Safety Data Sheet
Hempel's Light Primer Base

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878 - Europe

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

1.1 Product identifier

Product name : Hempel's Light Primer Base

Product identity : 4555911630, 0013427C

Product type : epoxy primer (base for multi-component product)

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

Field of application : yacht, ships and shipyards.

Ready-for-use mixture : 45550 = 45559 2 vol. / 95360 1 vol. 45551 = 45559 2 vol. / 95360 1 vol.

Identified uses : Consumer applications, Industrial applications, Professional applications, Used by spraying.

1.3 Details of the supplier of the safety data sheet

Company details :
HEMPEL A/S
Lundtoftegårdsvej 91
DK-2800 Kgs. Lyngby
Denmark
Tel.: + 45 45 93 38 00
hempel@hempel.com

Date of issue : 12 May 2026

Date of previous issue : 20 November 2025.

1.4 Emergency telephone number

Emergency telephone number (with hours of operation)

+45 45 93 38 00 (08.00 - 17.00)
See section 4 First aid measures.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Flam. Liq. 3, H226	FLAMMABLE LIQUIDS
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION
Eye Dam. 1, H318	SERIOUS EYE DAMAGE/ EYE IRRITATION
Skin Sens. 1, H317	SKIN SENSITIZATION
Aquatic Chronic 3, H412	AQUATIC HAZARD (LONG-TERM)

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Signal word : Danger

Hazard statements :
H226 - Flammable liquid and vapor.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements :

General : Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling.

Response : IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients : middle molecular epoxy resin MMW 700-1200
butan-1-ol

SECTION 2: Hazards identification

Supplemental label elements : Contains epoxy constituents. May produce an allergic reaction.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT, vPvB or endocrine disruptor.

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]		Type
middle molecular epoxy resin MMW 700-1200	CAS: 25068-38-6 Index: Polymer	≥10 - ≤25	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317	Skin Irrit. 2, H315: C ≥ 5% Eye Irrit. 2, H319: C ≥ 5%	[1]
Solvent naphtha (petroleum), light arom.	REACH #: 01-2119455851-35 EC: 918-668-5 CAS: 128601-23-0	≥10 - ≤13	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	-	[1]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥5 - ≤10	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315	ATE [Dermal] = 1100 mg/kg ATE [Inhalation (gases)] = 5000 ppm	[1] [2]
butan-1-ol	REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6	≥5 - ≤6.4	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	ATE [Oral] = 790 mg/kg	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥1 - ≤3	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304	ATE [Inhalation (gases)] = 4500 ppm	[1] [2]
			See Section 16 for the full text of the H statements declared above.		

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit, see section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate treatment (first aid).

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek immediate medical attention/advice.

Inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Give nothing by mouth. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately.

Skin contact : Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Remove contaminated clothing and shoes.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.

SECTION 4: First aid measures

Protection of first-aiders :	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact :	Causes serious eye damage.
Inhalation :	No known significant effects or critical hazards.
Skin contact :	Causes skin irritation. May cause an allergic skin reaction.
Ingestion :	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact :	Adverse symptoms may include the following: pain watering redness
Inhalation :	No specific data.
Skin contact :	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion :	Adverse symptoms may include the following: stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician :	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments :	No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media :	Recommended: alcohol resistant foam, CO_2, powders, water spray. Not to be used: waterjet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture :	Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products :	Decomposition products may include the following materials: carbon oxides halogenated compounds metal oxide/oxides

5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid all direct contact with the spilled material. Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.2 Environmental precautions

SECTION 6: Accidental release measures

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used. Contains epoxy constituents. Avoid all possible skin contact with epoxy and amine containing products, they may cause allergic reactions.
Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
xylene	**EU OEL (Europe, 1/2022) [xylene, mixed isomers]** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 221 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 442 mg/m³.
ethylbenzene	**EU OEL (Europe, 1/2022)** Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 442 mg/m³. STEL 15 minutes: 200 ppm. STEL 15 minutes: 884 mg/m³.

Biological exposure indices

Product/ingredient name	Exposure limit values
No exposure limit value known.	

Recommended monitoring procedures

SECTION 8: Exposure controls/personal protection

Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived effect levels

Product/ingredient name	Type - Population - Exposure	Value	Effects
Solvent naphtha (petroleum), light arom.	DNEL - Workers - Long term - Dermal	12.5 mg/kg bw/day	Systemic
	DNEL - Workers - Long term - Inhalation	150 mg/m³	Systemic
xylene	DNEL - Workers - Long term - Inhalation	77 mg/m³	Systemic
	DNEL - Workers - Long term - Dermal	212 mg/kg bw/day	Systemic
ethylbenzene	DNEL - Workers - Long term - Dermal	180 mg/kg bw/day	Systemic
	DNEL - Workers - Long term - Inhalation	77 mg/m³	Systemic

Predicted effect concentrations

Product/ingredient name	Compartment Detail	Value
xylene	Fresh water	0.327 mg/l
	Marine water	0.327 mg/l
	Fresh water sediment	12.46 mg/kg
	Marine water sediment	12.46 mg/kg
	Soil	2.31 mg/kg
	Sewage Treatment Plant	6.68 mg/l
ethylbenzene	Fresh water	0.1 mg/l
	Marine water	0.01 mg/l
	Sewage Treatment Plant	9.6 mg/l
	Fresh water sediment	13.7 mg/kg
	Soil	2.68 mg/kg

8.2 Exposure controls

Appropriate engineering controls

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Individual protection measures

General : Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.

Hygiene measures : Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection : Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.

Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:

Recommended: Silver Shield / Barrier / 4H gloves, polyvinyl alcohol (PVA), Viton®
May be used: nitrile rubber (>0.3 mm)
Short term exposure: neoprene rubber (>0.1 mm), butyl rubber (>0.5 mm), natural rubber (latex) (>0.4 mm), polyvinyl chloride (PVC), nitrile rubber (>0.1 mm), butyl rubber (>0.3 mm)

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.
Wear suitable protective clothing. Always wear protective clothing when spraying.
Chemical-resistant apron.

SECTION 8: Exposure controls/personal protection

Respiratory protection : When the product is applied by spraying and for continuous or prolonged work always wear an air-fed respirator e.g. hood with supply of fresh or compressed air or a full face, powered air purifying filter. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. (EN140) Be sure to use an approved/certified respirator or equivalent.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : Liquid.

Color : Off-white.

Odor : Solvent-like

pH : Testing not relevant or not possible due to nature of the product.

Melting point/freezing point : Testing not relevant or not possible due to nature of the product.

Boiling point/boiling range : Testing not relevant or not possible due to nature of the product.

Flash point : Closed cup: 24°C (75.2°F)

Evaporation rate : Testing not relevant or not possible due to nature of the product.

Flammability : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Vapor pressure :

	Vapor Pressure at 20˚C			Vapor pressure at 50˚C		
Ingredient name	**mm Hg**	**kPa**	**Method**	**mm Hg**	**kPa**	**Method**
butan-1-ol	<7.50064	<1	DIN EN 13016-2			

Vapor density : Not available.

Specific gravity : 1.47 g/cm³

Partition coefficient (LogKow) : Testing not relevant or not possible due to nature of the product.

Auto-ignition temperature :

Ingredient name	°C	°F	Method
Solvent naphtha (petroleum), light arom.	280 - 470	536 - 878	

Decomposition temperature : Testing not relevant or not possible due to nature of the product.

Viscosity : Aspiration hazard (H304) Not classified. Testing not relevant due to nature of the product.

Explosive properties : Explosive in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Oxidizing properties : Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight : Weighted average: 29 %

Water % by weight : Weighted average: 0 %

VOC content : 420.3 g/l

VOC content, Ready-for-use mixture : 430.9 g/l

TOC Content : Weighted average: 356 g/l

Solvent Gas : Weighted average: 0.101 m³/l

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials

Highly reactive or incompatible with the following materials: oxidizing materials.
Reactive or incompatible with the following materials: reducing materials.

10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides halogenated compounds metal oxide/oxides

SECTION 11: Toxicological information

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

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.
Epoxy and amine containing products can cause skin disorders such as allergic eczema. The allergy may arise after only a short exposure period.
Direct contact with the eyes can cause irreversible damage, including blindness.

Acute toxicity

Product/ingredient name	Result	Dose / Exposure	Effects
middle molecular epoxy resin MMW 700-1200	Rat - Dermal - LD50	>2000 mg/kg	
Solvent naphtha (petroleum), light arom.	Rat - Oral - LD50	3492 mg/kg	
	Rabbit - Dermal - LD50	3160 mg/kg	
	Rat - Inhalation - LC50 Vapor	6193 mg/m³ [4 hours]	
xylene	Rabbit - Dermal - LD50	>4200 mg/kg	
	Rat - Oral - LD50	3523 mg/kg	
	Rat - Inhalation - LC50 Vapor	6350 ppm [4 hours]	
	Rat - Inhalation - LC50 Gas.	5000 ppm [4 hours]	
butan-1-ol	Rabbit - Dermal - LD50	3400 mg/kg	Eye - Corneal damage Cardiac - Pulse rate Lung, Thorax, or Respiration - Dyspnea
	Rat - Oral - LD50	790 mg/kg	Liver - Fatty liver degeneration Kidney, Ureter, and Bladder - Other changes Blood - Other changes
	Rat - Inhalation - LC50 Vapor	24000 mg/m³ [4 hours]	
ethylbenzene	Rat - Oral - LD50	3500 mg/kg	Liver - Other changes Kidney, Ureter, and Bladder - Other changes
	Rabbit - Dermal - LD50	>5000 mg/kg	

Acute toxicity estimates

SECTION 11: Toxicological information

Product/ingredient name	Oral mg/kg	Dermal mg/kg	Inhalation (gases) ppm	Inhalation (vapors) mg/l	Inhalation (dusts and mists) mg/l
Hempel's Light Primer Base	12940.9	14063.1	51653.5	657.8	
Solvent naphtha (petroleum), light arom.	3492	3160			
xylene	3523	1100	5000		
butan-1-ol	790	3400		24	
ethylbenzene	3500		4500	11	

Irritation/Corrosion

Product/ingredient name	Result	Species	Exposure
Solvent naphtha (petroleum), light arom.	Rabbit - Eyes - Mild irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 100 microliters
	Rabbit - Respiratory - Mild irritant		
	Rabbit - Skin - Moderate irritant		
xylene	Rabbit - Eyes - Severe irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 5 milligrams
	Rabbit - Skin - Moderate irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 500 milligrams
	Rabbit - Skin - Irritant		
butan-1-ol	Rabbit - Eyes - Severe irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 2 milligrams
	Rabbit - Skin - Moderate irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 20 milligrams
ethylbenzene	Rabbit - Skin - Mild irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 15 milligrams
	Rabbit - Respiratory - Mild irritant		
	Rabbit - Eyes - Mild irritant		

Sensitizer

Product/ingredient name	Species - Route of exposure	Result
middle molecular epoxy resin MMW 700-1200	Guinea pig - skin	Sensitizing

Mutagenic effects

No known data avaliable in our database.

