chromium oxide), milk testing, welding, floor waxes, shoe polishes, paints, glues, pigments, detergents, etc. **May cause airborne contact dermatitis. CAS** 7778-50-9.

#### Potassium dicyanoaurate(I)

P-015 C<sub>2</sub>AuKN<sub>2</sub> 288.13 MET

This hapten is a marker for contact allergy to **gold**. Gold salt used in the electroplating industry. **CAS** 13967-50-5.

### Art. No. Formula FW Series Pramoxine hydrochloride P-039 $C_{17}H_{27}NO_3 \cdot HCI$ 329.86 ME

This substance is a topical anesthetic and used as an antipruritic. Like other local anesthetics, the drug decreases the permeability of neuronal membranes to sodium ions, blocking both initiation and conduction of nerve impulses. Depolarization and repolarization of excitable neural membranes is thus inhibited, leading to numbness. **CAS** 637-58-1.

#### Prilocaine hydrochloride

P-027 C<sub>13</sub>H<sub>21</sub>CIN<sub>2</sub>O 256.8

Used as a local anesthetic agent. Also known as Citanest, Xylonest. Also available as part of Mx-20. **CAS** 1786-81-8.

#### Pristinamycin

Deleted 2021

Pristinamycin is an antibiotic used primarily in the treatment of staphylococcal infections, and to a lesser extent streptococcal infections. It is a streptogramin group antibiotic, similar to virginiamycin, derived from the bacterium Streptomyces pristina spiralis. It is marketed in Europe by Sanofi-Aventis under the trade name Pyostacine. Pristinamycin is a mixture of two components that have a synergistic antibacterial action. Pristinamycin I is a macrolide, and results in pristinamycin having a similar spectrum of action to erythromycin. Pristinamycin II is a depsipeptide. **CAS** 11006-76-1.

#### Procaine hydrochloride

P-016 C<sub>12</sub>H<sub>21</sub>CIN<sub>2</sub>O<sub>2</sub> 272.77

A local anesthetic agent also known as Novocaine, Ethocaine, Allocaine, Topocaine, Neocaine and Syncaine etc. **Cross: para group of compounds, parabens, butethamine, PABA. CAS** 51-05-8.

#### Promethazine hydrochloride

P-017 C<sub>17</sub>H<sub>21</sub>CIN<sub>2</sub>S 320.87 EP, EPE

An antihistaminic, antiemetic, CNS depressant used in pills, syrup, injections and suppositories Also known as Phenergan, Lergigan, Atosil, Fenazil etc. Cross: phenothiazines, ethylenediamine-HCI, para compounds, chlorpromazine HCI, tripelennamine. May produce erythema multiforme like eruptions. PA. UCU. PL. CAS 58-33-3.

Art. No.	Formula	FW	Series
PROPIONIC	ACID		
P-018	$C_3H_6O_2$	74.08	В

Used as food additive for the preservation against moulds in, e.g., cheese products. Also in the production of fruit flavors and perfume bases. **CAS** 79-09-4.

#### **Propolis**

P-022 ECB, ICB, NA, NAE, AC, NAC, PL, LU, S

A resinous substance found in beehives (beeglue). Collected by bees from treebuds. Found in biocosmetics, face creams, ointments, lotions, solutions, varnish, toothpaste, mouthwashes, tablets, chewing gum, etc. Also found in wax for violins. Contains flavonoid aglycones and the main hapten is 1,1-dimethylallyl caffeic acid ester (LB-1). Cross: Peru balsam. May cause airborne contact dermatitis. CAS 85665-41-4

#### PROPYLENE GLYCOL

P-019 C<sub>3</sub>H<sub>8</sub>O<sub>2</sub> 76.09 ICB, C, O, LU, AC, NA, NAE, NAC

Used as vehicle in pharmaceutical and cosmetic bases. In food it is used as solvent for colors and flavors and to prevent growth of moulds. Works as humectant and can also be found in cooling fluids. **UCU. CAS** 57-55-6.

#### **PROPYL GALLATE**

P-021  $C_{10}H_{12}O_{\epsilon}$  212.20 B, C, LA

An antioxidant in cosmetic and pharmaceutic creams, emulsions, various fats, oils and waxes. Can also be found in foods like margarine, peanut butter, etc. Also available as part of Mx-28B. **CAS** 121-79-9.

#### **PROPYLPARABEN**

P-020  $C_{10}H_{12}O_3$  180.20

A preservative in foods (salad dressings, mayonnaise, spiced sauces, mustard, frozen dairy products, baked products), cosmetics

Art. No. Formula FW Series

and pharmaceutical preparations. Also known as Propyl-4-hydroxybenzoate. Also available as part of Mx-03A, Mx-03C. Cross: hydroquinone monobenzyl ether, other parabens, para compounds. CAS 94-13-3.



#### **QUATERNIUM-15**

C-007 C<sub>9</sub>H<sub>16</sub>Cl<sub>2</sub>N<sub>4</sub> 251.20 ICB, S, IS, C, H, ECB, NA, NAE, NAC, LA, AC

A formaldehyde-releasing preservative in hand creams, lotions, face creams, shampoos, latex paints, topical medicaments, polishes, metal working fluids, adhesives, inks, etc. Also known as Dowicil 200 and 1-(3-Chloroallyl)-3,5,7-triaza-1-azoniaadamantane chloride. **CAS** 51229-78-8.

#### **Quinine sulfate**

Q-001  $(C_{20}H_{24}N_2O_2)_2$  746.93 ME

An antimalarial agent also used as antipyreticum and in liquids (tonic etc.). **PA. CAS** 6119-70-6.



#### **Reactive Black 5**

R-004  $C_{26}H_{21}N_5Na_4O_{19}S_6$  991.79 TF

An azo dye belonging to the reactive dye class used for coloring cotton, wool, silk and polyamide textiles. **May cause allergic conjunctivitis, allergic rhinitis and occupational asthma. CAS** 17095-24-8.

#### **Reactive Blue 21**

Art. No.	Formula	FW	Series
R-005			TF

A phthalocyanine-copper complex dye belonging to the reactive dye class used for coloring cotton, wool, silk and polyamide textiles. **May cause allergic conjunctivitis, allergic rhinitis and occupational asthma. CAS** 12236-86-1.

#### **Reactive Orange 107**

R-007 TF

An azo dye belonging to the reactive dye class used for coloring cotton, wool, silk and polyamide textiles. **May cause allergic conjunctivitis, allergic rhinitis and occupational asthma. CAS** 94158-82-4.

#### Reactive Red 123

R-008 TF

An azo dye belonging to the reactive dye class used for coloring cotton, wool, silkand polyamide textiles. **May cause allergic conjunctivitis, allergic rhinitis and occupational asthma.** 

#### **Reactive Red 228**

R-010 TF

An monoazo dye belonging to the reactive dye class used for coloring cotton, wool, silk and polyamide textiles. **May cause allergic conjunctivitis**, allergic rhinitis and occupational asthma.

#### **Reactive Red 238**

Deleted 2018

#### Reactive Violet 5

R-011 TF

An dye belonging to the reactive dye class used for coloring cotton, wool, silk and polyamide textiles. **May cause allergic conjunctivitis, allergic rhinitis and occupational asthma. CAS** 12226-38-9.

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RESORCINOL

A keratolytic agent found in acne medications. Used in hair dyes, resins, tanning, cosmetics, Castellanis paint, eye drops, suppositories, photocopying and photographic solutions, explosives, etc. Also used a topical antipruritic and antiseptic agent. Cross: phenol. May cause orange-brown discoloration of lacquered nails and may darken fair hair. CAS 108-46-3.

110.11

Н

#### Resorcinol monobenzoate

 $C_{a}H_{a}O_{a}$ 

R-001

R-002 C<sub>13</sub>H<sub>10</sub>O<sub>3</sub> 214.22 PG

An UV-light absorber added mainly to out door plastics. Has caused dermatitis as additive in spectacle frames. **Cross: Peru balsam. CAS** 136-36-7.

#### Rhodium(III)chloride hydrate

R-013 RhCl<sub>3</sub> · xH<sub>2</sub>O MET

This hapten is a marker for contact allergy to **rhodium**. This metal can be found in precious metal alloys and in electroplating. In jewelry it can be found in white gold, platinum, and sterling silver. Rhodium is also used as an alloying agent for hardening and improving the resistance of platinum and palladium to corrosion which can be used in coatings. In the car industry rhodium is used as a catalytic converter. **CAS** 20765-98-4.

#### **ROSA DAMASCENA EXTRACT**

Change of name as of January 2016; please refer to Rose absolute (Art. No. R-003).

#### Rose absolute

R-003 F

A fragrance used in various perfumes and for flavoring lozenges, ointments, toilet preparations, etc. The raw material for this product is made from an solvent extraction of the flowers. Contains among other substances Citronellol, Phenyl ethyl alcohol, Geraniol, Nerol,

Art. No. Formula FW Series

Eugenol. Also known as ROSA DAMASCENA EXTRACT, Rose oil.

