

#### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 SDS Ref. (EU): P40-SDS

Issue date: 26/02/2015 Revision date: 25/08/2020 Supersedes version of: 29/10/2019 Version: 7.0

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

#### 1.1. Product identifier

Product form : Mixture

Trade name : ISOPON P.40 GLASS FIBRE COMPOUND

: H7M0-Q09E-F00Q-79T5 UFI

Product code : P40/2, P40/4 Product group : Bodyfiller

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Intended for general public

: Industrial use, Professional use, Consumer use Main use category Use of the substance/mixture : Fillers, putties, plasters, modelling clay

: Fillers Function or use category

#### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Manufacturer Importer

U-POL Limited U-POL Netherlands B.V. Denington Road Hoorgoorddreef 15

NN8 2QH Wellingborough - United Kingdom 1101BA Amsterdam - Netherlands

T +44 (0) 1933 230310 T+31 20 240 2216

technicalsupport@u-pol.com - www.u-pol.com technicalsupport@u-pol.com - www.u-pol.com

#### 1.4. Emergency telephone number

**Emergency number** : CHEMTREC: +44 (0) 870 8200418 (24 hrs)

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	NHS England, Scotland & Wales	-	Call 111 or a Doctor	In Northern Ireland, contact your local GP or pharmacist during normal hours (www.gpoutofhours.h scni.net)

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315 Serious eye damage/eye irritation, Category 2 H319 Reproductive toxicity, Category 2 H361 Specific target organ toxicity — Single exposure, Category 3, Respiratory H335 tract irritation

Specific target organ toxicity — Repeated exposure, Category 1 H372

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Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412

Full text of H statements : see section 16

#### Adverse physicochemical, human health and environmental effects

Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. May cause respiratory irritation. Causes skin irritation. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.

#### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





GHS07

GHS08

Signal word (CLP) : Danger Contains : styrene

Hazard statements (CLP) : H315 - Causes skin irritation.

H319 - Causes serious eye irritation.H335 - May cause respiratory irritation.

H361 - Suspected of damaging the unborn child.

 $\ensuremath{\mathsf{H372}}$  - Causes damage to organs (hearing organs) through prolonged or repeated

exposure (inhalation).

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children. P261 - Avoid breathing vapours, fume.

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

P280 - Wear eye protection, protective clothing, protective gloves.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P308+P313 - IF exposed or concerned: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.

P405 - Store locked up.

P501 - Dispose of contents and container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

EUH-statements : EUH208 - Contains bisphenol-A-(epichlorhydrin), epoxy resin, phthalic anhydride. May

produce an allergic reaction.

#### 2.3. Other hazards

Component		
styrene (100-42-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
Xylene (1330-20-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
phthalic anhydride (85-44-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

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#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
styrene (Note D)	(CAS-No.) 100-42-5 (EC-No.) 202-851-5 (EC Index-No.) 601-026-00-0 (REACH-no) 01-2119457861-32	10 – 50	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d STOT SE 3, H335 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
Xylene substance with a Community workplace exposure limit (Note C)	(CAS-No.) 1330-20-7 (EC-No.) 215-535-7 (EC Index-No.) 601-022-00-9 (REACH-no) 01-2119488216-32	< 2.5	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304
bisphenol-A-(epichlorhydrin), epoxy resin	(CAS-No.) 25068-38-6 (EC-No.) 500-033-5 (EC Index-No.) 603-074-00-8 (REACH-no) 01-2119456619-26	< 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
phthalic anhydride	(CAS-No.) 85-44-9 (EC-No.) 201-607-5 (EC Index-No.) 607-009-00-4 (REACH-no) 01-2119457017-41	< 0.25	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335

Specific concentration limits:			
Name	Product identifier	Specific concentration limits	
bisphenol-A-(epichlorhydrin), epoxy resin	(CAS-No.) 25068-38-6 (EC-No.) 500-033-5 (EC Index-No.) 603-074-00-8 (REACH-no) 01-2119456619-26	( 5 ≤C < 100) Skin Irrit. 2, H315 ( 5 ≤C < 100) Eye Irrit. 2, H319	

Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Note D: Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words 'non-stabilised'.

Full text of H-statements: see section 16

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#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a

doctor if you feel unwell.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get

medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Irritation.
Symptoms/effects after eye contact : Eye irritation.

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

Treat symptomatically.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

#### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. No open flames. No smoking.

6.1.1. For non-emergency personnel

Protective equipment : Safety glasses. Protective clothing. Gloves.