Carcinogenicity

No known data avaliable in our database.

Reproductive toxicity

No known data avaliable in our database.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Solvent naphtha (petroleum), light arom.	Category 3		Respiratory tract irritation
	Category 3		Narcotic effects
butan-1-ol	Category 3		Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs

Aspiration hazard

Product/ingredient name	Result
Solvent naphtha (petroleum), light arom.	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

No known significant effects or critical hazards.

SECTION 11: Toxicological information

11.2 Information on other hazards

Endocrine disrupting properties : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

Other information : No additional known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Do not allow to enter drains or watercourses. Harmful to aquatic life with long lasting effects.

Product/ingredient name	Result	Species	Exposure
middle molecular epoxy resin MMW 700-1200	Acute - LC50	Fish	>100 mg/l [96 hours]
	Acute - EC50	Daphnia	>100 mg/l [48 hours]
Solvent naphtha (petroleum), light arom.	Acute - LC50	Fish - *Oncorhynchus mykiss (rainbow trout)*	9.22 mg/l [96 hours]
	Acute - EC50	Algae - *Pseudokirchneriella subcapitata (green algae)*	2.6 mg/l [96 hours]
	Acute - EC50	Daphnia	3.2 mg/l [48 hours]
butan-1-ol	Acute - LC50	Fish	1.376 mg/l [96 hours]
	Acute - EC50	Daphnia	1328 mg/l [96 hours]
ethylbenzene	Chronic - NOEC - Fresh water	Algae - Green algae - *Pseudokirchneriella subcapitata*	<1000 µg/l [96 hours]

12.2 Persistence and degradability

Product/ingredient name	Test	Result
Solvent naphtha (petroleum), light arom.		>70% [28 days] - Readily
		>60% [28 days] - Readily
	OECD Ready Biodegradability - Manometric Respirometry Test	78% [28 days] - Readily
xylene		>60% [28 days] - Readily
	OECD Ready Biodegradability - Manometric Respirometry Test	90 - 98% [28 days] - Readily
butan-1-ol	OECD Ready Biodegradability - Closed Bottle Test	92% [20 days]
ethylbenzene		>70% [28 days] - Readily

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Solvent naphtha (petroleum), light arom.			Readily
xylene			Readily
butan-1-ol			Readily
ethylbenzene			Readily

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
middle molecular epoxy resin MMW 700-1200	2.64 - 3.78	31	Low
Solvent naphtha (petroleum), light arom.	-	10 - 2500	High
xylene	3.12	8.1 - 25.9	Low
butan-1-ol	1	3.16	Low
ethylbenzene	3.6	-	Low

12.4 Mobility in soil

Soil/Water partition coefficient

Product/ingredient name	logKoc	Koc
xylene	1.6 - 2.6	39 - 365
butan-1-ol	0.51	3.22078
ethylbenzene	2.2	170.406

Results of PMT and vPvM assessment

SECTION 12: Ecological information

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
middle molecular epoxy resin MMW 700-1200	No	No	No	No	No	No	No
Solvent naphtha (petroleum), light arom.	No	No	No	No	No	No	No
xylene	No	No	No	No	No	No	No
butan-1-ol	No	No	No	No	No	No	No
ethylbenzene	No	No	No	No	No	No	No

Mobility : The product does not meet the criteria to be considered as a PMT or vPvM.

12.5 Results of PBT and vPvB assessment

Conclusion/Summary : The product does not meet the criteria to be considered as a PBT or vPvB.

12.6 Endocrine disrupting properties

The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

European waste catalogue no. (EWC) is given below.

European waste catalogue (EWC) : 08 01 11*

Packaging

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

	14.1 UN / ID no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env*	Additional information
ADR/RID Class	UN1263	PAINT	3 	III	No.	**Tunnel code** (D/E)
IMDG Class	UN1263	PAINT	3 	III	No.	**Emergency schedules** F-E, S-E
IATA Class	UN1263	PAINT	3 	III	No.	The environmentally hazardous substance mark may appear if required by other transportation regulations.

PG* : Packing group
Env.* : Environmental hazards

14.6 Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization - Substances of very high concern

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

Synthetic polymer microparticles - Designation 78

Generic identity of polymer(s) : Polyolefinic copolymers

Total percentage of synthetic polymer microparticles : 0.34%

The synthetic polymer microparticles supplied is subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council.

Other EU regulations

Seveso category This product is controlled under the Seveso III Directive.

Seveso category
P5c: Flammable liquids 2 and 3 not falling under P5a or P5b

15.2 Chemical Safety Assessment

-

SECTION 16: Other information

Abbreviations and acronyms :
ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
EUH statement = CLP-specific Hazard statement
RRN = REACH Registration Number
DNEL = Derived No Effect Level
PNEC = Predicted No Effect Concentration

Full text of abbreviated H statements :

H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
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.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
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.
EUH066	Repeated exposure may cause skin dryness or cracking.

Full text of classifications [CLP/GHS] :

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2
Aquatic Chronic 3	AQUATIC HAZARD (LONG-TERM) - 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. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITIZATION - Category 1
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

SECTION 16: Other information

Classification	Justification
FLAMMABLE LIQUIDS	On basis of test data
SKIN CORROSION/IRRITATION	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION	Calculation method
SKIN SENSITIZATION	Calculation method
AQUATIC HAZARD (LONG-TERM)	Calculation method

Notice to reader

Indicates information that has changed from previously issued version.

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical preformance or suitability for particular applications.
It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.

Safe Use of Mixture Information

Hempel's Light Primer Base

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

Indoor or outdoor spray painting by professionals or with brush, roller, putty knife, dipping etc. with good general room ventilation

This safe use information is linked to : Professional spray painting and/or low-energy painting, local effect - Level III
Skin Corr. 1, Eye Dam. 1, Resp. Sens. 1 or EUH071

Sector(s) of use : Industrial uses - Professional uses

Product category(ies) : Coatings and paints, thinners, paint removers

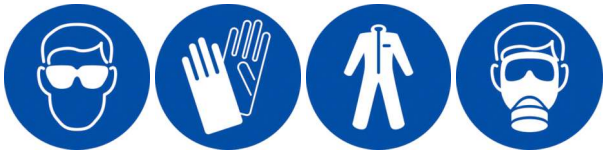
Operational conditions

Place of use : Indoor or outdoor use

Risk management measures (RMM)

Contributing activity	Process category (ies)	Maximum duration	Ventilation		Respiratory	Eye	Hands
			Type and air changes per hour				
Preparation of material for application	PROC05	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.
Loading of application equipment and handling of coated parts before curing	PROC08a	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.
Professional application of coatings by brush or roller	PROC10	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.
Professional application of coatings by spraying	PROC11	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.
Film formation - force drying, stoving and other technologies	PROC04	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	None	None	Wear suitable gloves tested to EN374.
Cleaning	PROC05	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.
Waste management	PROC08a	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.

See section 8 of this Safety Data Sheet for specifications.



The information in this Safe Use of Mixture Information (SUMI) sheet is based on the data provided by the substance supplier for the substances in the product for which a chemical safety assessment has been carried out at the time of issue. It does not guarantee safe use of the product and does not replace any occupational risk assessment required by legislation. When developing workplace instructions for employees, SUMI sheets should always be considered in combination with the Safety Data Sheet (SDS) and the label of the product.
No liability is accepted for any damage, no matter of what kind, which is a direct or indirect consequence of acts and/or decisions based on the contents of this document.

Safety Data Sheet
Hempel's Curing Agent 95360

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878 - Europe

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

1.1 Product identifier

Product name : Hempel's Curing Agent 95360

Product identity : 9536000000, 00134283

Product type : Curing agent

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

Field of application : used only as part of two- or multi component products.

Ready-for-use mixture : (see base component)

Identified uses : Consumer applications, Industrial applications, Professional applications, Used by spraying.

1.3 Details of the supplier of the safety data sheet

Company details :
HEMPEL A/S
Lundtoftegårdsvej 91
DK-2800 Kgs. Lyngby
Denmark
Tel.: + 45 45 93 38 00
hempel@hempel.com

Date of issue : 13 May 2026

Date of previous issue : 21 November 2025.

1.4 Emergency telephone number

Emergency telephone number (with hours of operation)

+45 45 93 38 00 (08.00 - 17.00)
See section 4 First aid measures.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Flam. Liq. 3, H226	FLAMMABLE LIQUIDS
Acute Tox. 4, H332	ACUTE TOXICITY (inhalation)
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION
Eye Dam. 1, H318	SERIOUS EYE DAMAGE/ EYE IRRITATION
Skin Sens. 1, H317	SKIN SENSITIZATION
Aquatic Chronic 3, H412	AQUATIC HAZARD (LONG-TERM)

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Signal word : Danger

Hazard statements :
H226 - Flammable liquid and vapor.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H332 - Harmful if inhaled.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements :

General : Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling.

