



Safety Data Sheet dated 10/12/2021, version 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:

Trade name: Hema Free Gel Polish Trade code: HGEL001 onwards

- 1.2. Relevant identified uses of the substance or mixture and uses advised against
- 1.3. Details of the supplier of the safety data sheet

Company:

Nails by Annabel Ltd

Davenport St,

Stoke-On-Trent,

ST6 4LG

United Kingdom

Competent person responsible for the safety data sheet:

Annabel@nailsbyannabel.co.uk

1.4. Emergency telephone number +44 1782 901012 (office hours only)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture EC regulation criteria 1272/2008 (CLP)

- Warning, Skin Irrit. 2, Causes skin irritation.
- Warning, Eye Irrit. 2, Causes serious eye irritation.
- Warning, Skin Sens. 1A, May cause an allergic skin reaction.
- Warning, STOT SE 3, May cause respiratory irritation.

Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash ... Thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

P302+P352 IF ON SKIN: Wash with plenty of water/...

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER/doctor/... if you feel unwell.

P321 Specific treatment (see ... On this label).

P332+P313 If skin irritation occurs: Get medical advice/attention.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Contains

Isobornyl Methacrylate

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,

Hydroxypropyl Methacrylate: May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:

. None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification or which have been assigned Occupational Exposure Limits:

Name	Ident. Numb		Classification
Isobornyl Methacrylate	Index number: CAS: EC: REACH No.:	607-134-00-4 7534-94-3 231-403-1 01-21198865 05-27	3.2/2 Skin Irrit. 2 H315 3.3/2 Eye Irrit. 2 H319 3.8/3 STOT SE 3 H335 4.1/C3 Aquatic Chronic 3 H412
Hydroxypropyl Methacrylate	CAS: EC: REACH No.:	27813-02-1 248-666-3 01-21194902 26-37	3.3/2 Eye Irrit. 2 H319 3.4.2/1 Skin Sens. 1 H317
2-hydroxy-2-methylpro piophenone	CAS: EC: REACH No.:	7473-98-5 231-272-0 01-21194723 06-39	3.1/4/Oral Acute Tox. 4 H302
diphenyl(2,4,6-trimethy lbenzoyl)phosphine oxide	Index number: CAS: EC: REACH No.:	015-203-00-X 75980-60-8 278-355-8 01-21199722 95-29	3.7/2 Repr. 2 H361f
Reaction mass of Bis(1,2,2,6,6-pentamet hyl-4-piperidyl) sebacate and Methyl 1,2,	CAS: EC: REACH No.:	1065336-91-5 915-687-0 01-21194913 04-40	3.4.2/1A Skin Sens. 1A H317 4.1/A1 Aquatic Acute 1 H400 4.1/C1 Aquatic Chronic 1 H410
ethyl acetate	Index number: CAS: EC:	607-022-00-5 141-78-6 205-500-4	 2.6/2 Flam. Liq. 2 H225 3.3/2 Eye Irrit. 2 H319 3.8/3 STOT SE 3 H336 EUH066
1-methoxy-2-propanol; monopropylene glycol methyl ether	Index number: CAS: EC: REACH No.:	603-064-00-3 107-98-2 203-539-1 01-21194574 35-35	2.6/3 Flam. Liq. 3 H226 3.8/3 STOT SE 3 H336

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and water.

In case of eye contact:

After contact with the eyes, rinse with water with the eyelids open for 15 minutes, then seek prompt medical advice.

Protect uninjured eye.

In case of ingestion:

Do not induce vomiting. Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable remove to hospital and bring these instructions.

In case of inhalation:

In case of inhalation, consult a doctor immediately. Take the data sheet or label.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or experiencing symptoms, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

For emergency responders:

Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose of it.

In case of escape or of entry into waterways, soil or drains, inform the responsible authorities. Suitable material for taking up: sand, earth, vermiculite etc.

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Use localized ventilation system.

Ensure empty containers have been cleaned of any residue before reuse.

Before transferring product, ensure that there are no traces of incompatible material residues in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

Always keep in a well ventilated place.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

See section 1.2

None in particular

SECTION 8: Exposure controls/personal protection

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8.1. Control parameters
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Silica Caprylyl Silylate - CAS: 92797-60-9

- OEL Type: EH40/2005 - TWA(8h): 6 mg/m3 - Notes: Inhalable dust (Silicon dioxide)

- OEL Type: EH40/2005 - TWA(8h): 2.4 mg/m3 - Notes: Respirable dust (Silicon dioxide)

ethyl acetate - CAS: 141-78-6

- OEL Type: EH40/2005 - TWA(8h): 200 ppm - STEL(15min): 400 ppm

- OEL Type: EU - TWA(8h): 734 mg/m3, 200 ppm - STEL: 1468 mg/m3, 400 ppm

- OEL Type: ACGIH - TWA(8h): 400 ppm - Notes: URT and eye irr

1-methoxy-2-propanol; monopropylene glycol methyl ether - CAS: 107-98-2

- OEL Type: EH40/2005 - TWA(8h): 375 mg/m3, 100 ppm - STEL: 560 mg/m3, 150 ppm - Notes: (Sk)