Emergency procedures : Ventilate spillage area. Do not breathe vapours, fume. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

For containment : Contain released product. Collect spillage.

Methods for cleaning up : Mechanically recover the product. Notify authorities if product enters sewers or public

waters.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

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#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been

read and understood. Wear personal protective equipment. Do not breathe vapours, fume.

Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.

: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this

product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Storage temperature :  $< 25 \, ^{\circ}\text{C}$ 

Storage area : Store in a well-ventilated place. Special rules on packaging : Keep only in original container.

#### 7.3. Specific end use(s)

No additional information available

#### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

phthalic anhydride (85-44-9)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	Phtalic anhydride	
Notes	Respiratory sensitizer; skin sensitizer. (Year of adoption 2010)	
Regulatory reference	SCOEL Recommendations	
Ireland - Occupational Exposure Limits		
Local name	Phthalic anhydride	
OEL TWA [2]	1 ppm	
OEL STEL	12 mg/m³	
Notes (IE)	Sens. (In the workplace respiratory or dermal exposures to sensitising agents may occur. Sensitizers may evoke respiratory or dermal reactions, e.g. asthma, rhinitis and allergic contact dermatitis. The notation does not distinguish between respiratory or dermal sensitisation. Chemical agents that are sensitizers present special problems in the workplace. Should an employee become sensitised, subsequent exposure may cause intense responses, even at low exposure concentrations well below the OELV. Exposure should be eliminated or significantly reduced through control measures such as engineering and process controls and use of personal protective equipment (PPE))	
Regulatory reference	Chemical Agents Code of Practice 2020	
United Kingdom - Occupational Exposure Limits		
Local name	Phthalic anhydride	
WEL TWA (OEL TWA) [1]	4 mg/m³	
WEL STEL (OEL STEL)	12 mg/m³	
Remark (WEL)	Sen (Capable of causing occupational asthma)	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

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styrene (100-42-5)			
Ireland - Occupational Exposure Limits			
Local name	Styrene [Phenylethylene, Vinyl benzene]		
OEL TWA [1]	85 mg/m³		
OEL TWA [2]	20 ppm		
OEL STEL	170 mg/m³		
OEL STEL [ppm]	40 ppm		
Regulatory reference	Chemical Agents Code of Practice 2020		
Ireland - Biological limit values	Ireland - Biological limit values		
Local name	Propylene Oxide		
BLV	3 Parameter: N-(3-hydroxypropyl) valine - Medium: blood haemoglobin		
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)		
United Kingdom - Occupational Exposure Limits			
Local name	Styrene		
WEL TWA (OEL TWA) [1]	430 mg/m³		
WEL TWA (OEL TWA) [2]	100 ppm		
WEL STEL (OEL STEL)	1080 mg/m³		
WEL STEL (OEL STEL) [ppm]	250 ppm		
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE		

V I (4000 00 T)			
Xylene (1330-20-7)			
EU - Indicative Occupational Exposure Limit (IOEL)			
Local name	Xylene, mixed isomers, pure		
IOEL TWA	221 mg/m³		
IOEL TWA [ppm]	50 ppm		
IOEL STEL	442 mg/m³		
IOEL STEL [ppm]	100 ppm		
Notes	Skin		
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC		
Ireland - Occupational Exposure Limits	Ireland - Occupational Exposure Limits		
Local name	Xylene, mixed isomers		
OEL TWA [1]	221 mg/m³		
OEL TWA [2]	50 ppm		
OEL STEL	442 mg/m³		
OEL STEL [ppm]	100 ppm		
Notes (IE)	Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values)		
Regulatory reference	Chemical Agents Code of Practice 2020		
Ireland - Biological limit values			
Local name	Xylene		

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Xylene (1330-20-7)		
BLV	1.5 g/g creatinine Parameter: methylhippuric acids - Medium: urine - Sampling time: End of Shift	
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)	
United Kingdom - Occupational Exposure Limits		
Local name	Xylene	
WEL TWA (OEL TWA) [1]	220 mg/m³	
WEL TWA (OEL TWA) [2]	50 ppm	
WEL STEL (OEL STEL)	441 mg/m³	
WEL STEL (OEL STEL) [ppm]	100 ppm	
Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	
United Kingdom - Biological limit values		
Local name	Xylene, o-, m-, p- or mixed isomers	
BMGV	650 mmol/mol Creatinine Parameter: methyl hippuric acid - Medium: urine - Sampling time: Post shift	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)		
DNEL/DMEL (Workers)		
8.33 mg/kg bodyweight/day		
12.25 mg/m³		
8.33 mg/kg bodyweight/day		
12.25 mg/m³		
DNEL/DMEL (General population)		
3.571 mg/kg bodyweight/day		
0.75 mg/kg bodyweight/day		
0.75 mg/kg bodyweight/day		
3.571 mg/kg bodyweight/day		
PNEC (Water)		
0.006 mg/l		
0.0006 mg/l		
0.018 mg/l		
PNEC (Sediment)		
0.996 mg/kg dwt		
0.0996 mg/kg dwt		