Response : IF INHALED: Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

SECTION 2: Hazards identification

Hazardous ingredients : xylene
polymer of C18-unsatd. fatty acids dimers with tall-oil fatty acids and triethylenetetramine
butan-1-ol
3,6-diazaoctanethylenediamin

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Yes, applicable.

2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT, vPvB or endocrine disruptor.

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]		Type
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥25 - ≤50	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315	ATE [Dermal] = 1100 mg/kg ATE [Inhalation (gases)] = 5000 ppm	[1] [2]
polymer of C18-unsatd. fatty acids dimers with tall-oil fatty acids and triethylenetetramine	REACH #: 01-2119972320-44 EC: 500-191-5 CAS: 68082-29-1	≥10 - <25	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 2, H411	-	[1]
butan-1-ol	REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6	≥5 - ≤10	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	ATE [Oral] = 790 mg/kg	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥5 - <10	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304	ATE [Inhalation (gases)] = 4500 ppm	[1] [2]
3,6-diazaoctanethylenediamin	REACH #: 01-2119487919-13 EC: 203-950-6 CAS: 112-24-3 Index: 612-059-00-5	≤1.7	Acute Tox. 3, H311 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	ATE [Dermal] = 550 mg/kg	[1]
toluene	REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	<1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304	-	[1] [2]
			See Section 16 for the full text of the H statements declared above.		

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit, see section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate treatment (first aid).

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek immediate medical attention/advice.

SECTION 4: First aid measures

Inhalation :	Remove to fresh air and keep at rest in a position comfortable for breathing. Give nothing by mouth. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately.
Skin contact :	Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Remove contaminated clothing and shoes.
Ingestion :	If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.
Protection of first-aiders :	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact :	Causes serious eye damage.
Inhalation :	Harmful if inhaled.
Skin contact :	Causes skin irritation. May cause an allergic skin reaction.
Ingestion :	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact :	Adverse symptoms may include the following: pain watering redness
Inhalation :	No specific data.
Skin contact :	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion :	Adverse symptoms may include the following: stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician :	If gasses have been inhaled, from the decomposition of the product, symptoms may be delayed. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments :	No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media :	Recommended: alcohol resistant foam, CO_2, powders, water spray. Not to be used: waterjet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture :	Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products :	Decomposition products may include the following materials: carbon oxides nitrogen oxides

5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid all direct contact with the spilled material. Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used.
Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
xylene	**EU OEL (Europe, 1/2022) [xylene, mixed isomers]** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 221 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 442 mg/m³.
ethylbenzene	**EU OEL (Europe, 1/2022)** Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 442 mg/m³. STEL 15 minutes: 200 ppm. STEL 15 minutes: 884 mg/m³.
toluene	**EU OEL (Europe, 1/2022)** Absorbed through skin. TWA 8 hours: 192 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 384 mg/m³. STEL 15 minutes: 100 ppm.

SECTION 8: Exposure controls/personal protection

Biological exposure indices

Product/ingredient name	Exposure limit values
No exposure limit value known.	

Recommended monitoring procedures

Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived effect levels

Product/ingredient name	Type - Population - Exposure	Value	Effects
xylene	DNEL - Workers - Long term - Inhalation	77 mg/m³	Systemic
	DNEL - Workers - Long term - Dermal	212 mg/kg bw/day	Systemic
polymer of C18-unsatd. fatty acids dimers with tall-oil fatty acids and triethylenetetramine	DNEL - Workers - Long term - Inhalation	3.9 mg/m³	Systemic
	DNEL - Workers - Long term - Dermal	1.1 mg/kg bw/day	Systemic
ethylbenzene	DNEL - Workers - Long term - Dermal	180 mg/kg bw/day	Systemic
	DNEL - Workers - Long term - Inhalation	77 mg/m³	Systemic
3,6-diazaoctanethylenediamin	DNEL - Workers - Long term - Dermal	0.57 mg/kg bw/day	Systemic
	DNEL - Workers - Long term - Inhalation	1 mg/m³	Systemic
toluene	DNEL - Workers - Long term - Dermal	384 mg/kg bw/day	Systemic
	DNEL - Workers - Long term - Inhalation	192 mg/m³	Systemic

Predicted effect concentrations

Product/ingredient name	Compartment Detail	Value
xylene	Fresh water	0.327 mg/l
	Marine water	0.327 mg/l
	Fresh water sediment	12.46 mg/kg
	Marine water sediment	12.46 mg/kg
	Soil	2.31 mg/kg
	Sewage Treatment Plant	6.68 mg/l
polymer of C18-unsatd. fatty acids dimers with tall-oil fatty acids and triethylenetetramine	Fresh water	0.00434 mg/l
	Marine water	0.000434 mg/l
	Sewage Treatment Plant	3.84 mg/l
	Fresh water sediment	434.02 mg/kg
	Marine water sediment	43.4 mg/kg
	Soil	86.78 mg/kg
ethylbenzene	Fresh water	0.1 mg/l
	Marine water	0.01 mg/l
	Sewage Treatment Plant	9.6 mg/l
	Fresh water sediment	13.7 mg/kg
	Soil	2.68 mg/kg
3,6-diazaoctanethylenediamin	Fresh water	190 µg/l
	Fresh water sediment	95.9 mg/kg
	Marine water	38 µg/l
	Marine water sediment	19.2 mg/kg
	Soil	19.1 mg/kg
	Sewage Treatment Plant	4.25 mg/l
toluene	Fresh water	0.68 mg/l
	Marine water	0.68 mg/l
	Sewage Treatment Plant	13.61 mg/l
	Fresh water sediment	16.39 mg/kg
	Marine water sediment	16.39 mg/kg
	Soil	2.89 mg/kg

8.2 Exposure controls

Appropriate engineering controls

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Individual protection measures

SECTION 8: Exposure controls/personal protection

General : Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.

Hygiene measures : Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection : Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.

Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:

Recommended: polyvinyl alcohol (PVA), Silver Shield / Barrier / 4H gloves, Viton®
May be used: neoprene rubber (>0.1 mm), butyl rubber (>0.5 mm), butyl rubber (>0.3 mm), nitrile rubber (>0.3 mm)
Short term exposure: natural rubber (latex) (>0.4 mm), polyvinyl chloride (PVC), nitrile rubber (>0.1 mm)

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.
Wear suitable protective clothing. Always wear protective clothing when spraying.
Chemical-resistant apron.

Respiratory protection : When the product is applied by spraying and for continuous or prolonged work always wear an air-fed respirator e.g. hood with supply of fresh or compressed air or a full face, powered air purifying filter. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. (EN140) Be sure to use an approved/certified respirator or equivalent.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : Liquid.

Color : Transparent

Odor : Solvent-like

pH : Testing not relevant or not possible due to nature of the product.

Melting point/freezing point : Testing not relevant or not possible due to nature of the product.

Boiling point/boiling range : Testing not relevant or not possible due to nature of the product.

Flash point : Closed cup: 25°C (77°F)

Evaporation rate : Testing not relevant or not possible due to nature of the product.

Flammability : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Vapor pressure :

	Vapor Pressure at 20˚C			Vapor pressure at 50˚C		
Ingredient name	**mm Hg**	**kPa**	**Method**	**mm Hg**	**kPa**	**Method**
ethylbenzene	9.30076	1.2				

Vapor density : Not available.

Specific gravity : 0.93 g/cm³

Partition coefficient (LogKow) : Testing not relevant or not possible due to nature of the product.

Auto-ignition temperature :

SECTION 9: Physical and chemical properties

Ingredient name	°C	°F	Method
butan-1-ol	355	671	EU A.15

Decomposition temperature : Testing not relevant or not possible due to nature of the product.

Viscosity : Aspiration hazard (H304) Not classified. Testing not relevant due to nature of the product.

Explosive properties : Explosive in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Oxidizing properties : Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight : Weighted average: 49 %

Water % by weight : Weighted average: 0 %

VOC content : 452.2 g/l

TOC Content : Weighted average: 386 g/l

Solvent Gas : Weighted average: 0.111 m³/l

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials

Extremely reactive or incompatible with the following materials: acids.
Highly reactive or incompatible with the following materials: oxidizing materials.
Reactive or incompatible with the following materials: reducing materials and organic materials.

10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides nitrogen oxides

SECTION 11: Toxicological information

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

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.
Direct contact with the eyes can cause irreversible damage, including blindness.