Ruthenium

R-012 Ru 101.07 MET

Ruthenium is a chemical element and a rare transition metal, which is inert to most other chemicals. Ruthenium usually occurs as a minor component of platinum ores. Most ruthenium produced is used for wear-resistant electrical contacts and the production of thick-film resistors. A minor application of ruthenium is its use in some platinum alloys, and as a catalyst. It might also be found in dental implants. **CAS** 7440-18-8.



#### Sandalwood oil

S-009 F

A fragrance used in various perfumed products like soap, after-shave lotions, colognes and cosmetics. Also known as. SANTALUM ALBUM OIL. **PA. PT. PL. CAS** 8006-87-9.

#### **SANTALUM ALBUM OIL**

Change of name as of January 2016; please refer to Sandalwood oil (Art. No. S-014).

#### **SHELLAC**

S-015 C

Shellac is a resin secreted by the female lac bug, on trees in the forests of India and Thailand. It is processed and sold as dry flakes, which are dissolved in denatured alcohol to make liquid shellac, which is used as a brush-on colorant, food glaze and wood finish. Shellac is edible and it is used as a glazing agent on pills and candies in the form of pharmaceutical glaze. When used for this purpose, it has the food additive E number E904. **CAS** 9000-59-3.

Art. No. Formula FW Series

#### SILVER NITRATE

S-007 AgNO<sub>3</sub> 169.89 MET

This hapten is a marker for contact allergy to **silver**. Used in photography, silver plating, coloring porcelain, manufacturing of mirrors, etching ivory, analytical reagent. Can also be used as astringent and antiseptic agent. **May cause gray-brown discoloration of the conjunctivae and black discoloration of the fingernails. <b>CAS** 7761-88-8.

#### **SODIUM BENZOATE**

S-001 C<sub>7</sub>H<sub>6</sub>NaO<sub>2</sub> 144.11 B, AC

A preservative especially used for food products (drinks, jams, jellies, pickles, syrups, etc.) Also commonly found in cosmetic and pharmaceutical products. **NICU. CAS** 532-32-1.

#### SODIUM LAURYL SULFATE

S-018 CH<sub>3</sub>(CH<sub>2</sub>)<sub>11</sub>OSO<sub>3</sub>Na 288.38

Described in the literature as a substance used as an irritant control in patch testing and works well in terms of reproducibility and a high number of patients are reacting to it. The chemical is an anionic surfactant used in many cleaning and hygiene products. The salt is an organosulfate consisting of a 12-carbon tail attached to a sulfate group, giving the material the amphiphilic properties required of a detergent. Being derived from inexpensive coconut and palm oils, it is a common component of many domestic cleaning products.

CAS 151-21-3.

#### **SODIUM METABISULFITE**

S-011 Na<sub>2</sub>S<sub>2</sub>O<sub>5</sub> 190.1 C, H, ECB

Used as a food additive, mainly as a preservative and is sometimes identified as E223. As an additive, it may cause allergic reactions, particularly skin irritation e.g. excema; gastric irritation and asthma. It is present in many dilutable squashes. It is commonly used in homebrewing preparations to sanitize equipment. It is used as a cleaning agent for potable water reverse osmosis membranes in desalination systems. It is also used to remove chloramine from drinking water after treatment. In the brand Stump-Out, it is used in almost a pure form (98%) to cause degradation of lignin, creating

Art. No. Formula FW Series

pores for fuel adsorption, and consequently, ignition. CAS 7681-57-4.

Sodium-2-pyridinethiol-1-oxide

S-002 C<sub>5</sub>H<sub>4</sub>NOSNa 149.14 C, O

A bactericide used in cooling fluids and short term -in can- preservation of vinyl acetate latex, paints and synthetic fiber lubricants. Can also be found as a preservative for cosmetic rinse-off products. Also known as Sodium omadine. **CAS** 3811-73-2.

#### Sodium tetrachloropalladate(II) hydrate

S-017  $Cl_4Na_2Pd\cdot 3H_2O$  348.20 DS, DMP, MET,

This hapten is a marker for contact allergy to **palladium**. It is an inorganic compound used in among other things in chemical synthesis as a catalyst. It is present in many alloys containing palladium. **CAS** 13820-53-6.

#### Sodium tungstate dihydrate

S-019 Na<sub>2</sub>WO<sub>4</sub> · 2H<sub>2</sub>O 329.85 MET

In patch testing Sodium tungstate dihydrate is used to diagnose a contact allergy to **tungsten**. It can be found in incandescent light bulb filaments, X-ray tubes, and electrodes in welding, superalloys, and radiation shielding. About half is used in the form of tungsten carbide, WC. Tungsten's hardness and high density gives it military applications in penetrating projectiles. Tungsten compounds are also often used as industrial catalysts. In medicine, tungsten can be found in medical devices such as joint replacements, intravascular devices and dental implants. Tungsten is also used in jewelry. **CAS** 10213-10-2.

#### Softisan 649

S-016

SOFTISAN 649 is a partial ester of diglycerin with medium chain fatty acids, isostearic acid, stearic acid, 12-hydroxystearic acid and adipic acid. Used in cosmetics in skin care, baby creams, decorative cosmetics and hair care products as lanolin substitute and as a cream base. **CAS** 130905-60-1.

Art. No. Formula FW Series SORBIC ACID  $C_6H_8O_2 \qquad 112.13 \qquad B, C, LU, AC$ 

A preservative (antifungal) found in foods like cheese syrup etc. and in cosmetic and pharmaceutical products. Also used in alkyd coatings and drying oils, adhesives, glues, inks, paints, varnishes, tanning agents, metalworking fluids. **Cross: potassium sorbate. ICU, NICU. CAS** 110-44-1.

#### **SORBITAN OLEATE**

S-004 C, LU

Monoester of oleic acid and hexitol anhydrides derived from sorbitol. An emulsifier in cosmetic and pharmaceutical ointments and creams. Also known as Sorbitan monooleate and Span 80. **Cross: SORBITAN SESQUIOLEATE. CAS** 1338-43-8.

#### **SORBITAN SESQUIOLEATE**

S-005 C, LU, AC

Mixed ester of oleic acid and hexitol anhydrides derived from sorbitol. Used as emulsifier in cosmetic and pharmaceutical ointments and creams. **CAS** 8007-43-0.

#### Spiramycin base

S-012 C<sub>42</sub>H<sub>74</sub>N<sub>2</sub>O<sub>44</sub> 842.51 CAD

Spiramycin is a macrolide antibiotic which is used to treat toxoplasmosis. Although routinely used in Europe, spiramycin is still considered an experimental drug in the United States. Used in Europe since 2000 year as "Rovamycine", produced by Rhone-Poulenc Rorer, France and Eczacibasi Ilae, Turkey. **CAS** 8025-81-8.

#### STANNOUS CHLORIDE

S-013 SnCl<sub>2</sub> 189.60 MET

This hapten is a marker for contact allergy to **tin**. A solution of tin(II) chloride containing a little hydrochloric acid is used for the tin-plating of steel, in order to make tin cans. SnCl<sub>2</sub> also reduces quinones to hydroquinones. STANNOUS CHLORIDE is also added as a food additive with E number E512 to some canned and bottled foods, where it serves as a color-retention agent and antioxidant. It is used in production of ornamental glass called aurene glass. **CAS** 7772-99-8.

Art. No. Formula FW Series

#### Stannous oxalate

Change of name as of January 2014; please refer to Tin(II)oxalate (Art. No. S-014).

#### STEARYL ALCOHOL

S-006 C<sub>10</sub>H<sub>20</sub>O 270.48 C

A lubricant and antifoam agent in cosmetic and pharmaceutical creams and in textile oils and finishes. **UCU. CAS** 112-92-5.

#### **Styrax**

S-008 F

Balsam obtained from the trunk of trees. Contains cinnamates, styrene, etc. Used in perfumery. Cross: Peru balsam, tincture of benzoin, dieythylstilbestrol. CAS 8046-19-3.

#### Sulfanilamide

S-010 C<sub>6</sub>H<sub>8</sub>N<sub>2</sub>O<sub>2</sub>S 172.21 ME

A topical and vaginal antibiotic of sulfonamide type. Cross (photo): para group of compounds. May produce erythema multiforme like eruptions. PA. PL. CAS 63-74-1.

T

#### Tanacetum vulgare extract

T-033 PL

A strongly aromatic weed growing in uncultivated areas, along roadsides, rivers etc. Grows all over Europe and in North America. Used as a herbal remedy, for seasoning and for making a tea. The oil is used as a vermifuge and in perfumery. Contains the sesquiterpene lactones arbusculin-A and tanacetin. Also known as Tanacetum Vulgare and Tansy. Also available as part of Mx-29A and Mx-29B. Cross: Other plants within the Compositae family.