- OEL Type: EU - TWA(8h): 375 mg/m3, 100 ppm - STEL: 563 mg/m3, 150 ppm - Notes: Skin

- OEL Type: ACGIH - TWA(8h): 50 ppm - STEL: 100 ppm - Notes: A4 - Eye and URT rr

DNEL Exposure Limit Values

2-hydroxy-2-methylpropiophenone - CAS: 7473-98-5

Worker Industry: 3.5 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Industry: 3.5 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Industry: 1.25 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

ethyl acetate - CAS: 141-78-6

Worker Industry: 734 mg/m3 - Consumer: 367 mg/m3 - Exposure: Human Inhalation -

Frequency: Long Term, systemic effects

Worker Industry: 63 mg/kg - Consumer: 37 mg/kg - Exposure: Human Dermal -

Frequency: Long Term, systemic effects - Endpoint: bw/day

Consumer: 4.5 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic

effects - Endpoint: bw/day

PNEC Exposure Limit Values

Isobornyl Methacrylate - CAS: 7534-94-3

Target: Fresh Water - Value: 4.66 ug/l

Target: Freshwater sediments - Value: 0.604 mg/kg

Target: Soil (agricultural) - Value: 0.118 mg/kg

Target: Microorganisms in sewage treatments - Value: 2.45 mg/l

2-hydroxy-2-methylpropiophenone - CAS: 7473-98-5

Target: Fresh Water - Value: 0.00195 mg/l Target: Marine water - Value: 0.000195 mg/l

Target: Intermittent releases - Value: 0.0195 mg/l

Target: Freshwater sediments - Value: 0.00514 mg/kg

Target: Marine water sediments - Value: 0.000514 mg/kg

ethyl acetate - CAS: 141-78-6

Target: Fresh Water - Value: 0.24 mg/l

Target: Marine water - Value: 0.024 mg/l

Target: Intermittent releases - Value: 1.65 mg/l

Target: Freshwater sediments - Value: 1.15 mg/kg

Target: Soil (agricultural) - Value: 0.148 mg/kg

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use respiratory protection where ventilation is insufficient or exposure is prolonged.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	Liquid		
Colour:	Various		
Odour:	Characteristic		
Melting point/freezing point:	N.A.		

Boiling point or initial	N.A.		
boiling point and boiling			
range:			
Flammability:	N.A.		
Lower and upper explosion limit:	N.A.		
Flash point:	N.A.		
Auto-ignition temperature:	N.A.		
Decomposition	N.A.		
temperature:			
pH:	N.A.		
Kinematic viscosity:	N.A.		
Solubility in water:	Insoluble		
Solubility in oil:	N.A.		
Partition coefficient n-octanol/water (log value):	N.A.		
Vapour pressure:	N.A.		
Density and/or relative	N.A.		
density:			
Relative vapour density:	N.A.		
Particle characteristics:			
Particle size:	N.A.		

9.2. Other information

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Toxicological information of the product:

a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

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The product is classified: Skin Irrit. 2 H315
      c) serious eye damage/irritation
            The product is classified: Eye Irrit. 2 H319
      d) respiratory or skin sensitisation
            The product is classified: Skin Sens. 1A H317
      e) germ cell mutagenicity
            Not classified
            Based on available data, the classification criteria are not met
      f) carcinogenicity
            Not classified
            Based on available data, the classification criteria are not met
      g) reproductive toxicity
            Not classified
            Based on available data, the classification criteria are not met
      h) STOT-single exposure
            The product is classified: STOT SE 3 H335
      i) STOT-repeated exposure
            Not classified
            Based on available data, the classification criteria are not met
      j) aspiration hazard
            Not classified
            Based on available data, the classification criteria are not met
Toxicological information of the main substances found in the product:
      Isobornyl Methacrylate - CAS: 7534-94-3
      a) acute toxicity:
            Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg
            Test: LD50 - Route: Skin - Species: Rabbit > 3000 mg/kg
      Hydroxypropyl Methacrylate - CAS: 27813-02-1
      a) acute toxicity:
            Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg
            Test: LD50 - Route: Skin - Species: Rabbit >= 5000 mg/kg
      2-hydroxy-2-methylpropiophenone - CAS: 7473-98-5
      a) acute toxicity:
            Test: LD50 - Route: Oral - Species: Rat = 1694 mg/kg
            Test: LD50 - Route: Skin - Species: Rat = 6929 mg/kg
      diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide - CAS: 75980-60-8
      a) acute toxicity:
            Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg
            Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg
      ethyl acetate - CAS: 141-78-6
      a) acute toxicity:
            Test: LD50 - Route: Oral - Species: Rabbit 4934 mg/kg
            Test: LD50 - Route: Skin - Species: Rabbit > 20000 mg/kg
            Test: LC50 - Route: Inhalation - Species: Rat > 22.5 mg/l
      1-methoxy-2-propanol; monopropylene glycol methyl ether - CAS: 107-98-2
      a) acute toxicity:
            Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg
            Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg
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Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