Acute toxicity

SECTION 11: Toxicological information

Product/ingredient name	Result	Dose / Exposure	Effects
xylene	Rabbit - Dermal - LD50 Rat - Oral - LD50 Rat - Inhalation - LC50 Vapor Rat - Inhalation - LC50 Gas.	>4200 mg/kg 3523 mg/kg 6350 ppm [4 hours] 5000 ppm [4 hours]	
butan-1-ol	Rabbit - Dermal - LD50 Rat - Oral - LD50 Rat - Inhalation - LC50 Vapor	3400 mg/kg 790 mg/kg 24000 mg/m³ [4 hours]	Eye - Corneal damage Cardiac - Pulse rate Lung, Thorax, or Respiration - Dyspnea Liver - Fatty liver degeneration Kidney, Ureter, and Bladder - Other changes Blood - Other changes
ethylbenzene	Rat - Oral - LD50	3500 mg/kg	Liver - Other changes Kidney, Ureter, and Bladder - Other changes
3,6-diazaoctanethylenediamin	Rabbit - Dermal - LD50 Rabbit - Dermal - LD50 Rat - Oral - LD50	>5000 mg/kg 550 mg/kg 1716 mg/kg	
toluene	Rat - Oral - LD50 Rat - Inhalation - LC50 Vapor	636 mg/kg >20 mg/l [4 hours]	

Acute toxicity estimates

Product/ingredient name	Oral mg/kg	Dermal mg/kg	Inhalation (gases) ppm	Inhalation (vapors) mg/l	Inhalation (dusts and mists) mg/l
Hempel's Curing Agent 95360	8326.2	3468.2	13555.3	172.9	
xylene	3523	1100	5000		
butan-1-ol	790	3400		24	
ethylbenzene	3500		4500	11	
3,6-diazaoctanethylenediamin		550			

Irritation/Corrosion

Product/ingredient name	Result	Species	Exposure
xylene	Rabbit - Eyes - Severe irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 5 milligrams
	Rabbit - Skin - Moderate irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 500 milligrams
	Rabbit - Skin - Irritant		
polymer of C18-unsatd. fatty acids dimers with tall-oil fatty acids and triethylenetetramine	Rabbit - Eyes - Severe irritant		
butan-1-ol	Rabbit - Eyes - Severe irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 2 milligrams
	Rabbit - Skin - Moderate irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 20 milligrams
ethylbenzene	Rabbit - Skin - Mild irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 15 milligrams
	Rabbit - Respiratory - Mild irritant		
	Rabbit - Eyes - Mild irritant		
3,6-diazaoctanethylenediamin	Rabbit - Eyes - Moderate irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 20 milligrams
	Rabbit - Skin - Severe irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 5 milligrams
toluene	Rabbit - Eyes - Mild irritant	Duration of treatment/ exposure: 0.5 minutes	Amount/concentration applied: 100 mg
	Rabbit - Skin - Moderate irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 20 mg

Sensitizer

Product/ingredient name	Species - Route of exposure	Result
polymer of C18-unsatd. fatty acids dimers with tall-oil fatty acids and triethylenetetramine	Mouse - skin	Sensitizing
3,6-diazaoctanethylenediamin	Guinea pig - skin	Sensitizing

Mutagenic effects

No known data avaliable in our database.

Carcinogenicity

No known data avaliable in our database.

SECTION 11: Toxicological information

Reproductive toxicity

No known data avaliable in our database.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
butan-1-ol	Category 3		Respiratory tract irritation
	Category 3		Narcotic effects
toluene	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs
toluene	Category 2	-	-

Aspiration hazard

Product/ingredient name	Result
ethylbenzene	ASPIRATION HAZARD - Category 1
toluene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

No known significant effects or critical hazards.

11.2 Information on other hazards

Endocrine disrupting properties : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

Other information : No additional known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Do not allow to enter drains or watercourses. Harmful to aquatic life with long lasting effects.

Product/ingredient name	Result	Species	Exposure
polymer of C18-unsatd. fatty acids dimers with tall-oil fatty acids and triethylenetetramine	Acute - LC50	Fish	7.07 mg/l [96 hours]
	Acute - EC50	Daphnia	7.07 mg/l [48 hours]
	Acute - EC50	Algae	4.34 mg/l [72 hours]
butan-1-ol	Acute - LC50	Fish	1.376 mg/l [96 hours]
	Acute - EC50	Daphnia	1328 mg/l [96 hours]
ethylbenzene	Chronic - NOEC - Fresh water	Algae - Green algae - *Pseudokirchneriella subcapitata*	<1000 µg/l [96 hours]
3,6-diazaoctanethylenediamin	Acute - EC50	Daphnia	31.1 mg/l [48 hours]
	Acute - EC50	Algae	20 mg/l [72 hours]
	Acute - LC50	Fish	330 mg/l [96 hours]
toluene	Chronic - NOEC - Fresh water	Daphnia - Water flea - *Daphnia magna*	1000 µg/l [21 days]
	Chronic - NOEC - Fresh water	Algae - Green algae - *Pseudokirchneriella subcapitata*	<500000 µg/l [96 hours]

12.2 Persistence and degradability

Product/ingredient name	Test	Result
xylene		>60% [28 days] - Readily
	OECD Ready Biodegradability - Manometric Respirometry Test	90 - 98% [28 days] - Readily
polymer of C18-unsatd. fatty acids dimers with tall-oil fatty acids and triethylenetetramine	OECD Ready Biodegradability - Closed Bottle Test	15% [28 days] - Not readily
butan-1-ol	OECD Ready Biodegradability - Closed Bottle Test	92% [20 days]
ethylbenzene		>70% [28 days] - Readily
toluene		100% [14 days] - Readily

SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene			Readily
polymer of C18-unsatd. fatty acids dimers with tall-oil fatty acids and triethylenetetramine			Not readily
butan-1-ol			Readily
ethylbenzene			Readily
toluene			Readily

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
xylene	3.12	8.1 - 25.9	Low
polymer of C18-unsatd. fatty acids dimers with tall-oil fatty acids and triethylenetetramine	10.34	1.89	Low
butan-1-ol	1	3.16	Low
ethylbenzene	3.6	-	Low
3,6-diazaoctanethylenediamin	-1.66 - -1.4	-	Low
toluene	2.73	90	Low

12.4 Mobility in soil

Soil/Water partition coefficient

Product/ingredient name	logKoc	Koc
xylene	1.6 - 2.6	39 - 365
butan-1-ol	0.51	3.22078
ethylbenzene	2.2	170.406
3,6-diazaoctanethylenediamin	1.5	33.6474
toluene	2.1	117.115

Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
xylene	No	No	No	No	No	No	No
polymer of C18-unsatd. fatty acids dimers with tall-oil fatty acids and triethylenetetramine	No	No	No	No	No	No	No
butan-1-ol	No	No	No	No	No	No	No
ethylbenzene	No	No	No	No	No	No	No
3,6-diazaoctanethylenediamin	No	No	No	No	No	No	No
toluene	No	No	No	No	No	No	No

Mobility : The product does not meet the criteria to be considered as a PMT or vPvM.

12.5 Results of PBT and vPvB assessment

Conclusion/Summary : The product does not meet the criteria to be considered as a PBT or vPvB.

12.6 Endocrine disrupting properties

The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

European waste catalogue no. (EWC) is given below.

European waste catalogue (EWC) : 08 01 11*

Packaging

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

	14.1 UN / ID no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env*	Additional information
ADR/RID Class	UN1263	PAINT	3 	III	No.	**Tunnel code** (D/E)
IMDG Class	UN1263	PAINT	3 	III	No.	**Emergency schedules** F-E, S-E
IATA Class	UN1263	PAINT	3 	III	No.	-

PG* : Packing group
Env.* : Environmental hazards

14.6 Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization - Substances of very high concern

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

Other EU regulations

Seveso category This product is controlled under the Seveso III Directive.

Seveso category
P5c: Flammable liquids 2 and 3 not falling under P5a or P5b

15.2 Chemical Safety Assessment

-

SECTION 16: Other information

Abbreviations and acronyms :
ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
EUH statement = CLP-specific Hazard statement
RRN = REACH Registration Number
DNEL = Derived No Effect Level
PNEC = Predicted No Effect Concentration

Full text of abbreviated H statements :

H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

SECTION 16: Other information

	H318	Causes serious eye damage.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.
	H336	May cause drowsiness or dizziness.
	H361d	Suspected of damaging the unborn child.
	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.
Full text of classifications [CLP/GHS] :	Acute Tox. 3	ACUTE TOXICITY - Category 3
	Acute Tox. 4	ACUTE TOXICITY - Category 4
	Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2
	Aquatic Chronic 3	AQUATIC HAZARD (LONG-TERM) - Category 3
	Asp. Tox. 1	ASPIRATION HAZARD - Category 1
	Eye Dam. 1	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
	Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
	Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
	Repr. 2	TOXIC TO REPRODUCTION - Category 2
	Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
	Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
	Skin Sens. 1	SKIN SENSITIZATION - Category 1
	Skin Sens. 1A	SKIN SENSITIZATION - Category 1A
	STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
	STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
FLAMMABLE LIQUIDS	On basis of test data
ACUTE TOXICITY (inhalation)	Calculation method
SKIN CORROSION/IRRITATION	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION	Calculation method
SKIN SENSITIZATION	Calculation method
AQUATIC HAZARD (LONG-TERM)	Calculation method

Notice to reader

Indicates information that has changed from previously issued version.

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical preformance or suitability for particular applications.
It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.

Safety Data Sheet
Hempel´s Silic One Tiecoat

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878 - Europe

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

1.1 Product identifier

Product name : Hempel´s Silic One Tiecoat

Product identity : 2745023410, 0005A6D3

Product type : silicone paint

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

Field of application : yacht, ships and shipyards.

Identified uses : Consumer applications, Professional applications.

1.3 Details of the supplier of the safety data sheet

Company details : HEMPEL A/S
Lundtoftegårdsvej 91
DK-2800 Kgs. Lyngby
Denmark
Tel.: + 45 45 93 38 00
hempel@hempel.com

Date of issue : 12 May 2026

Date of previous issue : 15 December 2025.

1.4 Emergency telephone number

Emergency telephone number (with hours of operation)

+45 45 93 38 00 (08.00 - 17.00)
See section 4 First aid measures.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Flam. Liq. 3, H226	FLAMMABLE LIQUIDS
Aquatic Chronic 3, H412	AQUATIC HAZARD (LONG-TERM)

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H226 - Flammable liquid and vapor.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements :

General : Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients : Not applicable.

Supplemental label elements : Contains 1,3-bis(12-hydroxyocta-decanamide-N-methyle)benzene. May produce an allergic reaction.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

This mixture contains substances that are assessed to be a PBT or a vPvB, refer to Section 3.2. This mixture does not contain any substances that are assessed to be an endocrine disruptor.