Art. No.	Formula	FW	Series
Tantalum			
T-047	Та	180.95	MET

Tantalum is a chemical element. It is widely used as minor component in alloys. Its main use today is in tantalum capacitors in electronic equipment such as mobile phones, DVD players, video game systems and computers. It can also be used in medical implants and bone repair. **CAS** 7440-25-7.

#### Taraxacum officinale extract

T-032 ы

Taraxacum Officinale (Dandelion) is a weed that grows in open fields. on prairies, in garbage dumps, etc. and spread all over the world. It is a popular folk medicine plant (laxative, diuretic, tonic, etc.). Haptenic substance is taraxin acid glucoside. Also known as Taraxacum Officinale, Cross: Other plants within the Compositae family, May cause airborne contact dermatitis.

#### Tea tree oil oxidized

T-035 ICB, C, NAE, NAC. AC

Oil from distilled leaves of Melaleuca Alternifolia. Pale yellowish green oil of a warm spicy aromatic terpenic odor. The oil has served as an antiseptic for many decades but is now also sold as a remedy for various skin and nail conditions. Also present in household products like cleansers, laundry agents and fabric softeners. Some Perfumery Uses: Herbal; Nutmeg; Mint; Pine. Common haptens present are d-limonene, α-terpinene and aromadendrene. May cause airborne contact dermatitis.

#### **Tetracaine hydrochloride**

T-025 C<sub>15</sub>H<sub>25</sub>CIN<sub>2</sub>O<sub>2</sub> 300.83

Used as topical and local anesthetic. Amethocaine, Also available as part of Mx-13. Mx-19 and Mx-31. Cross: Amylocaine hydrochloride. CAS 136-47-0.

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3,3',4',5-Tetrachlorosalicylanilide

Deleted 2018

#### Tetraethylene glycol dimethacrylate

T-029 C, H, O, 330.37

MA

A methacrylate present in adhesives and constitutes the main component in polyethylene glycol dimethacrylate in Loctite anaerobic sealants CAS 109-17-1

#### Tetraethylthiuram disulfide

T-002

C10H20N2S4

296.54

R

An accelerator, activator, stabilizer and vulcanizing agent for various rubber products. Also used as a fungicide, seed disinfectant, and alcohol deterrent. Also known as disulfiram, antabuse and TETD. Also available as part of Mx-01. CAS 97-77-8.

#### **Tetrahydrofurfurylmethacrylate**

T-027

 $C_0H_{44}\tilde{O}_0$ 

170.21

DS. MA. MN. DMP. DMS

A methacrylic component used in dental materials such as crown and bridge products. Also used as a component in artificial nails. CAS 2455-24-5.

#### Tetramethylthiuram disulfide

T-005

 $C_{e}H_{12}N_{2}S_{4}$ 

240.44

R

A rubber accelerator and vulcanizer. Works as a fungicide. disinfectant for seed, bacteriostat in soap, animal repellent, etc. Also known as Thiram and TMTD. Also available as part of Mx-01. Cross: Tetraethylthiuram monosulfide. Tetraethylthiuram disulfide. CAS 137-26-8.

#### Tetramethylthiuram monosulfide

C<sub>e</sub>H<sub>12</sub>N<sub>2</sub>S<sub>2</sub> T-006

208.37

R

An accelerator and activator for natural rubber nitrile-butadiene and butvl rubber, Also known as TMTM. Also available as part of Mx-01. CAS 97-74-5.

Art. No.	Formula	FW	Series
THIMEROSA	<b>AL</b>	404.84	ICB, C, O, LU,
T-007	C <sub>9</sub> H <sub>9</sub> HgNaO <sub>2</sub> S		NAC, LA

A preservative used in vaccines, antitoxins, skin testing antigens, antiseptics, eyedrop solutions, contact lens solutions, and cosmetic products like eye makeup. Also known as Merthiolate. **CAS** 54-64-8.

#### 2,2'-THIOBIS(4-CHLOROPHENOL)

F-001 C<sub>12</sub>H<sub>8</sub>Cl<sub>2</sub>O<sub>2</sub>S 287.18

A fungicide especially used against Monosporium apiospermum. Used as a topical antifungal and antibacterial agent in hairdressings, antifungal creams, and ointments, also used as thermoplastic resin. Cross (photo): Bithionol, hexachlorophene. PA. PT. PL. CAS 97-24-5.

#### **Thiourea**

T-026 CH<sub>4</sub>N<sub>2</sub>S 76.12 R

A photographic fixing agent and stain remover. Can be used as a rubber accelerator and used in the manufacture of resins. Also used as an antioxidant in photocopy paper to prevent discoloration. **May cause airborne contact dermatitis. PA. CAS** 62-56-6.

#### Tin

T-008 Sn 118.69 DS, MET

A metal used in tin plating, soldering and dental alloys, collapsible tubes. Used in the production of tin salts. **CAS** 7440-31-5.

#### Tin(II)oxalate

S-014 C<sub>2</sub>O<sub>4</sub>Sn 206.71 MET

This hapten is a marker for contact allergy to tin. Tin(II)oxalate is used as a catalyst (Esterification reactions) and in dyeing and printing textiles etc. CAS 814-94-8.

Art. No. Formula		FW	Series
Tioconazole	)		
T-034	$C_{16H_{13}Cl_3N_2OS}$	387.71	ME

Tioconazole is an antifungal medication of the Imidazole class used to treat infections caused by a fungus or yeast. Tioconazole ointments serve to treat women's vaginal yeast infections. Tioconazole topical (skin) preparations are also available for ringworm, jock itch, athlete's foot, and tinea versicolor or "sun fungus". **CAS** 65899-73-2.

#### **Titanium**

T-042 Ti 47.88 MET

A light, strong, lustrous, corrosion-resistant (including resistance to sea water and chlorine) transition metal with a grayish color. Can be alloyed with other elements such as iron, aluminium, Vanadium, molybdenum and others, to produce strong lightweight alloys for aerospace, military, industrial process (chemicals and petrochemicals, desalination plants, pulp and paper), automotive, agrifood, medical (prostheses, orthopaedic implants, dental implants), sporting goods, and other applications. **CAS** 7440-32-6.

#### TITANIUM DIOXIDE

T-040 O<sub>2</sub>Ti 79.87 MET

This hapten is a marker for contact allergy to **titanium**. Is the naturally occurring oxide of Titanium. When used as a pigment, it is called Titanium white or Pigment White 6. It is noteworthy for its wide range of applications, from paint to sunscreen to food colouring. Used as a white food colouring, it has E number E171. In cosmetic and skin care products, TITANIUM DIOXIDE is used both as a pigment and a thickener. It is also used as a tattoo pigment and styptic pencils. This pigment is used extensively in plastics and other applications for its UV resistant properties where it acts as a UV absorber, efficiently transforming destructive UV light energy into heat. **CAS** 13463-67-7.

#### Titanium(III)nitride

T-039 TiN 61.89 MET

This hapten is a marker for contact allergy to **titanium**. This metal (sometimes known as Tinite) is an extremely hard, ceramic material, often used as a coating on Titanium alloy, steel, carbide, and aluminium components to improve the substrate's surface

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properties. The most common use for TiN coating is for edge retention and corrosion resistance on machine tooling, such as drill bits and milling cutters. Because of TiN's metallic gold color, it is used to coat costume lewelry and automotive trim for decorative purposes. TiN is also widely used as a top-layer coating, usually with nickel or chromium plated substrates, on consumer plumbing fixtures and door hardware. TiN is non-toxic, meets FDA guidelines and has seen use in medical devices and bio-implants, as well as aerospace and military applications. Coatings of TiN have also been used in implanted prostheses and in dental alloys. CAS 25583-20-4.

#### Titanium(IV)oxalate hydrate

TiC,O,H, · xH,O 241.92 · xH,O T-041 MET

This hapten is a marker for contact allergy to **titanium**. Titanium oxalate could be used as a source for titanium in a process for preparing zinc-alloy-electroplated steel sheets excellent in corrosion resistance comprising electroplating steel sheets. Used in the preparation of a welding flux binder and welding flux comprising the reaction product of a hydrolyzed and polymerized organometallic compound such as metal esters and metal oxalates. A metal salt for testing of allergy to Titanium in dental alloys.

#### Tixocortol-21-pivalate

S. ICB. IS. CS. T-031 C<sub>2</sub>H<sub>2</sub>O<sub>5</sub>S 462.35 LU. ECB. NA. NAE, NAC, LA

A topical corticosteroid belonging to the group A (hydrocortisone) type of steroids used in nasal sprays for the treatment of rhinitis. Good marker for group A corticosteroid contact allergy. Also available as part of Mx-23. May cause airborne contact dermatitis. Cross: Budesonide. Fluocinolone acetonide. Hydrocortisone. Hvdrocortisone-17butvrate. Prednisolone Acetate. Triamcinolone acetonide, CAS 55560-96-8.