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PNEC (Soil)		
PNEC soil	0.196 mg/kg dwt	
PNEC (Oral)		
PNEC oral (secondary poisoning)	11 mg/kg food	
PNEC (STP)		
PNEC sewage treatment plant 10 mg/l		

phthalic anhydride (85-44-9)		
DNEL/DMEL (Workers)		
Long-term - systemic effects, dermal	10 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	32.2 mg/m³	
DNEL/DMEL (General population)	DNEL/DMEL (General population)	
Long-term - systemic effects,oral	5 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	8.6 mg/m³	
Long-term - systemic effects, dermal	5 mg/kg bodyweight/day	
PNEC (Water)		
PNEC aqua (freshwater)	1 mg/l	
PNEC aqua (marine water)	0.1 mg/l	
PNEC aqua (intermittent, freshwater)	5.6 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	3.8 mg/kg dwt	
PNEC sediment (marine water)	0.38 mg/kg dwt	
PNEC (Soil)		
PNEC soil	0.173 mg/kg dwt	
PNEC (STP)		
PNEC sewage treatment plant	10 mg/l	

styrene (100-42-5)		
DNEL/DMEL (Workers)		
Acute - systemic effects, inhalation	289 mg/m³	
Acute - local effects, inhalation	306 mg/m³	
Long-term - systemic effects, dermal	406 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	85 mg/m³	
DNEL/DMEL (General population)		
Acute - systemic effects, inhalation	174.25 mg/m³	
Acute - local effects, inhalation	182.75 mg/m³	
Long-term - systemic effects,oral	2.1 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	10.2 mg/m³	
Long-term - systemic effects, dermal	343 mg/kg bodyweight/day	
PNEC (Water)		
PNEC aqua (freshwater)	0.028 mg/l	
PNEC aqua (marine water)	0.014 mg/l	

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PNEC aqua (intermittent, freshwater)	0.04 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.614 mg/kg dwt
PNEC sediment (marine water)	0.307 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.2 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	5 mg/l

#### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Gloves. Protective clothing. Safety glasses.

Personal protective equipment symbol(s):









#### 8.2.2.1. Eye and face protection

Eye protection:			
Safety glasses			
Туре	Field of application	Characteristics	Standard
Safety glasses	Dust	clear	

#### 8.2.2.2. Skin protection

## Skin and body protection: Wear suitable protective clothing

Hand protection:					
Protective gloves					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Protective gloves	Nitrile rubber (NBR), Neoprene rubber (HNBR), Polyvinylalcohol (PVA), Viton	6 (> 480 minutes)	0.4		EN 374-3

# Other skin protection Materials for protective clothing: Impermeable clothing

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#### 8.2.2.3. Respiratory protection

Respiratory protection:			
[In case of inadequate ventilation] wear respiratory protection.			
Device	Filter type	Condition	Standard
Breathing apparatus, Gas filters	Type A - High-boiling (>65 °C) organic compounds	Vapour protection	EN 140, EN 136, EN 143, EN 145, EN 149

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

#### **Environmental exposure controls:**

Avoid release to the environment.

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

: Solid Physical state Colour Yellow. clear. : Fibrous. Paste. Appearance Odour : aromatic. Odour threshold : Not available Melting point : Not available Freezing point : Not applicable Boiling point : Not available Flammability : Non flammable. **Explosive limits** : Not applicable Lower explosive limit (LEL) : Not applicable Upper explosive limit (UEL) : Not applicable

Flash point : 32 °C (does not sustain combustion)

Solubility : insoluble in water. soluble in most organic solvents.

Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50 °C : Not available

Density :  $1.37 (1.32 - 1.42) g/cm^3$ 

Relative density Not applicable Relative vapour density at 20 °C : Not applicable Particle size : Not available : Not available Particle size distribution Particle shape : Not available Particle aspect ratio Not available Particle aggregation state Not available Particle agglomeration state : Not available Particle specific surface area : Not available Particle dustiness : Not available

#### 9.2. Other information

VOC content : 291 g/l

#### 9.2.1. Information with regard to physical hazard classes

Not sustained combustibility : Yes

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#### 9.2.2. Other safety characteristics

VOC content : 291 g/l

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

#### **SECTION 11: Toxicological information**

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

dolomite (16389-88-1)	
	> 2000 mg/kg (OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure), rat, female, Experimental value)

talc (14807-96-6)	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 2.1 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 15 day(s))

silicon dioxide, amorphous (7631-86-9)	
LD50 oral rat > 10000 mg/kg (Rat, Oral)	
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Dermal)

glass, oxide, chemicals (65997-17-3)	
	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)

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bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))

phthalic anhydride (85-44-9)	
LD50 oral rat	1530 mg/kg bodyweight Animal: rat, Animal sex: male
LD50 dermal rabbit	> 3160 mg/kg (Rabbit, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 2.14 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

1,4-naphthoquinone (130-15-4)	
LD50 oral rat	190 mg/kg bodyweight (Rat, Literature study, Oral)
LD50 dermal rat	202 mg/kg
LC50 Inhalation - Rat (Vapours)	0.046 mg/l/4h

ethanediol; ethylene glycol (107-21-1)	
LD50 oral rat	7712 mg/kg bodyweight Animal: rat
LD50 dermal	> 3500 mg/kg bodyweight (Mouse, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	> 2.5 mg/l (6 h, Rat, Male / female, Experimental value, Inhalation (aerosol))

1-methoxy-2-propanol (107-98-2)	
LD50 oral rat	4016 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic – Acute toxic class method, Rat, Male / female, Experimental value, Oral)
LD50 dermal rat	13 g/kg

styrene (100-42-5)	
LD50 oral	> 6000 mg/kg bodyweight Animal: hamster, Syrian, Animal sex: male
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	11.8 mg/l (4 h, Rat, Inconclusive, insufficient data, Inhalation (vapours))

dipropylene glycol monomethyl ether (34590-94-8)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 19020 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	9510 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 1.67 mg/l air (Equivalent or similar to OECD 403, 7 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))

Xylene (1330-20-7)	
	3523 mg/kg bodyweight (Equivalent or similar to EU Method B.1: Acute Toxicity (Oral), Rat, Male, Experimental value, Oral, 14 day(s))

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LD50 dermal rat	12126 mg/kg (Non-GLP, read-across from supporting substance, single dermal dose under occlusion followed by observation for 14 days)
LD50 dermal rabbit	12126 mg/kg bodyweight Animal: rabbit, Animal sex: male
LC50 Inhalation - Rat [ppm]	6700 ppm/4h (EU Method B.2 (Acute Toxicity (Inhalation)), 4h, rat, male)

Ethylbenzene (100-41-4)	
LD50 oral rat	3500 mg/kg (Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	15432 mg/kg bodyweight (24 h, Rabbit, Male, Experimental value, Dermal)
LC50 Inhalation - Rat	17.8 mg/l (4 h, Rat, Male, Experimental value, Inhalation (vapours))

parrafin waxes and hydrocarbon waxes (8002-74-2)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

styrene (100-42-5)	
IARC group	2B - Possibly carcinogenic to humans

Xylene (1330-20-7)	
IARC group	3 - Not classifiable

bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)	
NOAEL (chronic, oral, animal/male, 2 years)	15 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:MITI, Japanese ministry of international trade and industry, February 1998, Remarks on results: other:Effect type: toxicity (migrated information)
NOAEL (chronic, oral, animal/female, 2 years)	100 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:MITI, Japanese ministry of international trade and industry, February 1998, Remarks on results: other:Effect type: toxicity (migrated information)

phthalic anhydride (85-44-9)	
NOAEL (chronic, oral, animal/male, 2 years)	3570 mg/kg bodyweight Animal: mouse, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information)
NOAEL (chronic, oral, animal/female, 2 years)	1785 mg/kg bodyweight Animal: mouse, Animal sex: female, Remarks on results: other:Effect type: carcinogenicity (migrated information)

ethanediol; ethylene glycol (107-21-1)	
	1500 mg/kg bodyweight Animal: mouse, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information)
	Caronia in the caronia general (in grand a membrane)

#### Safety Data Sheet

Reproductive toxicity

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

phthalic anhydride (85-44-9) NOAEL (animal/male, F0/P) 3570 mg/kg bodyweight Animal: mouse, Animal sex: male, Remarks on results: other:Generation: all major orans incl. reproductive organs were examined (migrated information) NOAEL (animal/female, F0/P) 1785 mg/kg bodyweight Animal: mouse, Animal sex: female, Remarks on results: other:Generation: all major orans incl. reproductive organs were examined (migrated information) STOT-single exposure : May cause respiratory irritation. phthalic anhydride (85-44-9) STOT-single exposure May cause respiratory irritation. 1,4-naphthoquinone (130-15-4) STOT-single exposure May cause respiratory irritation.