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]		Type
n-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≥10 - <20	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	-	[1] [2]
2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime	REACH #: 01-2120006148-66 CAS: 58190-62-8 List #: 700-810-0	≥5 - <10	Acute Tox. 4, H302 Eye Irrit. 2, H319	ATE [Oral] = 500 mg/kg	[1]
1,3-bis(12-hydroxyocta-decanamide-N-methyle) benzene	REACH #: 01-0000016979-49 EC: 423-300-7	≤0.3	Skin Sens. 1B, H317 Aquatic Chronic 4, H413	-	[1]
trimethylolpropane	REACH #: 01-2119486799-10 EC: 201-074-9 CAS: 77-99-6	≤0.3	Repr. 2, H361fd	-	[1]
octamethylcyclotetrasiloxane (D4)	REACH #: 01-2119529238-36 EC: 209-136-7 CAS: 556-67-2 Index: 014-018-00-1	<0.1	Flam. Liq. 3, H226 Repr. 2, H361f Aquatic Chronic 1, H410 PBT, EUH440 vPvB, EUH441 See Section 16 for the full text of the H statements declared above.	M [Chronic] = 10	[1] [3] [4]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit, see section 8.
[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

List numbers have no legal significance.

SECTION 4: First aid measures

4.1 Description of first aid measures

General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate treatment (first aid).

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. In all cases of doubt, or when symptoms persist, seek medical attention.

Inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Give nothing by mouth. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately.

Skin contact : Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Remove contaminated clothing and shoes.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

SECTION 4: First aid measures

Skin contact :	No specific data.
Ingestion :	No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician :	If gasses have been inhaled, from the decomposition of the product, symptoms may be delayed. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments :	No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media :	Recommended: alcohol resistant foam, CO_2, powders, water spray. Not to be used: waterjet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture :	Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products :	Decomposition products may include the following materials: carbon oxides nitrogen oxides metal oxide/ oxides

5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid all direct contact with the spilled material. Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used.
Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
n-butyl acetate	**EU OEL (Europe, 1/2022)** STEL 15 minutes: 150 ppm. STEL 15 minutes: 723 mg/m³. TWA 8 hours: 241 mg/m³. TWA 8 hours: 50 ppm.

Biological exposure indices

Product/ingredient name	Exposure limit values
No exposure limit value known.	

Recommended monitoring procedures

Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived effect levels

Product/ingredient name	Type - Population - Exposure	Value	Effects
n-butyl acetate	DNEL - Workers - Long term - Inhalation	300 mg/m³	Systemic
	DNEL - Workers - Long term - Dermal	11 mg/kg bw/day	Systemic
trimethylolpropane	DNEL - Workers - Long term - Dermal	0.94 mg/kg bw/day	Systemic
	DNEL - Workers - Long term - Inhalation	3.3 mg/m³	Systemic
octamethylcyclotetrasiloxane (D4)	DNEL - Workers - Long term - Inhalation	73 mg/m³	Systemic

Predicted effect concentrations

Product/ingredient name	Compartment Detail	Value
n-butyl acetate	Fresh water	0.18 mg/l
	Marine	0.018 mg/l
	Fresh water sediment	0.981 mg/kg
	Marine water sediment	0.0981 mg/kg
	Soil	0.0903 mg/kg
	Sewage Treatment Plant	35.6 mg/l
2-Pentanone, O,O',O''-(ethenylsilylidyne) trioxime	Fresh water	0.103 mg/l
	Marine water	0.0103 mg/l
	Fresh water sediment	0.586 mg/kg
	Marine water sediment	0.059 mg/kg
	Soil	0.04555 mg/kg
	Sewage Treatment Plant	2.22 mg/l

SECTION 8: Exposure controls/personal protection

octamethylcyclotetrasiloxane (D4)	Fresh water Fresh water Sewage Treatment Plant Fresh water sediment Marine water sediment Soil	1.5 µg/l 0.15 µg/l 10 mg/l 3 mg/kg dwt 0.3 mg/kg dwt 0.84 mg/kg dwt

8.2 Exposure controls

Appropriate engineering controls

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Individual protection measures

General : Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.

Hygiene measures : Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Hand protection : Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.

Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:

Recommended: Silver Shield / Barrier / 4H gloves, polyvinyl alcohol (PVA), Viton®
May be used: nitrile rubber (>0.3 mm), neoprene rubber (>0.1 mm), butyl rubber (>0.5 mm)
Short term exposure: natural rubber (latex) (>0.4 mm), polyvinyl chloride (PVC), nitrile rubber (>0.1 mm), butyl rubber (>0.3 mm)

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.

Respiratory protection : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. (EN140) Be sure to use an approved/certified respirator or equivalent.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : Liquid.

Color : Cream

Odor : Solvent-like

pH : Testing not relevant or not possible due to nature of the product.

Melting point/freezing point : Testing not relevant or not possible due to nature of the product.

Boiling point/boiling range : Testing not relevant or not possible due to nature of the product.

Flash point : Closed cup: 31°C (87.8°F)

Evaporation rate : Testing not relevant or not possible due to nature of the product.

Flammability : Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and oxidizing materials.

Vapor pressure : Not applicable. [50°C (122°F)]

SECTION 9: Physical and chemical properties

Vapor density : Not available.

Specific gravity : 1.21 g/cm³

Partition coefficient (LogKow) : Testing not relevant or not possible due to nature of the product.

Auto-ignition temperature :

Ingredient name	°C	°F	Method
n-butyl acetate	415	779	EU A.15

Decomposition temperature : Testing not relevant or not possible due to nature of the product.

Viscosity : Testing not relevant or not possible due to nature of the product.

Explosive properties : Slightly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge.

Oxidizing properties : Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight : Weighted average: 19 %

Water % by weight : Weighted average: 0 %

VOC content : 231.5 g/l

TOC Content : Weighted average: 143 g/l

Solvent Gas : Weighted average: 0.048 m³/l

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials

Highly reactive or incompatible with the following materials: oxidizing materials.

10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides nitrogen oxides metal oxide/oxides

SECTION 11: Toxicological information

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

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

Acute toxicity

SECTION 11: Toxicological information

Product/ingredient name	Result	Dose / Exposure	Effects
n-butyl acetate	Rat - Oral - LD50 Rabbit - Dermal - LD50 Rat - Inhalation - LC50 Vapor	10768 mg/kg >14112 mg/kg >21 mg/l [4 hours]	
2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime	Rat - Oral - LD50	1000 - 2000 mg/kg	
1,3-bis(12-hydroxyocta-decanamide-N-methyle)benzene	Rat - Oral - LD50 Rat - Dermal - LD50 Rat - Inhalation - LC50 Dusts and mists	>2000 mg/kg >2000 mg/kg >5 mg/m³ [4 hours]	
trimethylolpropane	Rat - Oral - LD50	14100 mg/kg	Behavioral - Somnolence (general depressed activity) Lung, Thorax, or Respiration - Dyspnea Lung, Thorax, or Respiration - Respiratory depression
octamethylcyclotetrasiloxane (D4)	Rat - Oral - LD50 Rat - Dermal - LD50 Rat - Inhalation - LC50 Dusts and mists	>4800 mg/kg >2400 mg/kg 36 mg/l [4 hours]	

Acute toxicity estimates

Product/ingredient name	Oral mg/kg	Dermal mg/kg	Inhalation (gases) ppm	Inhalation (vapors) mg/l	Inhalation (dusts and mists) mg/l
Hempel´s Silic One Tiecoat	7983.0				
n-butyl acetate	10768				
2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime	500				
trimethylolpropane	14100				
octamethylcyclotetrasiloxane (D4)					36

Irritation/Corrosion

Product/ingredient name	Result	Species	Exposure
n-butyl acetate	Rabbit - Skin - Moderate irritant Rabbit - Eyes - Mild irritant Rabbit - Respiratory - Mild irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 500 mg
octamethylcyclotetrasiloxane (D4)	Rabbit - Eyes - Mild irritant Rabbit - Skin - Mild irritant	Duration of treatment/ exposure: 24 hours Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 500 milligrams Amount/concentration applied: 500 milligrams

Sensitizer

No known data avaliable in our database.

Mutagenic effects

No known data avaliable in our database.

Carcinogenicity

No known data avaliable in our database.

Reproductive toxicity

No known data avaliable in our database.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
n-butyl acetate	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
No known data avaliable in our database.			

Aspiration hazard

SECTION 11: Toxicological information

Product/ingredient name	Result
No known data avaliable in our database.	

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

No known significant effects or critical hazards.

11.2 Information on other hazards

Endocrine disrupting properties : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

Other information : No additional known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Do not allow to enter drains or watercourses. Harmful to aquatic life with long lasting effects.