#### **Tobramycin**

T-050  $C_{10}H_{27}N_{E}O_{0}$ 467.51 ME

This substance is an aminoglycoside antibiotic derived from Streptomyces tenebrarius and used to treat various types of bacterial infections, particularly Gram-negative infections, CAS 32986-56-4.

Art. No.	Formula	FW	Series
TOCOPHER T-036	<b>OL</b> C <sub>20</sub> H <sub>50</sub> O <sub>2</sub>	430.71	ICB, C, NAE,
	29 50 2		NAC, AC

DL-Alpha-tocopherol is the form of vitamin E that is preferentially absorbed and accumulated in humans. In general, food sources with the highest concentrations of vitamin E are vegetable oils, followed by nuts and seeds including whole grains. Although originally extracted from wheat germ oil, most natural vitamin E supplements are now derived from vegetable oils, usually soybean oil. Vitamin E is widely used as an inexpensive antioxidant in cosmetics and foods. Vitamin E containing products are commonly used in the belief that vitamin E is good for the skin; many cosmetics include it, often labeled as tocopherol acetate, tocopheryl linoleate or tocopheryl nicotinate. Some individuals experience allergic reactions to some tocopheryl esters or develop a rash and hives that may spread over the entire body from the use of topical products with alpha tocopheryl esters. CAS 10191-41-0.

#### TOCOPHERYL ACETATE

T-037  $C_{21}H_{E2}O_{2}$ 472.75 C

Tocopheryl acetate, also known as vitamin E acetate, is a common vitamin supplement, it is the ester of acetic acid and tocopherol (vitamin E). It is often used in dermatological products such as skin creams. Tocopheryl acetate is used as an alternative to tocopherol itself because the phenolic hydroxyl group is blocked, providing a less acidic product. It is believed that the acetate is slowly hydrolyzed once it is absorbed into the skin, regenerating tocopherol and providing protection against the sun's ultraviolet rays. **CAS** 7695-91-2.

#### Tolu balsam absolute

Deleted 2018

#### **TOLUENE-2,5-DIAMINE**

T-049  $C_7H_{10}N_2$ 122.17 Н

This substance is used in hair dye products. **CAS** 95-70-5.

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 TOLUENE-2,5-DIAMINE SULFATE
 D-002
 C<sub>2</sub>H<sub>42</sub>N<sub>3</sub>·H<sub>2</sub>SO<sub>4</sub>
 220.25
 H

The primary intermediate in various permanent hair dyes Also known as 4-Toluenediamine, 2,5-Diaminotoluene sulfate and PTD. **CAS** 615-50-9.

#### Toluene-2,4-diisocyanate

T-009  $C_9H_6N_2O_2$ 

174.15

- 1

Used in the production of polyurethane foams, elastomers, adhesives, printing plates, etc. Also known as TDI. **May cause allergic asthma. CAS** 584-84-9.

#### Toluenesulfonamide formaldehyde resin

T-010

ICB, IS, PG, NA AC. NAE. NAC. LA

A modifier and adhesion promotor used for film forming natural and synthetic resins. Occurs in vinyl lacquers, nitrocellulose compositions (e.g., nail lacquers), PVA adhesives, acrylics. **CAS** 1338-51-8.

#### 4-Tolyldiethanolamine

T-011

C<sub>11</sub>H<sub>17</sub>NO<sub>2</sub>

195.26

DS

An amine accelerator for the polymerization of e.g. dental acrylic composite restorative materials. **CAS** 3077-12-1.

#### Treemoss absolute

E-026

This is a chemical extract of the treemoss plant Evernia Furfuracea and oak moss. Used in perfumes, cosmetics, moisturizers, fragrance for men, body powder, sunscreen products, lipsticks, shampoos and soaps among others. The raw material for this product is made from an hexane extraction of the moss giving a concrete, then the absolute is obtained by extrating the concrete with ethanol. The moss used is Pseudevernia furfuracea & usnea barbata. Also known as Evernia furfuracea. NOTE: The preparation is based on the raw material of treemoss absolute that has not been subject to chemical reduction of atranol and chloroatranol. CAS 94944-93-1

Art. No.	Art. No. Formula		Series
Triamcinolo	one acetonide		
T-030	$C_{24}H_{31}FO_{6}$	434.49	CS, AC

A topical and systemic corticosteroid belonging to the group B (triamcinolone acetonide) type of steroids. Cross: Budesonide, Fluocinolone acetonide, Hydrocortisone, Hydrocortisone-17-butyrate, Prednisolone Acetate, Tixocortol-21-Pivalate. CAS 76-25-5.

#### 3,4,5-Tribromosalicylanilide (TBS)

T-012

 $C_{13}H_8Br_3NO_2$ 

449.96

6

Abacteriostatic agent found in detergents and soaps, disinfectants, pet flea powders. Also known as Tribromsalan. Cross (photo): Bithionol and other halogenated salicylanilides, TRICLOCARBAN, hexachlorophene, fentichlor. PA, PT. CAS 87-10-5.

#### **TRICLOCARBAN**

T-013

 $C_{13}H_9CI_3N_2O$ 

315.59

O, EPE

a bacteriostat and antiseptic agent found in soaps and other cleansing compositions. Used as a disinfectant. Also known as 3,4,4-Trichlorocarbanilide and TCC. Cross (photo): bithionol and other halogenated salicylanilides. PA. PT. May cause pigmentation of the face. CAS 101-20-2.

#### **TRICLOSAN**

T-014

 $C_{12}H_7CI_3O_2$ 

289.53

C. O. EPE

A preservative found in cosmetic products, soaps, detergents, shampoos, bath additives, deodorants, foot powders and sprays, disposable paper products, antiodor insoles and hose, laundry products. Also used in the treatment of textiles and as antifungal agent in PVC wetroom carpets. Also known as Irgasan DP 300. **PA. CAS** 3380-34-5.

#### Tricresyl phosphate

T-015

 $C_{21}H_{21}O_{4}P$ 

368.36

PG

A plasticizer found in vinyl plastics, spectacle frames. Used as a flame retardant and additive to extreme pressure lubricants. Can also be used as solvent for nitrocellulose, etc. **CAS** 1330-78-5.

Art. No.	Formula	FW	Series
TRIETHANG	DLAMINE		
T-016	$C_6H_{15}NO_3$	149.19	ICB, C, O, LU

A surface-active agent found in soaps, shampoos, creams, waxes, cutting oils etc. Used in making emulsions with mineral and vegetable oils. **CAS** 102-71-6.

#### Triethylene glycol diacrylate

T-017 C<sub>12</sub>H<sub>18</sub>O<sub>6</sub> 258.28 MN, MP

A cross-linking acrylate monomer used in coatings, adhesives, and in printing plates of photoprepolymer type. Also known as TEGDA. **CAS** 1680-21-3.

#### 

A methacrylic monomer used as cross-linking agent for adhesives and dental restorative materials. Also know as TEGDMA and TREGDMA. **CAS** 109-16-0

#### **Triethylenetetramine**

T-019  $C_6H_{18}N_4$  146.23 E

Used as epoxy curing agent, lubricating oil additive, chelating and analytical agent. Also known as TETA. **CAS** 112-24-3.

#### Triglycidyl isocyanurate

T-028 C<sub>12</sub>H<sub>15</sub>N<sub>3</sub>O<sub>6</sub> 297.27 PG

Trifunctional epoxy compound used as cross-linker in heat-cured polyester paints used for laminated sheetings, printed circuits, tools, inks, adhesives, lining materials etc. Also known as TGIC. **May cause airborne contact dermatitis. CAS** 2451-62-9.

#### 2,2,4-Trimethyl-1,2-dihydroquinoline

T-020  $(C_{12}H_{15}N)_{p}$  R

An antioxidant used in rubber and plastic materials. Also used in hydraulic fluids and greases. Also known as Flectol H and Agerite resin D. **CAS** 26780-96-1

Art. No.	Art. No. Formula		Series
Trimethyl	olpropane tri	acrylate	
T-021	$C_{15}H_{20}O_{6}$	296.31	MN, MP

A triacrylate used in UV-curable lithographic inks, varnishes, artificial nails, wood finish solder, and etch resists in the electronics industry. Also known as TMPTA. **CAS** 15625-89-5

#### Trimethylolpropane triglycidyl ether

T-038  $C_{15}H_{26}O_{6}$  302.36 E

A trifunctional glycidyl ether of trimethylolpropane. It is used as a general purpose diluent to reduce the viscosity of epoxy resins and provides excellent crosslinking with good reactivity used in adhesives and coatings. **CAS** 30499-70-8.

#### 3,4,4-Trimethyl-oxazolidine

Comp. in D-015 C<sub>6</sub>H<sub>15</sub>NO 115.18 O

Component in Bioban CS 1135, a preservative (2.5%) used in latex paints, resin emulsions, and cooling fluids. D-015: **Bioban CS 1135:** also contains 4,4-Dimethyloxazolidine. Neither of the substances can be ordered separately.