: Suspected of damaging the unborn child.

1-methoxy-2-propanol (107-98-2)
STOT-single exposure May cause drowsiness or dizziness.

STOT-single exposure May cause respiratory irritation.

 Xylene (1330-20-7)

 STOT-single exposure
 May cause respiratory irritation.

STOT-repeated exposure : Causes damage to organs (hearing organs) through prolonged or repeated exposure (inhalation).

phthalic anhydride (85-44-9)

LOAEL (oral, rat, 90 days)

2500 mg/kg bodyweight Animal: rat, Animal sex: male

1-methoxy-2-propanol (107-98-2)

LOAEL (oral, rat, 90 days)

2757 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)

NOAEL (oral, rat, 90 days)

919 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)

NOAEL (dermal, rat/rabbit, 90 days)

> 1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

styrene (100-42-5)LOAEL (oral, rat, 90 days)2000 mg/kg bodyweight Animal: ratLOAEC (inhalation, rat, vapour, 90 days)0.21 mg/l air Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)NOAEL (oral, rat, 90 days)1000 mg/kg bodyweight Animal: ratNOAEL (subchronic, oral, animal/male, 90 days)10 mg/kg bodyweight Animal: mouse, Animal sex: maleSTOT-repeated exposureCauses damage to organs (hearing sense) through prolonged or repeated exposure (if inhaled).

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dipropylene glycol monomethyl ether (34590-94-8)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: other:KANPOGYO No.700, YAKUHATSU No. 1039.61, and KIKYKU No. 1014.
NOAEL (dermal, rat/rabbit, 90 days)	2850 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

Xylene (1330-20-7)	
	150 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Ethylbenzene (100-41-4)	
	75 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90- Day Oral Toxicity in Rodents)
STOT-repeated exposure	May cause damage to organs (hearing sense) through prolonged or repeated exposure.

Aspiration hazard : Not classified

ISOPON P.40 GLASS FIBRE COMPOUND	
Viscosity, kinematic	> 20.5 mm <sup>2</sup> /s

#### 11.2. Information on other hazards

No additional information available

#### **SECTION 12: Ecological information**

#### 12.1. Toxicity

: Harmful to aquatic life with long lasting effects. Ecology - general

Hazardous to the aquatic environment, short-term : Not classified

(acute)

Hazardous to the aquatic environment, long-term

: Harmful to aquatic life with long lasting effects.

(chronic)

bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)	
LC50 - Fish [1]	1.2 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
EC50 72h - Algae [1]	9.4 mg/l Test organisms (species): Scenedesmus capricornutum
EC50 72h - Algae [2]	> 11 mg/l Test organisms (species): Scenedesmus capricornutum
LOEC (chronic)	1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.3 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

phthalic anhydride (85-44-9)	
LC50 - Fish [1]	560 mg/l (OECD 210: Fish, Early-Life Stage Toxicity Test, 7 day(s), Danio rerio, Semistatic system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	> 640 mg/l Test organisms (species): Daphnia magna

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NOEC (chronic)	16 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
	10 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '60 d'

styrene (100-42-5)	
LC50 - Fish [1]	10 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	4.7 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	4.9 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	6.3 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	4.9 mg/l (EPA OTS 797.1050, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
LOEC (chronic)	2.06 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	1.01 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

Xylene (1330-20-7)	
LC50 - Fish [1]	2.6 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 3.4 mg/l Test organisms (species): Ceriodaphnia dubia
EC50 72h - Algae [1]	2.2 mg/l
ErC50 algae	4.36 mg/l (OECD 201: Alga, Growth Inhibition Test, 73 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
NOEC chronic fish	> 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'

## 12.2. Persistence and degradability

bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)	
Persistence and degradability	Not readily biodegradable in water.

phthalic anhydride (85-44-9)	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.26 g O <sub>2</sub> /g substance
ThOD	1.51 g O₂/g substance

styrene (100-42-5)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Chemical oxygen demand (COD)	2.8 g O <sub>2</sub> /g substance
ThOD	3.07 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.42 (Literature study)

Xylene (1330-20-7)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.