Product/ingredient name	Result	Species	Exposure
n-butyl acetate	Acute - EC50	Daphnia	44 mg/l [48 hours]
	Acute - EC50	Algae	648 mg/l [72 hours]
1,3-bis(12-hydroxyocta-decanamide-N-methyle)benzene	Acute - LC50	Fish	>100 mg/l [96 hours]
	Acute - LC50	Algae	>100 mg/l [72 hours]
octamethylcyclotetrasiloxane (D4)	Chronic - NOEC - Fresh water	Daphnia - Water flea - *Daphnia magna*	1.7 - 15 µg/l [21 days]
	Chronic - NOEC - Fresh water	Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss* - Egg	4.4 µg/l [93 days]
	Acute - LC50	Fish	>0.022 mg/l [96 hours]
	Acute - EC50	Daphnia	0.015 mg/l [48 hours]
	Acute - EC50	Algae	>0.022 mg/l [96 hours]

12.2 Persistence and degradability

Product/ingredient name	Test	Result
n-butyl acetate	OECD Ready Biodegradability - Closed Bottle Test	90% [28 days] - Readily
		80% [5 days] - Readily
1,3-bis(12-hydroxyocta-decanamide-N-methyle)benzene		5% [28 days]
trimethylolpropane	OECD Inherent Biodegradability: Zahn-Wellens/ EMPA Test	100% [28 days] - Readily
octamethylcyclotetrasiloxane (D4)	OECD Ready Biodegradability - CO_2 in Sealed Vessels (Headspace Test)	3.7% [28 days] - Not readily

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-butyl acetate			Readily
1,3-bis(12-hydroxyocta-decanamide-N-methyle)benzene			Not readily
trimethylolpropane			Readily
octamethylcyclotetrasiloxane (D4)			Not readily

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
n-butyl acetate	2.3	3.1	Low
trimethylolpropane	-0.47	<1	Low
octamethylcyclotetrasiloxane (D4)	6.488	13400	High

12.4 Mobility in soil

Soil/Water partition coefficient

SECTION 12: Ecological information

Product/ingredient name	logKoc	Koc
n-butyl acetate	1.5	33.2139
2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime	3.1	1234.32
trimethylolpropane	1.2	16.5101
octamethylcyclotetrasiloxane (D4)	3.5	3064.9

Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
n-butyl acetate	No	No	No	No	No	No	No
2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime	No	No	No	No	No	No	No
1,3-bis(12-hydroxyocta-decanamide-N-methyle)benzene	No	No	No	No	No	No	No
trimethylolpropane	No	No	No	No	No	No	No
octamethylcyclotetrasiloxane (D4)	No	Yes	No	Yes	No	Yes	No

Mobility : The product does not meet the criteria to be considered as a PMT or vPvM.

12.5 Results of PBT and vPvB assessment

Regulation (EC) No. 1907/2006 [REACH]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
n-butyl acetate	No	N/A	No	No	No	N/A	No
2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime	No	N/A	N/A	No	N/A	N/A	N/A
1,3-bis(12-hydroxyocta-decanamide-N-methyle)benzene	No	N/A	N/A	No	N/A	N/A	N/A
trimethylolpropane	No	N/A	No	Yes	No	N/A	No
octamethylcyclotetrasiloxane (D4)	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Regulation (EC) No. 1272/2008 [CLP]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
n-butyl acetate	No	No	No	No	No	No	No
2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime	No	No	No	No	No	No	No
1,3-bis(12-hydroxyocta-decanamide-N-methyle)benzene	No	No	No	No	No	No	No
trimethylolpropane	No	No	No	No	No	No	No
octamethylcyclotetrasiloxane (D4)	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Conclusion/Summary : The product does not meet the criteria to be considered as a PBT or vPvB.

12.6 Endocrine disrupting properties

The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

European waste catalogue no. (EWC) is given below.

European waste catalogue (EWC) : 08 01 11*

Packaging

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

	14.1 UN / ID no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env*	Additional information
ADR/RID Class	UN1263	PAINT	3 	III	No.	**Tunnel code** (D/E)
IMDG Class	UN1263	PAINT	3 	III	No.	**Emergency schedules** F-E, S-E
IATA Class	UN1263	PAINT	3 	III	No.	-

PG* : Packing group
Env.* : Environmental hazards

14.6 Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization - Substances of very high concern

Annex XIV

None of the components are listed.

Substances of very high concern

Ingredient name	Intrinsic property	Status	Reference number	Date of revision
octamethylcyclotetrasiloxane (D4)	PBT	Recommended	10th recommendation	4/14/2021
octamethylcyclotetrasiloxane (D4)	vPvB	Recommended	10th recommendation	4/14/2021

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

Other EU regulations

Seveso category This product is controlled under the Seveso III Directive.

Seveso category
P5c: Flammable liquids 2 and 3 not falling under P5a or P5b

15.2 Chemical Safety Assessment

-

SECTION 16: Other information

Abbreviations and acronyms :

ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
EUH statement = CLP-specific Hazard statement
RRN = REACH Registration Number
DNEL = Derived No Effect Level
PNEC = Predicted No Effect Concentration

SECTION 16: Other information

Full text of abbreviated H statements :	H226	Flammable liquid and vapor.
	H302	Harmful if swallowed.
	H317	May cause an allergic skin reaction.
	H319	Causes serious eye irritation.
	H336	May cause drowsiness or dizziness.
	H361f	Suspected of damaging fertility.
	H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
	H410	Very toxic to aquatic life with long lasting effects.
	H412	Harmful to aquatic life with long lasting effects.
	H413	May cause long lasting harmful effects to aquatic life.
	EUH440	Accumulates in the environment and living organisms including in humans.
	EUH441	Strongly accumulates in the environment and living organisms including in humans.
	EUH066	Repeated exposure may cause skin dryness or cracking.
Full text of classifications [CLP/GHS] :	Acute Tox. 4	ACUTE TOXICITY - Category 4
	Aquatic Chronic 1	AQUATIC HAZARD (LONG-TERM) - Category 1
	Aquatic Chronic 3	AQUATIC HAZARD (LONG-TERM) - Category 3
	Aquatic Chronic 4	AQUATIC HAZARD (LONG-TERM) - Category 4
	Eye Irrit. 2	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
	Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
	PBT	PERSISTENT, BIOACCUMULATIVE AND TOXIC
	Repr. 2	TOXIC TO REPRODUCTION - Category 2
	Skin Sens. 1B	SKIN SENSITIZATION - Category 1B
	STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3
	vPvB	VERY PERSISTENT AND VERY BIOACCUMULATIVE

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
FLAMMABLE LIQUIDS	On basis of test data
AQUATIC HAZARD (LONG-TERM)	Calculation method

Notice to reader

Indicates information that has changed from previously issued version.

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical preformance or suitability for particular applications.
It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.

Safe Use of Mixture Information
Hempel´s Silic One Tiecoat

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

Indoor or outdoor spray painting by professionals or with brush, roller, putty knife, dipping etc. with good general room ventilation

This safe use information is linked to : Professional spray painting and/or low-energy painting, local effect - Level II
Skin Sens. 1, Eye Irrit. 2 , Asp. Tox. 1 or Solvent.

Sector(s) of use : Industrial uses - Professional uses

Product category(ies) : Coatings and paints, thinners, paint removers

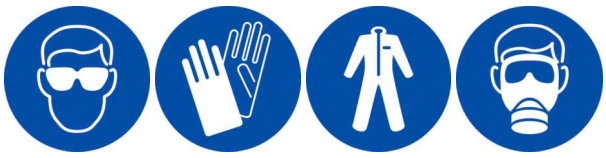
Operational conditions

Place of use : Indoor or outdoor use

Risk management measures (RMM)

Contributing activity	Process category (ies)	Maximum duration	Ventilation		Respiratory	Eye	Hands
			Type and air changes per hour				
Preparation of material for application	PROC05	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Loading of application equipment and handling of coated parts before curing	PROC08a	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Professional application of coatings by brush or roller	PROC10	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Professional application of coatings by spraying	PROC11	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Film formation - force drying, stoving and other technologies	PROC04	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	None	None	None
Cleaning	PROC05	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Waste management	PROC08a	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.

See section 8 of this Safety Data Sheet for specifications.



The information in this Safe Use of Mixture Information (SUMI) sheet is based on the data provided by the substance supplier for the substances in the product for which a chemical safety assessment has been carried out at the time of issue. It does not guarantee safe use of the product and does not replace any occupational risk assessment required by legislation. When developing workplace instructions for employees, SUMI sheets should always be considered in combination with the Safety Data Sheet (SDS) and the label of the product.
No liability is accepted for any damage, no matter of what kind, which is a direct or indirect consequence of acts and/or decisions based on the contents of this document.

Veiligheidsinformatieblad
Hempel's Silic One 77450

Conform Verordening (EG) nr. 1907/2006 (REACH), Bijlage II, zoals gewijzigd bij Verordening (EU) nr. 2020/878 - Nederland

RUBRIEK 1: Identificatie van de stof of het mengsel en van de vennootschap/onderneming

1.1 Productidentificatie

Productnaam :	Hempel's Silic One 77450
Productidentificatie :	7745019990, 0005A6EF
Producttype :	silicone verf

1.2 Relevant geïdentificeerd gebruik van de stof of het mengsel en ontraden gebruik

Toepassings gebied :	jachten, schepen en scheepswerven.
Aanbevolen gebruik :	Consumenten toepassing, Professionele toepassingen.

1.3 Details betreffende de verstrekker van het veiligheidsinformatieblad

Bedrijfsgegevens :

Hempel (The Netherlands) B.V.
Karel Doormanweg 7c
3115 JD Schiedam
Nederland
Tel: +31 10 4454000
Fax: +31 10 4600883
hempel@hempel.com

Datum van uitgave : 3 november 2026

Datum vorige uitgave : 22 mei 2026.

1.4 Telefoonnummer voor noodgevallen

Telefoonnummer voor noodgevallen (tijdens werkuren)

+31 10 4454000 (08.00 - 17.00)
Nationaal Vergiftigingen Informatie Centrum (NVIC): 088 755 8000

RUBRIEK 2: Identificatie van de gevaren

2.1 Indeling van de stof of het mengsel

Productomschrijving : Mengsel

Classificatie volgens de Verordening (EG) Nr.1272/2008 [CLP/GHS]

Flam. Liq. 3, H226	ONTVLAMBARE VLOEISTOFFEN
Aquatic Chronic 3, H412	(CHRONISCH) AQUATISCH GEVAAR OP LANGE TERMIJN

Zie rubriek 11 voor meer informatie over gezondheidseffecten en symptomen.