#### 2,4,6-Tris(dimethylaminomethyl)phenol

T-048 C<sub>15</sub>H<sub>27</sub>N<sub>3</sub>O 265.39 E

This chemical is a tertiary amine activator for epoxy resins. Used in coatings, flooring, adhesives, castings, potting and encapsulation. **CAS** 90-72-2.

#### TRIS(HYDROXYMETHYL)NITROMETHANE

H-015  $C_4H_9NO_5$  151.12 O

A bactericide and slimicide used in cooling fluids, paper and pulp industry. Also used as curing agent for certain adhesives. Also known as Tris Nitro and 2-Hydroxymethyl-2-nitro-1,3-propanediol. **CAS** 126-11-4.

#### Triphenyl phosphate

T-022 C<sub>40</sub>H<sub>4E</sub>O<sub>4</sub>P 326.28 PG

A plasticizer in plastics (e.g., cellulose acetate) lacquers, varnishes, etc. Also used in impregnating roofing paper. **CAS** 115-86-6.

A diacrylate monomer for use in UV-curable flexographic and silk screen inks, wood-finish varnishes, coatings on plastics, etc. Also known as TPGDA. **CAS** 42978-66-5.

#### **Tungsten**

T-043 W 183.84 MET

Tungsten, also known as Wolfram, is a metal with a wide range of uses, the largest of which is as Tungsten carbide (W2C, WC) in cemented carbides. Cemented carbides (also called hardmetals) are wear-resistant materials used by the metalworking, mining, petroleum and construction industries. Tungsten is widely used in light bulb and vacuum tube filaments, as well as electrodes, because it can be drawn into very thin wire with a high melting point. Tungsten is used in material for implanted electrodes and in orthopaedic and dental implants as well as in coils to treat intracranial aneurysms. **CAS** 7440-33-7

#### **Turpentine oil oxidized**

T-024 C

Mixture of hydroperoxides of terpenes found in oil of turpentine. Main hapten is the hydroperoxide of  $\delta$ -3-carene. Used in solvents or lacquers for printing, etching and art painting. Found in sealing wax, coolants, tapes, polish, metal cleaners, deodorizers, paints, and cosmetics. **Cross:** Chrysanthemum, pyrethrin. May cause airborne contact dermatitis.

## U

#### Urea formaldehyde resin

U-001  $C_3H_8N_2O_3$  120.11 TF

A textile finish resin of formaldehyde type for treatment of, e.g., cotton and rayon materials. Also used in wood glue industry. **CAS** 9011-05-6.

#### Urethane diacrylate, aliphatic

Deleted 2019 1500

An UV-reactive prepolymer based on an acrylated aliphatic isocyanate. Used in curable coatings, inks, and varnishes.

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Urethane diacrylate, aromatic

Deleted 2019 1000

An UV-reactive prepolymer based on an acrylated aromatic isocyanate. Used in curable coatings, inks and varnishes. Also known as Ebecryl 220. Contains also pentaerythritoltriacrylate and pentaerythritoltetraacrylate.

#### **Urethane dimethacrylate**

 $\text{U-004} \qquad \qquad \text{C}_{23} \text{H}_{38} \text{N}_2 \text{O}_8 \qquad \qquad \text{470.56} \qquad \quad \text{DS, MA}$ 

A methacrylate based on a methacrylated aliphatic isocyanate. Used in dental bonding agents, resin veneering, and restorative materials Also known as UDMA. **CAS** 72869-86-4.

#### (+)-Usnic acid

U-005 C<sub>18</sub>H<sub>16</sub>O<sub>7</sub> 344.31 PL

An antibacterial substance found in many lichens. Occurs in oak moss absolute which is used as fragrance. Used as a preservative in deodorants, antiacne formulations, and as antibiotic for topical application. Also available as part of Mx-15. **Cross: oak moss. May cause airborne contact dermatitis. CAS** 7562-61-0



#### Vanadium

V-002 V 50.94 MET

Vanadium is soft and ductile element, which occurs naturally in certain minerals and is used mainly to produce certain alloys. Approximately 80% of Vanadium produced is used as ferrovanadium or as a steel additive. Other uses: In such alloys as specialty stainless steel, e.g. for use in surgical instruments and tools. Such tools are rust resistant and high speed tool steels. Mixed with aluminium in Titanium alloys used in jet engines and high-speed airframes .Used in dental alloys.Vanadium steel alloys are used in axles, crankshafts, gears, and other critical components. It is an important carbide stabilizer in making steels. Vanadium foil is used in cladding Titanium to steel. CAS 7440-62-2.

Art. No.	Formula	FW	Series
Vanadium(I	ll)chloride		
V-003 VCI <sub>3</sub>		157.30	MET

This hapten is a marker for contact allergy to **vanadium**. Used as a catalyst in the polymerization of olefins, epoxy, phenolic and silicone resins. For testing purpose this is also used to test allergy for Vanadium. Vanadium is used in applications for bicycle parts, glass coatings and jewelry. It can also be found in dental implants. **CAS** 7718-98-1.

#### Vanadium(V)oxide

V-005  $V_2O_5$  181.88 MET

This hapten is a marker for contact allergy to **vanadium**. A principal precursor to alloys of vanadium and is a widely used as an industrial catalyst. It can also be found in air care products, floor coverings, paints and coatings. For testing purpose this is also used to test allergy for Vanadium. Vanadium is used in applications for bicycle parts, glass coatings and jewelry. It can also be found in dental implants. **CAS** 1314-62-1.

#### Vancomycin hydrochloride

V-004 C<sub>66</sub>H<sub>75</sub>C<sub>12</sub>N<sub>9</sub>O<sub>24</sub>·HCI 1485.71 ME

This substance is an antibiotic used to treat a number of bacterial infections. It is used as a first-line treatment for complicated skin infections, bloodstream infections, endocarditis, bone and joint infections, and meningitis caused by methicillin-resistant S. aureus. **CAS** 1404-93-9.

#### **VANILLIN**

V-001 C<sub>8</sub>H<sub>8</sub>O<sub>3</sub> 152.14 B, F

A flavoring agent found in beverages, confectionery, foods, galenicals. Used in perfumery, pharmaceuticals and also as chemical reagent. Also known as Vanillin. **Cross: COUMARIN, Propolis. ICU. CAS** 121-33-5.



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#### m-Xylylenediamine

X-001  $C_8H_{12}N_2$  136.19 E

The chemical is an intermediate in the production of epoxy curing agents, polyamides and polyurethanes. Due to the chemical binding processes that occur during curing, finished products do not contain the chemical. The substance is also not present in the industrial intermediates used in the production of polyamides and polyurethanes, but a few percent is present in the epoxy curing agent. The great majority of the epoxy curing agent is assumed to be used by industrial or professional users. Greater than 99.9% of the substance is used in three categories: polyamide (major), epoxy curing agent, and polyurethane production. Also known as 1,3-bis(aminomethyl)benzene. **CAS** 1477-55-0.



#### Ylang ylang oil

Y-001

ICB, F, NA, NAE. NAC. AC

This substance is used in soap perfumes and in general perfumery as a floral additive of extremely versatile application. It blends with almost any other floral natural or synthetic material and gives good effects in a concentration of 0.5% up to about 5% of the perfume base. The fragrance is also used in washing detergents, hair products and skin powder. The oil is steam distilled from the flowers of Cananga odorota genuine. Fractions of the oil are collected over the course of distillation to obtain different grades. The first and finest fraction is called ylang-ylang oil. The oil has a very sweet tropical floral scent, smells like a combination of Jasmine and bitter almond-peppermint. Main chemical components are Linalool, p-Cresyl methyl ether, beta-Caryophyllene, Geranyl acetate, Methyl benzoate, Benzyl benzoate, Farnesol, Geraniol, Isoeugenol, Eugenol and Citral. Also known as CANANGA ODORATA OIL. Cross: Benzyl salicylate, geranial. May cause pigmentation of the face. CAS 8006-81-3.

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Zinc

Z-001 Zn 65.38 MET

Zinc metal is included in most single tablet over-the-counter daily vitamin and mineral supplements. Zinc is the fourth most common metal in use, trailing only iron, aluminium, and copper in annual production. Zinc is used to galvanize steel to prevent corrosion. Zinc is used to Parkerize steel to prevent rust and corrosion and used in alloys such as brass, nickel silver, dental alloys, typewriter metal and various soldering formulas. Zinc is the primary metal used in making some coins and used in die casting notably in the automobile industry . Zinc is used as part of the containers of batteries. The most widespread such use is as the anode in alkaline batteries. **CAS** 7440-66-6.

#### ZINC CHLORIDE

Z-007 Cl<sub>2</sub>Zn 136.28 MET

This hapten is a marker for contact allergy to **zinc**. Other uses are as a deodorant and as a wood preservative. **CAS** 7646-85-7.