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#### 12.3. Bioaccumulative potential

bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)	
BCF - Other aquatic organisms [1] 31 (Estimated value, Fresh weight)	
Partition coefficient n-octanol/water (Log Pow)	3 (Estimated value, 25 °C)
Bioaccumulative potential Low potential for bioaccumulation (BCF < 500).	

phthalic anhydride (85-44-9)	
BCF - Other aquatic organisms [1] 3.4 (EPIWIN BCF (v 2.15), Calculated value)	
Partition coefficient n-octanol/water (Log Pow)	1.6 (Experimental value)
Bioaccumulative potential Low potential for bioaccumulation (Log Kow < 4).	

styrene (100-42-5)	
BCF - Fish [1] 35.5 (Carassius auratus, Literature study)	
Partition coefficient n-octanol/water (Log Pow)	2.96 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

Xylene (1330-20-7)	
BCF - Fish [1] 7.2 – 25.9 (56 day(s), Oncorhynchus mykiss, Flow-through system, Fresh water, Reacross)	
Partition coefficient n-octanol/water (Log Pow)	3.2 (Read-across, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

#### 12.4. Mobility in soil

bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)	
Surface tension 59 mN/m (20 °C, 0.09 g/l)	
Partition coefficient n-octanol/water (Log Koc)	2.65 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil Low potential for adsorption in soil.	

phthalic anhydride (85-44-9)	
Partition coefficient n-octanol/water (Log Koc) 0.3 – 1.49 (log Koc, Calculated value)	
Ecology - soil	Highly mobile in soil.

styrene (100-42-5)	
Surface tension 0.032 N/m (20 °C)	
Partition coefficient n-octanol/water (Log Koc)	2.55 (log Koc, Estimated value)
Ecology - soil	Low potential for adsorption in soil.

Xylene (1330-20-7)	
Surface tension 28.01 – 29.76 mN/m (25 °C)	
Partition coefficient n-octanol/water (Log Koc)	2.73 (log Koc, Equivalent or similar to OECD 121, Read-across)
Ecology - soil	Low potential for adsorption in soil. May be harmful to plant growth, blooming and fruit formation.

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#### 12.5. Results of PBT and vPvB assessment

Component	
styrene (100-42-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Xylene (1330-20-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
phthalic anhydride (85-44-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

#### 12.6. Endocrine disrupting properties

No additional information available

#### 12.7. Other adverse effects

No additional information available

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

#### **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

#### 14.1. UN number or ID number

UN-No. (ADR) : Not regulated UN-No. (IMDG) : Not regulated UN-No. (IATA) : Not regulated UN-No. (ADN) : Not regulated UN-No. (RID) : Not regulated

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not regulated Proper Shipping Name (IMDG) : Not regulated Proper Shipping Name (IATA) : Not regulated Proper Shipping Name (ADN) : Not regulated Proper Shipping Name (RID) : Not regulated

#### 14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not regulated

**IMDG** 

Transport hazard class(es) (IMDG) : Not regulated

IATA

Transport hazard class(es) (IATA) : Not regulated

ADN

Transport hazard class(es) (ADN) : Not regulated

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RID

Transport hazard class(es) (RID) : Not regulated

#### 14.4. Packing group

Packing group (ADR) : Not regulated Packing group (IMDG) : Not regulated Packing group (IATA) : Not regulated Packing group (ADN) : Not regulated Packing group (RID) : Not regulated

#### 14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

#### 14.6. Special precautions for user

#### **Overland transport**

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated

#### Inland waterway transport

Not regulated

#### Rail transport

Not regulated

#### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

### **SECTION 15: Regulatory information**

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

#### 15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:		
Reference code	Applicable on Entry title or description	
3(a)	Xylene ; styrene	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
3(b)	Xylene ; bisphenol-A-(epichlorhydrin), epoxy resin ; styrene	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	bisphenol-A-(epichlorhydrin), epoxy resin; styrene	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1
40.	Xylene ; styrene	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.