2.2 Etiketteringselementen

Gevaarsymbolen :



Signaalwoord :	Waarschuwing
Gevarenaanduidingen :	H226 - Ontvlambare vloeistof en damp. H412 - Schadelijk voor in het water levende organismen, met langdurige gevolgen.
Voorzorgsmaatregelen :	
Algemeen :	Buiten het bereik van kinderen houden. Bij het inwinnen van medisch advies, de verpakking of het etiket ter beschikking houden.
Preventie :	Verwijderd houden van warmte, hete oppervlakken, vonken, open vuur en andere ontstekingsbronnen. Niet roken. Voorkom lozing in het milieu.
Verwijdering :	Inhoud en container afvoeren in overeenstemming met locale, regionale, nationale en internationale regelgeving.
Gevaarlijke bestanddelen :	Niet van toepassing.
Aanvullende etiketonderdelen :	

Speciale verpakkingseisen

Recipiënten die van een kinderveilige sluiting moeten zijn voorzien :	Niet van toepassing.
Voelbare gevaarsaanduiding :	Niet van toepassing.

2.3 Andere gevaren

Dit mengsel bevat substanties die worden beoordeeld als een PBT of een zPzB, zie Paragraaf 3.2. Dit mengsel bevat geen enkele substantie die wordt beoordeeld als hormoonverstorende werking hebben.

RUBRIEK 2: Identificatie van de gevaren

Overige gevaren die niet leiden tot classificatie : Geen bekend.

RUBRIEK 3: Samenstelling en informatie over de bestanddelen

3.2 Mengsels

Product- /ingrediëntennaam	Identificatiemogelijkheden	%	Verordening (EG) nr. 1272/2008 [CLP]		Type
n-butylacetaat	REACH #: 01-2119485493-29 EC: 204-658-1 CAS-nr: 123-86-4 Index: 607-025-00-1	≥10 - ≤15	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	-	[1] [2]
2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime	REACH #: 01-2120006148-66 CAS-nr: 58190-62-8 Lijst #: 700-810-0	≥5 - <10	Acute Tox. 4, H302 Eye Irrit. 2, H319	ATE [Oraal] = 500 mg/kg	[1]
oppervlakte behandeld (trimethylsilyl)	REACH #: 01-2119379499-16 EC: 272-697-1 CAS-nr: 68909-20-6 Index: 014-052-00-7	≥3 - ≤4.6	STOT RE 2, H373 (longen) (inademing) EUH066	-	[1]
octamethylcyclotetrasiloxaan	REACH #: 01-2119529238-36 EC: 209-136-7 CAS-nr: 556-67-2 Index: 014-018-00-1	<0.1	Flam. Liq. 3, H226 Repr. 2, H361f Aquatic Chronic 1, H410 PBT, EUH440 vPvB, EUH441	M [Chronisch] = 10	[1] [3] [4]
			Zie Rubriek 16 voor de volledige tekst van de H-zinnen die hierboven staan vermeld.		

Er zijn geen additionele ingrediënten aanwezig die, voor zover op dit moment aan leverancier bekend is en in de van toepassing zijnde concentraties, geclassificeerd zijn als schadelijk voor de gezondheid of voor het milieu en op grond daarvan in deze sectie moeten worden vermeld.

Type

[1] Stof ingedeeld met een gezondheids- of milieugevaar
[2] Stof met een werkplaats blootstellingslimiet
[3] Stof voldoet aan criteria voor PBT overeenkomstig Verordening (EG) nr. 1907/2006, Bijlage XIII
[4] Stof voldoet aan criteria voor zPzB overeenkomstig Verordening (EG) nr. 1907/2006, Bijlage XIII

Lijstnummers hebben geen juridische betekenis.

RUBRIEK 4: Eerstehulpmaatregelen

4.1 Beschrijving van de eerstehulpmaatregelen

Algemeen : Roep in geval van twijfel of bij aanhoudende symptomen altijd medische hulp in. Geef een bewusteloos iemand nooit iets via de mond.

In het geval van een onregelmatige ademhaling, slaperigheid, bewustzijnsverlies of krampen: Bel 112 en geef Eerste Hulp (EHBO).

Oogcontact : Ga aanwezigheid van contactlenzen na en verwijder ze. Spoel de ogen onmiddellijk met ruime hoeveelheden water, waarbij u de boven- en onderoogleden zo nu en dan oplicht. Roep in geval van twijfel of bij aanhoudende symptomen altijd medische hulp in.

Inademing : Het slachtoffer in de frisse lucht brengen en laten rusten in een houding die het ademen vergemakkelijkt. Dien niets via de mond toe. Als de patiënt niet ademt, onregelmatig ademt, of als zich een ademhalingsstilstand voordoet, dient kunstmatige beademing of zuurstof te worden toegediend door getraind personeel. Plaats in stabiele zijligging en roep onmiddelijk medische hulp in, indien de persoon bewusteloos is.

Huidcontact : Reinig de huid grondig met water en zeep of gebruik een goedgekeurde huidreiniger. GEEN oplosmiddelen of verdunningsmiddelen gebruiken. Verwijder verontreinigde kleding en schoenen.

Inslikken : In geval van inslikken onmiddellijk een arts raadplegen en verpakking of etiket tonen. Houd de persoon warm en rustig. Zet niet aan tot braken tenzij medisch personeel aangeeft dat dit wel moet. Houd het hoofd naar beneden zodat het braaksel niet terugloopt in mond en keel.

Bescherming van eerste-hulpverleners : Er mag geen actie worden ondernomen als er kans is op persoonlijke ongelukken of in geval van onvoldoende training.

4.2 Belangrijkste acute en uitgestelde symptomen en effecten

Mogelijke acute gevolgen voor de gezondheid

Oogcontact : Significante effecten of kritische gevaren zijn niet bekend.

Inademing : Significante effecten of kritische gevaren zijn niet bekend.

Huidcontact : Significante effecten of kritische gevaren zijn niet bekend.

RUBRIEK 4: Eerstehulpmaatregelen

Inslikken :	Significante effecten of kritische gevaren zijn niet bekend.

Tekenen/symptomen van overmatige blootstelling

Oogcontact :	Geen specifieke gegevens.
Inademing :	Geen specifieke gegevens.
Huidcontact :	Geen specifieke gegevens.
Inslikken :	Geen specifieke gegevens.

4.3 Vermelding van eventueel noodzakelijke onmiddellijke medische verzorging en speciale behandeling

Opmerkingen voor arts :	Indien gassen zijn ingeademd van het ontledingsproduct, kunnen symptonen optreden met een vertraging. Behandel symptomatisch. Contacteer onmiddellijk een specialist voor de behandeling van de vergiftiging indien grote hoeveelheden ingenomen of geïnhaleerd zijn.
Specifieke behandelingen :	Geen specifieke behandeling.

RUBRIEK 5: Brandbestrijdingsmaatregelen

5.1 Blusmiddelen

Blusmiddelen :	Aanbevolen: alcohol resistent schuim, CO_2, poeders, spuitnevel (water). Niet gebruiken: waterstraal.

5.2 Speciale gevaren die door de stof of het mengsel worden veroorzaakt

Risico's van de stof of het mengsel :	Ontvlambare vloeistof en damp. Wegvloeien in riool kan gevaar voor brand of explosie veroorzaken. Bij brand of verhitting loopt de druk op en kan de houder barsten en eventueel exploderen. Deze stof is schadelijk voor het aquatisch milieu met blijvende gevolgen. Met dit materiaal verontreinigd bluswater dient te worden opgevangen, zodat het niet in het oppervlaktewater, riool of afvoer terechtkomt.
Gevaarlijke verbrandings-producten :	Afbraakproducten kunnen onder meer zijn: koolstofoxiden stikstofoxiden metaaloxide(n)

5.3 Advies voor brandweerlieden

In geval van brand, isoleer het terrein direct door alle personen uit de buurt van het incident te verwijderen. Er mag geen actie worden ondernomen als er kans is op persoonlijke ongelukken of in geval van onvoldoende training. Bij brand ontstaat een dichte, zwarte rook. Blootstelling aan ontledingsproducten kan gevaar voor de gezondheid opleveren. Afgesloten verpakkingen die zijn blootgesteld aan vuur, koelen met water. Zorg ervoor dat bluswater niet in afvoerbuizen of waterwegen terecht komt. Brandbestrijders dienen geschikte kleding te dragen en een onafhankelijk ademhalingstoestel (SCBA) dat een volledig gelaatsdeel heeft en met een overdrukmodus werkt. Kleding voor brandweerlieden (inclusief helmen, beschermende laarzen en handschoenen), overeenkomstig Europese norm EN 469, geeft een basis beschermingsniveau voor incidenten met chemische stoffen.

RUBRIEK 6: Maatregelen bij het accidenteel vrijkomen van de stof of het mengsel

6.1 Persoonlijke voorzorgsmaatregelen, beschermingsmiddelen en noodprocedures

Vermijd ieder contact met het gemorste materiaal. Ontstekingsbronnen dienen verwijderd te worden en de ruimte dient te worden geventileerd. Vermijd inademen van damp of nevel. Raadpleeg de beschermingsmaatregelen in rubriek 7 en rubriek 8. Er mag geen actie worden ondernomen als er kans is op persoonlijke ongelukken of in geval van onvoldoende training. Informeer de aangewezen overheden in overeenstemming met de plaatselijke regelgeving indien het product in meren, rivieren of riolen is verspreid.

6.2 Milieuvoorzorgsmaatregelen

Vermijd verspreiding van gemorst materiaal en afvalmateriaal en voorkom dat dit in contact komt met bodem, waterwegen, afvoerleidingen en riool. Informeer de betreffende autoriteiten wanneer het product het milieu heeft vervuild (riolering, waterwegen, bodem of lucht). Watervervuilend materiaal. Dit product kan schadelijk zijn voor het milieu wanneer het in grote hoeveelheden vrijkomt.