#### ZINC DIBUTYLDITHIOCARBAMATE

Z-002 C<sub>18</sub>H<sub>26</sub>N<sub>2</sub>S<sub>4</sub>Zn 474.14 R

An activator, antidegradant and accelerator for natural rubber, butadiene, styrene-butadiene, nitrile-butadiene, butyl rubber, and ethylene-propylene-diene terpolymers. Also known as ZBC. Also available as part of Mx-06. **CAS** 136-23-2.

#### Zinc diethyldithiocarbamate

Z-003  $C_{10}H_{20}N_2S_4Zn$  361.91 R

An activator and accelerator for natural rubber, styrene-butadiene, nitrile-butadiene, and butyl rubber. Also known as ZDC. Also available as part of Mx-06. **ICU. CAS** 14324-55-1.

Art. No. Formula		FW	Series
Zinc dimeth	yldithiocarbaı	mate	
Z-004	$C_6H_{12}N_2S_4Zn$	305.82	R

An activator and accelerator for natural rubber, styrene-butadiene, and butyl rubber. An agricultural fungicide used for seeds, plants, and fruit. Also known as Ziram. **CAS** 137-30-4.

#### Zinc ethylenebis-(dithiocarbamate) (Zineb)

Z-005 C<sub>4</sub>H<sub>6</sub>N<sub>2</sub>S<sub>4</sub>Zn 275.75 O

A fungicide used in cooling fluids and as pesticide for seeds, plants, and fruit. Also known as Zineb. **CAS** 12122-67-7.

#### ZINC PYRITHIONE

Z-006  $C_{10}H_8N_2S_2O_2Zn$  317.70 H

An antifungal, antibacterial and antiseborrheic agent used in many shampoos and hair creams. Also known as Zinc omadine. **Reactions may lead to photosensitive eczema and actinic reticuloid syndrome. CAS** 13463-41-7.

#### Zirconium(IV)chloride

Z-008 Cl<sub>4</sub>Zr 233.03 MET

This hapten is a marker for contact allergy to **zirconium**. This metal salt is a white high-melting solid which hydrolyzes rapidly in humid air. It is used to make water-repellent textiles and can also be used in implants. **CAS** 10026-11-6

#### ZIRCONIUM DIOXIDE

Z-009 ZrO<sub>2</sub> 123.22 MET

This hapten is a marker for contact allergy to zirconium. This chemical is a ceramic material and the most natural form of the element Zirconium. It is found in insulation, abrasives, enamels, ceramic glazes, and as diamond substitute in jewelry. It is also used in the construction of dental restorations such as crowns and bridges. It can also be used as radio-opaque material in bone cement. In orthopedic surgery bone cement is used to fix metal implants such as hip- and knee replacements. **CAS** 1314-23-4.

Catal	ogue amendments Januar	rv 2020	10.4000	September 2019.
	ogue unicilanite janitus	19 2020	IS-1000	No 18 IMIDAZOLIDINYL UREA 2.0% aq (I-001B) changed to IMIDAZOLIDINYL UREA 2.0% pet (I-001A).
New top	ical haptens	In Series	MA-1000	No 16 ISOBORNYL ACRYLATE 0.1% pet (I-019)
I-019	ISOBORNYL ACRYLATE 0.1% pet	MA, MP	IVIA- 1000	added.
Mx-28B	Gallate mix 1.0% pet	B, C	MET-1000	No 6 Cobalt(II)chloride hexahydrate 1.0% pet (C-017A)
	·		WIE 1-1000	added.
Deleted	topical haptens	In Series	MET-1000	No 36 Lead(II)acetate trihydrate 0.5% aq (L-007)
A-006A	PABA 5.0% pet	NAP		changed to Nickel(II)sulfate hexahydrate 5.0% pet
A-006B	PABA 5.0% alc	NAP		(N-002A).
B-029B	BUTYL METHOXYDIBENZOYLMETHAN	NE NAP	MET-1000	No 55 Potassium dichromate 0.5% pet (P-014A) added.
	5.0% pet		MP-1000	No 20 Epoxy acrylate 0.5% pet (E-001) changed
C-027	Cyclohexanone resin 1.0% pet	PG		to ISOBORNYL ACRYLATE 0.1% pet (I-019).
D-029	Disperse Blue 153 1.0% pet	TF	MP-1000	No 21 Urethane diacrylate, aliphatic 0.1% pet (U-002)
E-001	Epoxy acrylate 0.5% pet	MP		changed to Triethylene glycol diacrylate 0.1% pet (T-017).
E-018B	ETHYLHEXYL DIMETHYL PABA 5.0% p	et NAP	MP-1000	No22 Urethane diacrylate, aromatic 0.05% pet (U-003)
E-018C	ETHYLHEXYL DIMETHYL PABA 5.0% a	lcNAP		changedtoN,N-Methylene-bisacrylamide1.0%pet(M-023).
E-019B	ETHYLHEXYL METHOXYCINNAMATE	NAP	MP-1000	No23Triethyleneglycoldiacrylate0.1%pet(T-017)deleted.
	7.5% pet		MP-1000	No 24 N,N-Methylene-bisacrylamide 1.0% pet (M-023)
E-020	Epoxy resin, Cycloaliphatic 0.5% pet	E		deleted.
H-023B	BENZOPHENONE-4 10.0% pet	NAP, SF	NAP-1000	No 1 ETHYLHEXYL METHOXYCINNAMATE 7.5% pet
I-001B	IMIDAZOLIDINYL UREA 2.0% ag	IS		(E-019B) changed to ETHYLHEXYL METHOXYCIN
L-007	Lead(II)acetate trihydrate 0.5% ag	MET		NAMATE 10.0% pet (E-019C).
M-029	Minocycline hydrochloride 10.0% pet	CAD	NAP-1000	No2BENZOPHENONE-410.0% pet (H-023B) changed
Mx-21C	Dermatophagoides mix 30.0% pet	V		to BENZOPHENONE-4 2.0% pet (H-023C).
Mx-28	Gallate mix 1.5% pet	B, C	NAP-1000	No 10 PABA 5.0% alc (A-006B) changed to PABA 10.0%
P-017A	Promethazine hydrochloride 1.0% pet	NAP		pet (A-006C).
U-002	Urethane diacrylate, aliphatic 0.1% pet	MP	NAP-1000	No 13 ETHYLHEXYL DIMETHYL PABA 5.0% alc
U-003	Urethane diacrylate, aromatic 0.17% pet			(E-018C) changed to 10.0% pet (E-018D).
H-006	HYDROGEN PEROXIDE 3.0% aq	H	NAP-1000	No 15 Promethazine hydrochloride 1.0% pet (P-017A)
1.000	THEROOLIT LINOXIDE 0.070 aq	**		changed to Promethazine hydrochloride 0.1% pet
Hanten !	Series Amendment		(P-017B).	
•			NAP-1000	No 16 ETHYLHEXYL DIMETHYL PABA 5.0% pet
AC-1000	American Core Series added.	11-0-11-4-		(E-018B) changed to METHYLANTHRANILATE 5.0%
B-1000	No 20 Gallate mix 1.5% pet (Mx-28) chang	ged to Gallate		pet (M-028).
2 4000	mix 1.0% pet (Mx-28B).	0 !! !	NAP-1000	No 18 PABA 5.0% pet (A-006A) changed to 6-METHYL
C-1000	No 60 Gallate mix 1.5% pet (Mx-28) chang	ged to Gallate		COUMARIN 1.0% alc (M-010B).
2.5.400	mix 1.0% pet (Mx-28B).		NAP-1000	No23METHYLANTHRANILATE5.0%pet(M-028)deleted.
CAD-1000	- , ,		NAP-1000	No 24 6-METHYL COUMARIN 1.0% alc (M-010B) deleted.
E-1000	No 7 Epoxy resin, Cycloaliphatic 0.5% pe	et (E-020)	PCB-1000	Polish Comprehensive Baseline Series added July
	deleted.			2019.
GB-1000	Great Britain Baseline Series	extended		