Contains no substance on the REACH candidate list Contains no REACH Annex XIV substances

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Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content : 291 g/l

#### 15.1.2. National regulations

No additional information available

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

#### **SECTION 16: Other information**

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road  ATE Acute Toxicity Estimate  BLV Biological limit value  CAS-No. Chemical Abstract Service number  CLP Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008  DMEL Derived Minimal Effect level  DNEL Derived-No Effect Level  ECSO Median effective concentration  EC-No. European Community number  EN European Standard  ATA International Air Transport Association  IMDG International Maritime Dangerous Goods  LCSO Median lethal concentration  LDSO Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOAEC No-Observed Effect Concentration  DOEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  VevB Very Persistent and Very Bioaccumulative	Abbreviations and acrony	yms:
ACUE Toxicity Estimate  BLV Biological limit value  CAS-No. Chemical Abstract Service number  CLP Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008  DMEL Derived Minimal Effect level  DNEL Derived-No Effect Level  EC50 Median effective concentration  EC-No. European Community number  EN European Standard  International Air Transport Association  IMDG International Maritime Dangerous Goods  LC50 Median lethal concentration  LD50 Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOEC Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  Very Persistent and Very Bioaccumulative	ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
BLV Biological limit value  CAS-No. Chemical Abstract Service number  CLP Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008  DMEL Derived Minimal Effect level  DMEL Derived-No Effect Level  EC50 Median effective concentration  EC-No. European Community number  EN European Standard  International Air Transport Association  IMDG International Maritime Dangerous Goods  LC50 Median lethal concentration  Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Concentration  NOAEL No-Observed Effect Concentration  NOCE No-Observed Effect Concentration  DEC Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RED Safety Data Sheet  Very Persistent and Very Bioaccumulative	ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS-No. Chemical Abstract Service number  CLP Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008  DMEL Derived Minimal Effect level  DNEL Derived-No Effect Level  EC50 Median effective concentration  EC-No. European Community number  EN European Standard  International Air Transport Association  IMDG International Maritime Dangerous Goods  LC50 Median lethal concentration  LD50 Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Concentration  NOAEL No-Observed Adverse Effect Level  NOCE No-Observed Adverse Effect Level  NOEC No-Observed Effect Concentration  DEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PREC Predicted No-Effect Concentration  REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  REID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  Very Persistent and Very Bioaccumulative	ATE	Acute Toxicity Estimate
CILP Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008  DMEL Derived Minimal Effect level  DNEL Derived-No Effect Level  EC50 Median effective concentration  EC-No. European Community number  EN European Standard International Air Transport Association  IMDG International Maritime Dangerous Goods  LC50 Median lethal concentration  LD50 Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOAEL No-Observed Effect Concentration  NOAEL No-Observed Effect Concentration  NOEC No-Observed Effect Concentration  PPBT Persistent Bioaccumulative Toxic  PPNEC Predicted No-Effect Concentration  REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  VevB Very Persistent and Very Bioaccumulative	BLV	Biological limit value
DMEL Derived Minimal Effect level DNEL Derived-No Effect Level EC50 Median effective concentration EC-No. European Community number EN European Standard International Air Transport Association IMDG International Maritime Dangerous Goods LC50 Median lethal concentration LD50 Median lethal dose LOAEL Lowest Observed Adverse Effect Level NOAEC No-Observed Adverse Effect Concentration NOAEL No-Observed Adverse Effect Level NOCE No-Observed Effect Concentration DOEL Occupational Exposure Limit PPBT Persistent Bioaccumulative Toxic PNEC Predicted No-Effect Concentration REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 RID Regulations concerning the International Carriage of Dangerous Goods by Rail SDS Safety Data Sheet	CAS-No.	Chemical Abstract Service number
Derived-No Effect Level  EC50 Median effective concentration  EC-No. European Community number  EN European Standard  International Air Transport Association  IMDG International Maritime Dangerous Goods  LC50 Median lethal concentration  LD50 Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOEC No-Observed Adverse Effect Level  NOEC No-Observed Effect Concentration  OEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  Vevy Persistent and Very Bioaccumulative	CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
Median effective concentration  EC-No. European Community number  EN European Standard  International Air Transport Association  IMDG International Maritime Dangerous Goods  LC50 Median lethal concentration  LD50 Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOAEL No-Observed Adverse Effect Level  NOEC No-Observed Effect Concentration  OEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  VevB Very Persistent and Very Bioaccumulative	DMEL	Derived Minimal Effect level