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12.1. Toxicity
      Adopt good working practices to avoid releasing the product into the environment.
      The product is classified: Aquatic Chronic 3 - H412
Isobornyl Methacrylate - CAS: 7534-94-3
      a) Aquatic acute toxicity:
            Endpoint: LC50 - Species: Fish = 1.79 mg/l - Duration h: 96
            Endpoint: EC50 - Species: Daphnia > 2.57 mg/l - Duration h: 48
            Endpoint: EC50 - Species: Algae = 2.28 mg/l - Duration h: 72
            Endpoint: EC10 - Species: Algae = 0.751 mg/l - Duration h: 72
      b) Aquatic chronic toxicity:
            Endpoint: NOEC - Species: Daphnia = 0.233 mg/l
Hydroxypropyl Methacrylate - CAS: 27813-02-1
      a) Aquatic acute toxicity:
            Endpoint: LC50 - Species: Fish = 493 mg/l - Duration h: 48
            Endpoint: EC50 - Species: Daphnia > 143 mg/l - Duration h: 48
2-hydroxy-2-methylpropiophenone - CAS: 7473-98-5
      a) Aquatic acute toxicity:
            Endpoint: LC50 - Species: Fish = 160 mg/l - Duration h: 48
            Endpoint: EC50 - Species: Daphnia > 119 mg/l - Duration h: 48
            Endpoint: EC50 - Species: Algae = 1.95 mg/l - Duration h: 72
            Endpoint: EC10 - Species: Algae = 0.629 mg/l - Duration h: 72
            Endpoint: EC10 - Species: Microorganisms/Effect on activated sludge = 450 mg/l -
            Duration h: 3
            Endpoint: EC50 - Species: Microorganisms/Effect on activated sludge > 1000 mg/l -
            Duration h: 3
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide - CAS: 75980-60-8
      a) Aquatic acute toxicity:
            Endpoint: LC50 - Species: Fish 6.53 mg/l - Duration h: 48
            Endpoint: EC50 - Species: Daphnia 3.53 mg/l - Duration h: 48
            Endpoint: EC50 - Species: Algae > 2.01 mg/l - Duration h: 72
ethyl acetate - CAS: 141-78-6
      a) Aquatic acute toxicity:
            Endpoint: LC50 - Species: Fish 230 mg/l - Duration h: 96
            Endpoint: EC50 - Species: Daphnia 165 mg/l - Duration h: 48
            Endpoint: LC50 - Species: Algae 5600 mg/l - Duration h: 48
1-methoxy-2-propanol; monopropylene glycol methyl ether - CAS: 107-98-2
      a) Aquatic acute toxicity:
            Endpoint: LC50 - Species: Fish > 2.8 mg/l - Duration h: 96
            Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 48
            Endpoint: EC50 - Species: Algae 0.2 mg/l - Duration h: 72
12.2. Persistence and degradability
      Isobornyl Methacrylate - CAS: 7534-94-3
            Biodegradability: Readily biodegradable - Duration h: 28 d - %: 70 - Notes: Method:
            OECD 310 (Headspace test)
      Hydroxypropyl Methacrylate - CAS: 27813-02-1
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Biodegradability: Readily biodegradable 2-hydroxy-2-methylpropiophenone - CAS: 7473-98-5

Biodegradability: Readily biodegradable - Test: CO2 production - Duration h: 28 d - %:

90

ethyl acetate - CAS: 141-78-6

Biodegradability: Readily biodegradable - %: 69

12.3. Bioaccumulative potential

Hydroxypropyl Methacrylate - CAS: 27813-02-1

Not bioaccumulative - Test: BCF - Bioconcentration factor 100

ethyl acetate - CAS: 141-78-6

Not bioaccumulative - Test: Kow - Partition coefficient -3

12.4. Mobility in soil

Hydroxypropyl Methacrylate - CAS: 27813-02-1

No data available.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible, in compliance with local and national regulations currently in force.

SECTION 14: Transport information

- 14.1. UN number or ID number
- 14.2. UN proper shipping name

ADR-Shipping Name:

IATA-Shipping Name:

IMDG-Shipping Name:

14.3. Transport hazard class(es)

Classification for transport is not required.

- 14.4. Packing group
- 14.5. Environmental hazards
- 14.6. Special precautions for user
- Maritime transport in bulk according to IMO instruments N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 2020/878

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restriction 40

Restrictions related to the substances contained:

Restriction 75

Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

A Chemical Safety Assessment has not been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

H317 May cause an allergic skin reaction.

H302 Harmful if swallowed.

H361f Suspected of damaging fertility, causing atrophy of the testes.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H225 Highly flammable liquid and vapour.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

H226 Flammable liquid and vapour.

Hazard class and hazard category	Code	Description
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2

Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Skin Sens. 1A	3.4.2/1A	Skin Sensitisation, Category 1A
Repr. 2	3.7/2	Reproductive toxicity, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure,
		Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1A, H317	Calculation method
STOT SE 3, H335	Calculation method
Aquatic Chronic 3, H412	Calculation method

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO).

IMDG: International Maritime Code for Dangerous Goods. INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWA: Time-weighted average
WGK: German Water Hazard Class.