PG-1000	No 24 Cyclohexanone resin 1.0% pet (C-0	27) changed	pet	(P-005)
	to Triglycidyl isocyanurate (TGIC) 0.5% p		IS-1000	No 31 Toluenesulfonamide formaldehyde resin 10.0%
PG-1000	No 25 Triglycidyl isocyanurate (TGIC) 0.59	% pet (T-028)	10-1000	pet (T-010) deleted
	deleted.		IS-1000	No 32 METHYLISOTHIAZOLINONE 0.2 aq (M-035B)
POL-1000	Polish Baseline Series revised July 2019	9.	10 1000	deleted
SF-1000	Swedish Photopatch Series deleted.	20)	AC-1000	No 19 METHYLDIBROMO GLUTARONITRILE 0.5%
TF-1000 V-1000	No 5 Disperse Blue 153 1.0% pet (D-02	,	pet	(D-049E) changed to Hydroperoxides of Linalool
V-1000	No 37 Dermatophagoides mix 30.0% p deleted August 2019.	et (IVIX-21C)	0.5%	pet (H-031B)
H-1000	No 12 HYDROGEN PEROXIDE 3.0%	ag (H-006)	AC-1000	No 21 FORMALDEHYDE 1.0% aq (F-002A) changed
	deleted December 2019.	44 (11 000)	to	FORMALDEHYDE 2.0% aq (F-002B)
			AC-1000	No 59 p-CHLORO-m-CRESOL 1.0% pet (C-008)
0.1		0001		changed to Hydroperoxides of Limonene 0.2% pet
Catalo	gue amendments Januai	y 2021	AC-1000	(H-032B) No 60 BENZALKONIUM CHLORIDE 0.1% aq (B-027A)
			AC-1000	
New topic	cal haptens	In Series	AC-1000	changed to BENZALKONIUM CHLORIDE 0.1% pet
C-009E	METHYLISOTHIAZOLINONE+		AC-1000	changed to BENZALKONIUM CHLORIDE 0.1% pet (B-027B)
C-009E	METHYLISOTHIAZOLINONE+ METHYLCHLOROISOTHIAZOLINONE 0.215% au	qIS		changed to BENZALKONIUM CHLORIDE 0.1% pet
C-009E	METHYLISOTHIAZOLINONE+			changed to BENZALKONIUM CHLORIDE 0.1% pet (B-027B) No 69 CETEARYL ALCOHOL 20.0% pet (C-033)
C-009E Mx-05C	METHYLISOTHIAZOLINONE+ METHYLCHLOROISOTHIAZOLINONE 0.215% a Mercapto mix 3.5% pet	q IS IS	AC-1000	changed to BENZALKONIUM CHLORIDE 0.1% pet (B-027B) No 69 CETEARYL ALCOHOL 20.0% pet (C-033) changed to HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE 5.0% pet (L-003) No 81 CETEARYLALCOHOL 20.0% pet (C-033) added
C-009E Mx-05C <b>Deleted p</b>	METHYLISOTHIAZOLINONE+ METHYLCHLOROISOTHIAZOLINONE 0.215% at Mercapto mix 3.5% pet roducts	qIS IS In Series	AC-1000 AC-1000 AC-1000	changed to BENZALKONIUM CHLORIDE 0.1% pet (B-027B) No 69 CETEARYL ALCOHOL 20.0% pet (C-033) changed to HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE 5.0% pet (L-003) No 81 CETEARYLALCOHOL 20.0% pet (C-033) added No 82 left blank
C-009E Mx-05C  Deleted p C-017B	METHYLISOTHIAZOLINONE+ METHYLCHLOROISOTHIAZOLINONE 0.215% as Mercapto mix 3.5% pet  roducts Cobalt(II)chloride hexahydrate 0.5% pet	q IS IS In Series SS, DMP	AC-1000 AC-1000 AC-1000 AC-1000	changed to BENZALKONIUM CHLORIDE 0.1% pet (B-027B) No 69 CETEARYL ALCOHOL 20.0% pet (C-033) changed to HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE 5.0% pet (L-003) No 81 CETEARYLALCOHOL 20.0% pet (C-033) added No 82 left blank No 83 BENZYL SALICYLATE 10.0% pet (B-010B) added
C-009E Mx-05C <b>Deleted p</b> C-017B SMUV	METHYLISOTHIAZOLINONE+ METHYLCHLOROISOTHIAZOLINONE 0.215% as Mercapto mix 3.5% pet  roducts Cobalt(II)chloride hexahydrate 0.5% pet Skin Marker UV	IS IS IN Series SS, DMP N/A	AC-1000 AC-1000 AC-1000 AC-1000 AC-1000	changed to BENZALKONIUM CHLORIDE 0.1% pet (B-027B) No 69 CETEARYL ALCOHOL 20.0% pet (C-033) changed to HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE 5.0% pet (L-003) No 81 CETEARYLALCOHOL 20.0% pet (C-033) added No 82 left blank No 83 BENZYL SALICYLATE 10.0% pet (B-010B) added No 84 Disperse Yellow 3 1.0% pet (D-036) added
C-009E Mx-05C <b>Deleted p</b> C-017B SMUV SMS	METHYLISOTHIAZOLINONE+ METHYLCHLOROISOTHIAZOLINONE 0.215% at Mercapto mix 3.5% pet  roducts Cobalt(II)chloride hexahydrate 0.5% pet Skin Marker UV Skin Marker Slim	IS IS IN Series SS, DMP N/A N/A	AC-1000 AC-1000 AC-1000 AC-1000 AC-1000	changed to BENZALKONIUM CHLORIDE 0.1% pet (B-027B) No 69 CETEARYL ALCOHOL 20.0% pet (C-033) changed to HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE 5.0% pet (L-003) No 81 CETEARYLALCOHOL 20.0% pet (C-033) added No 82 left blank No 83 BENZYL SALICYLATE 10.0% pet (B-010B) added No 84 Disperse Yellow 3 1.0% pet (D-036) added No 85 Jasmine absolute 2.0% pet (J-002) added
C-009E Mx-05C <b>Deleted p</b> C-017B SMUV	METHYLISOTHIAZOLINONE+ METHYLCHLOROISOTHIAZOLINONE 0.215% as Mercapto mix 3.5% pet  roducts Cobalt(II)chloride hexahydrate 0.5% pet Skin Marker UV	IS IS IN Series SS, DMP N/A	AC-1000 AC-1000 AC-1000 AC-1000 AC-1000 AC-1000	changed to BENZALKONIUM CHLORIDE 0.1% pet (B-027B) No 69 CETEARYL ALCOHOL 20.0% pet (C-033) changed to HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE 5.0% pet (L-003) No 81 CETEARYLALCOHOL 20.0% pet (C-033) added No 82 left blank No 83 BENZYL SALICYLATE 10.0% pet (B-010B) added No 84 Disperse Yellow 3 1.0% pet (D-036) added No 85 Jasmine absolute 2.0% pet (J-002) added No 86 Peppermint oil 2.0% pet (P-036) added
C-009E  Mx-05C  Deleted p  C-017B  SMUV  SMS  UV-LAMP	METHYLISOTHIAZOLINONE+ METHYLCHLOROISOTHIAZOLINONE 0.215% at Mercapto mix 3.5% pet  roducts  Cobalt(II)chloride hexahydrate 0.5% pet Skin Marker UV Skin Marker Slim UV Lamp	IS IS IN Series SS, DMP N/A N/A	AC-1000 AC-1000 AC-1000 AC-1000 AC-1000 AC-1000 AC-1000	changed to BENZALKONIUM CHLORIDE 0.1% pet (B-027B) No 69 CETEARYL ALCOHOL 20.0% pet (C-033) changed to HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE 5.0% pet (L-003) No 81 CETEARYLALCOHOL 20.0% pet (C-033) added No 82 left blank No 83 BENZYL SALICYLATE 10.0% pet (B-010B) added No 84 Disperse Yellow 3 1.0% pet (D-036) added No 85 Jasmine absolute 2.0% pet (J-002) added No 86 Peppermint oil 2.0% pet (P-036) added No 87 Pramoxine hydrochloride 2.0% pet (P-039) added
C-009E  Mx-05C  Deleted p  C-017B  SMUV  SMS  UV-LAMP	METHYLISOTHIAZOLINONE+ METHYLCHLOROISOTHIAZOLINONE 0.215% at Mercapto mix 3.5% pet  roducts Cobalt(II)chloride hexahydrate 0.5% pet Skin Marker UV Skin Marker Slim	IS IS IN Series SS, DMP N/A N/A N/A	AC-1000 AC-1000 AC-1000 AC-1000 AC-1000 AC-1000	changed to BENZALKONIUM CHLORIDE 0.1% pet (B-027B) No 69 CETEARYL ALCOHOL 20.0% pet (C-033) changed to HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE 5.0% pet (L-003) No 81 CETEARYLALCOHOL 20.0% pet (C-033) added No 82 left blank No 83 BENZYL SALICYLATE 10.0% pet (B-010B) added No 84 Disperse Yellow 3 1.0% pet (D-036) added No 85 Jasmine absolute 2.0% pet (J-002) added No 86 Peppermint oil 2.0% pet (P-036) added

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### Catalogue amendments January 2022

New produc	ets	In Series
C-059	Carmine (CI) 2.5% pet	AC-82
SMM-4	Chemo Skin marker Medium	N/A
IMP-1000	Implant Series	IMP
METE-1000	Metal Extended Series	METE

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(C-017A).