EC-No.  European Community number  EN European Standard  International Air Transport Association  IMDG International Maritime Dangerous Goods  LC50 Median lethal concentration  LD50 Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Concentration  NOAEL No-Observed Adverse Effect Level  NOCE No-Observed Effect Concentration  OEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  Vevb Very Persistent and Very Bioaccumulative	DNEL	Derived-No Effect Level
EN European Standard  International Air Transport Association  IMDG International Maritime Dangerous Goods  LC50 Median lethal concentration  LD50 Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Concentration  NOAEL No-Observed Adverse Effect Level  NOEC No-Observed Effect Concentration  OEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  VevB Very Persistent and Very Bioaccumulative	EC50	Median effective concentration
International Air Transport Association  IMDG International Maritime Dangerous Goods  LC50 Median lethal concentration  LD50 Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Concentration  NOAEL No-Observed Adverse Effect Level  NOEC No-Observed Effect Concentration  OEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  VevB Very Persistent and Very Bioaccumulative	EC-No.	European Community number
International Maritime Dangerous Goods  LC50 Median lethal concentration  LD50 Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Concentration  NOAEL No-Observed Adverse Effect Level  NOEC No-Observed Effect Concentration  OEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  VPVB Very Persistent and Very Bioaccumulative	EN	European Standard
Median lethal concentration  LD50 Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Concentration  NOAEL No-Observed Adverse Effect Level  NOEC No-Observed Effect Concentration  OEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  Very Persistent and Very Bioaccumulative	IATA	International Air Transport Association
LD50  Median lethal dose  LOAEL  Lowest Observed Adverse Effect Level  NOAEC  No-Observed Adverse Effect Concentration  NOAEL  No-Observed Adverse Effect Level  NOEC  No-Observed Effect Concentration  OEL  Occupational Exposure Limit  PBT  Persistent Bioaccumulative Toxic  PNEC  Predicted No-Effect Concentration  REACH  Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID  Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS  Safety Data Sheet  Very Persistent and Very Bioaccumulative	IMDG	International Maritime Dangerous Goods
LOAEL  Lowest Observed Adverse Effect Level  No-Observed Adverse Effect Concentration  NoAEL  No-Observed Adverse Effect Level  NoEC  No-Observed Effect Concentration  OEL  Occupational Exposure Limit  PBT  Persistent Bioaccumulative Toxic  PNEC  Predicted No-Effect Concentration  REACH  Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID  Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS  Safety Data Sheet  Very Persistent and Very Bioaccumulative	LC50	Median lethal concentration
NOAEC  No-Observed Adverse Effect Concentration  NoAEL  No-Observed Adverse Effect Level  NOEC  No-Observed Effect Concentration  OEL  Occupational Exposure Limit  PBT  Persistent Bioaccumulative Toxic  PNEC  Predicted No-Effect Concentration  REACH  Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID  Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS  Safety Data Sheet  VPVB  Very Persistent and Very Bioaccumulative	LD50	Median lethal dose
NOAEL  No-Observed Adverse Effect Level  NoEC  No-Observed Effect Concentration  OEL  Occupational Exposure Limit  PBT  Persistent Bioaccumulative Toxic  PNEC  Predicted No-Effect Concentration  REACH  Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID  Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS  Safety Data Sheet  Very Persistent and Very Bioaccumulative	LOAEL	Lowest Observed Adverse Effect Level
NOEC  No-Observed Effect Concentration  OEL  Occupational Exposure Limit  PBT  Persistent Bioaccumulative Toxic  PNEC  Predicted No-Effect Concentration  REACH  Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID  Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS  Safety Data Sheet  Very Persistent and Very Bioaccumulative	NOAEC	No-Observed Adverse Effect Concentration
OEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  VPVB Very Persistent and Very Bioaccumulative	NOAEL	No-Observed Adverse Effect Level
PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  VPVB Very Persistent and Very Bioaccumulative	NOEC	No-Observed Effect Concentration
PNEC Predicted No-Effect Concentration  REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  VPVB Very Persistent and Very Bioaccumulative	OEL	Occupational Exposure Limit
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  VPVB Very Persistent and Very Bioaccumulative	PBT	Persistent Bioaccumulative Toxic
RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  VPVB Very Persistent and Very Bioaccumulative	PNEC	Predicted No-Effect Concentration
SDS Safety Data Sheet  vPvB Very Persistent and Very Bioaccumulative	REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
vPvB Very Persistent and Very Bioaccumulative	RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
	SDS	Safety Data Sheet
WGK Water Hazard Class	vPvB	Very Persistent and Very Bioaccumulative
	WGK	Water Hazard Class

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Repr. 2	Reproductive toxicity, Category 2
Repr. 2	Reproductive toxicity, Category 2
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H361	Suspected of damaging fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains bisphenol-A-(epichlorhydrin), epoxy resin, phthalic anhydride. May produce an allergic reaction.

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

For professional use only.

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