(C-009E)

No

IS-1000

IS-1000

IS-1000

IS-1000

No 9 Mercapto mix 2.0 pet% (Mx-05A) changed to

(M-003A) changed to Textile dye mix 6.6% pet (Mx-30)

METHYLCHLOROISOTHIAZOLINONE 0.02% aq (C-009B) changed to METHYLISOTHIAZOLINONE+ METHYLCHLOROISOTHIAZOLINONE 0.215% aq

No 26 Hydrocortisone-17-butyrate 1.0% pet (H-021B)

changed to Phenol formaldehyde resin (PFR2) 1.0%

METHYLISOTHIAZOLINONE+

No 14 2-Mercaptobenzothiazole (MBT) 2.0% pet

Mercapto mix 3.5% pet (Mx-05C)

Deleted pr	oducts	In Series	E-1000	No 7 m-Xylylenediamine 0.1% pet (X-001) moved from
A-018	Azodiisobutyrodinitrile 1.0% pet	PG		pos. 13 to 7.
A-020	Amylocaine hydrochloride 5.0% pet	N/A	E-1000	No 11 1,6-Hexanediol diglycidylether 0.25% pet
B-020	BUTYLPARABEN 3.0% pet	N/A		(H-026) changed to 2,4,6-Tris(dimethylaminomethyl)
B-036	1,4-Butanediol diglycidyl ether 0.3% pet	E		phenol 0.5% pet (T-048)
C-009D	METHYLISOTHIAZOLINONE+		E-1000	No 12 1,4-Butanediol diglycidyl ether 0.25% pet
	METHYLCHLOROISOTHIAZOLINONE 0.	2% pet N/A		(B-036) deleted
C-011		EPE,NAP	E-1000	No 14 Trimethylolpropane triglycidyl ether 0.25% pet
C-012	Chlorquinaldol 5.0% pet	N/A		(T-038) deleted
D-044B	DIAZOLIDINYL UREA 2.0% ag	SS, INC	E-1000	No 15 2,4,6-Tris(dimethylaminomethyl)phenol 0.5% pet
D-061A	Diclofenac sodium salt 1.0% pet	CAD		(T-048) moved to pos. 11.
D-067	Dexketoprofen 1.0% pet	EPE	EP-1000	No 19 Promethazine hydrochloride 0.1% pet (P-017B)
E-009	2-Ethylhexyl acrylate 0.1% pet	MP		deleted and changed to DECYL GLUCOSIDE 5.0% pet
H-017	Hydroxypropyl acrylate 0.1% pet	MP		(D-065)
H-026	1,6-Hexanediol diglycidylether 0.3% pet	E	EP-1000	No 20 DECYL GLUCOSIDE 5.0% pet (D-065) moved to
M-012	METHYLPARABEN 3.0% pet	N/A		pos. 19.
M-018	MUSK KETONE 1.0% pet	F	EPE-1000	No 1 BENZOPHENONE-3 10.0% pet (H-014C) changed
M-035A	METHYLISOTHIAZOLINONE 0.02% aq	N/A		to TRICLOCARBAN 1.0% pet (T-013)
M-035C	METHYLISOTHIAZOLINONE 0.05% aq	BS	EPE-1000	No 2 BENZOPHENONE-4 2.0% pet (H-023C) changed
Mx-08	Perfume mix 6.0% pet	F		to BENZOPHENONE-10 10.0% pet (H-020B)
O-003	Oligotriacrylate (OTA 480) 0.1% pet	MP	EPE-1000	No 3 4-METHYLBENZYLIDENE CAMPHOR 10.0% pet
P-002	Pentaerythritol triacrylate 0.1% pet	MP		(M-024B) changed to PHENYLBENZIMIDAZOLE
P-017B	Promethazine hydrochloride 0.1% pet	EP,EPE,NAP	EDE 1000	SULFONIC ACID 10.0% pet (P-024B)
P-020	PROPYLPARABEN 3.0% pet	N/A	EPE-1000	No 4 ETHYLHEXYL METHOXYCINNAMATE 10.0% pet
P-032	Pristinamycin 10.0% pet	CAD	EDE 1000	(E-019C) changed to HOMOSALATE 10.0% pet (H-024B)
SM	Chemo Skin Marker-Regular	N/A	EPE-1000	No 5 OCTOCRYLENE 10.0% pet (O-009) changed to
SMS	Chemo Skin Marker-Slim	N/A	EDE 1000	ETHYLHEXYL SALICYLATE 10.0% pet (O-007B)
T-012	3,4,5-Tribromosalicylanilide (TBS) 1.0% pet	NAP	EPE-1000	No 6 ISOAMYL p-METHOXYCINNAMATE 10.0% pet
T-038	Trimethylolpropane triglycidyl ether 0.3% pet	E-14	EDE 4000	(I-009) changed to Polysilicone-15 10.0% pet (P-035)
			EPE-1000	No 7 PABA 10.0% pet (A-006C) changed to Disodium
Hapten Se	ries Amendment		EDE 4000	phenyl dibenzimidazole tetrasulfonate 10.0% pet (D-064)
			EPE-1000	No 8 BUTYL METHOXYDIBENZOYLMETHANE 10.0%
CAD-1000	No 1 Cefixime trihydrate 10.0% pet (C-	-054) moved	EDE 4000	pet (B-029C) changed to TRICLOSAN 2.0% pet (T-014)
	from pos. 32 to 1.	,	EPE-1000	No 9 BIS-ETHYLHEXYLPHENOL METHOXYPHENOL TRIAZINE 10.0% pet (B-037) changed to Ibuprofen 5.0%
CAD-1000	No 6 Cefpodoxime proxetil 10.0% pet (C	-055) moved		pet (I-010B)
	from pos. 34 to 6.	,	EPE-1000	No 10 DROMETRIZOLE TRISILOXANE 10.0% pet
CAD-1000	No 10 Pristinamycin 10.0% pet (P-032)	changed to	EPE-1000	· ·
	Potassium clavulanate 10.0% pet (P-040)			(D-055) changed to Diclofenac sodium salt 5.0% pet (D-061B)
CAD-1000	No 19 Diclofenac sodium salt 1.0% p		EDE 4000	` ,
	changed to Diclofenac sodium salt 5.0% p		EPE-1000	No 11 Ketoprofen 1.0% pet (K-002B) changed to
CAD-1000	No 35 Potassium clavulanate 10.0% pet (F		EDE 4000	Fenofibrate 10.0% pet (F-006)
	from pos. 35 to 10.	,	EPE-1000	No 12 2-(4-Diethylamino-2-hydroxybenzoyl)-benzoic
220	•			acid hexylester 10.0% pet (D-062) changed to Olaquindox 221
-				

EPE-1000 F-1000	1.0% pet (O-008) No 13 to No 34 Deleted No 13 MUSK KETONE 1.0% pet (M-018) deleted and changed to SORBITAN SESQUIOLEATE 20.0% pet
	(S-005)
F-1000	No 45 Perfume mix 6.0% pet (Mx-08) deleted and changed to Fragrance mix I 8.0% pet (Mx-07)
MA-1000	No 17 Ethyl acrylate 0.1% pet (E-004) added
MA-1000	No 18 2-Hydroxyethyl acrylate 0.1% pet (H-009) added
MA-1000	No 19 ETHYL METHACRYLATE 2.0 % pet (E-012) added
MA-1000	No 20 2,2-bis(4-(2-Methacryl-oxyethoxy)phenyl) propane (BIS-EMA) 2.0 % pet (M-006B) added
MA-1000	No 21 1,4-Butanediol diacrylate 0.1% pet (B-016) added
MA-1000	No 22 Di(ethylene glycol) diacrylate 0.1% pet (D-009) added
MA-1000	No 23 Tri(propylene glycol) diacrylate 0.1% pet
MA-1000	(T-023) added No 24 Trimethylolpropane triacrylate 0.1% pet (T-021)
	added
MA-1000	No 25 Triethylene glycol diacrylate 0.1% pet (T-017) added
MA-1000	No 26 N,N-Methylene-bisacrylamide 1.0% pet (M-023) added
MA-1000	No 27 Butyl acrylate 0.1% pet (B-018) added
MET-1000	The series has been divided into two series MET-1000 and METE-1000
MN-1000	No 1 Butyl acrylate 0.1% pet (B-018) changed to Ethyl cyanoacrylate 10.0% pet (E-023)
MN-1000	No 3 BUTYL METHACRYLATE 2.0% pet (B-021)
MN-1000	changed to Methyl methacrylate 2.0% pet (M-013) No 7 Triethylene glycol dimethacrylate 2.0% pet (T-018)
WIN-1000	changed to Bisphenol A glycerolate dimethacrylate
	2.0% pet (H-013)
MN-1000	No 9 Trimethylolpropane triacrylate 0.1% pet (T-021)
	changed to Triethylene glycol diacrylate 0.1% pet (T-017
MN-1000	No 13 Triethylene glycol diacrylate 0.1% pet (T-017) deleted
MP-1000	Deleted 2021-10-30
PG-1000	No 9 Azodiisobutyrodinitrile 1.0% pet (A-018) changed

to Triglycidyl isocyanurate (TGIC) 0.5% pet (T-028)

PG-1000 No 24 Triglycidyl isocyanurate (TGIC) 0.5% pet

(T-028) deleted

AC-1000 No 82 Carmine (CI ) 2.5% pet (C-059) added

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