6.3 Insluitings- en reinigingsmethoden en -materiaal

Dicht het lek als dat zonder risico kan. Verwijder verpakkingen uit het gebied waar gemorst is. Benader de uitstoot met de wind in de rug. Vermijd toegang tot riolen, waterwegen, kelders of gesloten ruimten. Voer weggelekt materiaal af naar een afvalwaterzuiveringsinstallatie of handel als volgt. Neem gemorst preparaat op met niet-brandbare absorberende materialen, bijvoorbeeld zand, aarde, vermiculiet of diatomeeënaarde en doe dit in een afvoercontainer in overeenstemming met de plaatselijke voorschriften (zie Rubriek 13). Gebruik vonkvrije gereedschappen en explosievrije apparatuur. Vervuild absorberend materiaal kan dezelfde risico's met zich meebrengen als het gemorste product.

6.4 Verwijzing naar andere rubrieken

Zie Rubriek 1 voor contactgegevens voor noodgevallen.
Zie Rubriek 8 voor informatie over geschikte persoonlijke beschermingsmiddelen.
Zie Rubriek 13 voor aanvullende informatie over afvalbehandeling.

RUBRIEK 7: Hantering en opslag

7.1 Voorzorgsmaatregelen voor het veilig hanteren van de stof of het mengsel

Dampen zijn zwaarder dan lucht en kunnen zich over de vloer verspreiden. Dampen kunnen met lucht een explosief mengsel vormen. Vermijd de vorming van ontvlambare of explosieve concentraties van dampen in de lucht en vermijd dampconcentraties hoger dan de MAC-waarde. Bovendien, mag het product alleen gebruikt worden in ruimtes vrij van open vuur of andere ontstekingsbronnen. Electrische apparatuur dient te zijn beschermd volgens de geldende standaard. Om statische electriciteit tijdens uitvullen te vermijden dient het vat te worden geaard en verbonden te worden met het ontvangende blik. Medewerker dient antistatisch schoeisel en kleding te dragen, vloeren dienen van geleidend materiaal te zijn vervaardigd. Vonk vormend gereedschap dient niet te worden gebruikt.
Inademing van damp, stof en spuitnevel dient te worden voorkomen. Aanraking met de ogen en de huid vermijden. In de ruimte waar dit materiaal wordt gebruikt, opgeslagen of verwerkt, moet eten, drinken en roken verboden worden. Zie hoofdstuk 8 voor gebruik van persoonlijke beschermingsmiddelen. Bewaar het product altijd in verpakkingen van hetzelfde materiaal als de originele verpakking.

7.2 Voorwaarden voor een veilige opslag, met inbegrip van incompatibele producten

Overeenkomstig de plaatselijke regelgeving bewaren. Bewaar op een koele, goed geventileerde plaats uit de buurt van onverenigbare materialen en ontstekingsbronnen. Buiten het bereik van kinderen houden. Verwijderd houden van: Oxydatie middelen en sterk basische of zure materialen. Niet roken. Voorkom toegang door onbevoegden. Geopende verpakkingen dienen zorgvuldig opnieuw te worden afgesloten en dienen rechtop te worden bewaard om lekkage te voorkomen.

7.3 Specifiek eindgebruik

Zie separate Productdatabladen voor aanbevelingen of specifieke oplossingen voor de industriële sector.

RUBRIEK 8: Maatregelen ter beheersing van blootstelling/persoonlijke bescherming

8.1 Controleparameters

Beroepsmatige blootstellingslimieten

Product- /ingrediëntennaam	Grenswaarden voor blootstelling
n-butylacetaat	**MinSZW Wettelijke Grenswaarden (Nederland, 11/2025)** Wettelijke grenswaarde TGG 8 uren: 241 mg/m³. Wettelijke grenswaarde TGG 15 minuten: 723 mg/m³. Wettelijke grenswaarde TGG 15 minuten: 150 ppm. Wettelijke grenswaarde TGG 8 uren: 50 ppm. **EU Grenswaarden voor beroepsmatige blootstelling (Europa, 1/2022)** STEL 15 minuten: 150 ppm. STEL 15 minuten: 723 mg/m³. TWA 8 uren: 241 mg/m³. TWA 8 uren: 50 ppm.

Indexcijfers van de biologische blootstelling

Product- /ingrediëntennaam	Grenswaarden voor blootstelling
Geen blootstellingslimietwaarde bekend.	

Aanbevolen monitoring procedures

Er moet gebruik worden gemaakt van monitoringsnormen, zoals de volgende: Europese Norm EN 689 (Werkplekatmosfeer - Leidraad voor de beoordeling van de blootstelling bij inademing van chemische stoffen voor de vergelijking met de grenswaarden en de meetstrategie) Europese norm EN 14042 (Werkplekatmosfeer - Richtlijn voor de toepassing en het gebruik van procedures voor de beoordeling van blootstelling aan chemische en biologische stoffen) Europese norm EN 482 (Werkplekatmosfeer - Algemene eisen voor de uitvoering van de procedures voor het meten van chemische stoffen) Bovendien is raadpleging van nationale richtlijnen voor methoden voor de bepaling van gevaarlijke stoffen vereist.

DEL's (Derived Effect Levels; afgeleide effectdoses)

Product- /ingrediëntennaam	Type - Populatie - Blootstelling	Waarde	Effecten
n-butylacetaat	DNEL - Werknemers - Langetermijn - Inademing	300 mg/m³	Systemisch
	DNEL - Werknemers - Langetermijn - Dermaal	11 mg/kg bw/dag	Systemisch
octamethylcyclotetrasiloxaan	DNEL - Werknemers - Langetermijn - Inademing	73 mg/m³	Systemisch

PEC's (Predicted Effect Concentrations; voorspelde effectconcentraties)

RUBRIEK 8: Maatregelen ter beheersing van blootstelling/persoonlijke bescherming

Product- /ingrediëntennaam	Detail compartiment	Waarde
n-butylacetaat	Zoetwater	0.18 mg/l
	Marien(e)	0.018 mg/l
	Zoetwatersediment	0.981 mg/kg
	Zeewatersediment	0.0981 mg/kg
	Bodem	0.0903 mg/kg
	Rioolwaterzuiveringsinstallatie	35.6 mg/l
2-Pentanone, O,O',O''-(ethenylsilylidyne) trioxime	Zoetwater	0.103 mg/l
	Zeewater	0.0103 mg/l
	Zoetwatersediment	0.586 mg/kg
	Zeewatersediment	0.059 mg/kg
	Bodem	0.04555 mg/kg
	Rioolwaterzuiveringsinstallatie	2.22 mg/l
octamethylcyclotetrasiloxaan	Zoetwater	1.5 µg/l
	Zoetwater	0.15 µg/l
	Rioolwaterzuiveringsinstallatie	10 mg/l
	Zoetwatersediment	3 mg/kg dwt
	Zeewatersediment	0.3 mg/kg dwt
	Bodem	0.84 mg/kg dwt

8.2 Maatregelen ter beheersing van blootstelling

Passende technische maatregelen

Zorg voor bronafzuiging en goede ruimtelijke ventilatie om concentraties van dampen in de lucht zo laag mogelijk, doch in ieder geval beneden de bijbehorende maximaal toelaatbare drempelwaarde te houden. Zorg ervoor dat oogdouches en veiligheidsdouches dichtbij de werkplek zijn.

Individuele beschermingsmaatregelen

Algemeen :

Handschoenen dienen altijd gedragen te worden als er tijdens het werk kans is op morsen. Schorten/ overalls/beschermende kleding dienen altijd gedragen te worden indien de kans op morsen zo groot is dat reguliere werk kleding geen adequate bescherming bieden tegen contact met het product. Wanneer er kans op blootstelling bestaat, dient er een beschermingsmiddel voor de ogen te worden gebruikt.

Hygiënische maatregelen :

Was handen, onderarmen en gezicht grondig na het hanteren van verbindingen, voor het eten, roken en gebruik van de WC en aan het einde van de dag.

Bescherming van de ogen/het gezicht :

Wanneer een risicoanalyse aangeeft dat dit noodzakelijk is om blootstelling aan spatten, nevel, gassen of stof te vermijden, dient een veiligheidsbescherming voor de ogen te worden gedragen die voldoet aan een goedgekeurde standaard. Indien contact mogelijk is, moeten de volgende beschermingsmiddelen worden gedragen, tenzij uit de beoordeling blijkt dat een hogere mate van bescherming noodzakelijk is: veiligheidsbril met zijkapjes.

Bescherming van de handen :

Draag chemicaliënbestendige handschoenen (die voldoen aan EN374) in combinatie met basistraining voor werknemers. De kwaliteit van de chemicaliënbestendige beschermende handschoenen moet worden gekozen op basis van de specifieke werkplekconcentraties en de hoeveelheid gevaarlijke stoffen.

Daar de eigenlijke werk situatie onbekend is, dient contact te worden opgenomen met de leverancier van werkhandschoenen om het juiste type te bepalen. De hieronder aangegeven types werkhandschoenen dienen als algemeen advies beschouwd te worden:

Aanbevolen: Silver Shield/Barrier/4H handschoenen (4 uur), polyvinyl alcohol (PVA), Viton®
Kan worden gebruikt: nitrilrubber (>0.3 mm), neopreen (>0.1 mm), butylrubber (>0.5 mm)
Blootstelling op korte termijn: natuurlijk rubber (latex) (>0.4 mm), polyvinylchloride (PVC), nitrilrubber (>0.1 mm), butylrubber (>0.3 mm)

Lichaamsbescherming :

Persoonlijke lichaamsbeschermende middelen dienen te worden gekozen op basis van de uit te voeren taak, de daarbij behorende risico's en dient door een specialist te worden goedgekeurd voordat het product wordt gebruikt.

Bescherming van de ademhalingswegen :

Wanneer een risicoanalyse aangeeft dat dit noodzakelijk is, dient u een goed passend, luchtzuiverend of luchttoevoerend ademhalingstoestel te gebruiken dat voldoet aan een goedgekeurde standaard. De keuze van een masker moet gebaseerd worden op verwachte blootstellingslimieten, de gevaren van het product en de limieten voor veilig werken van het type masker. Indien de werkplek onvoldoende wordt geventileerd: indien het product wordt aangebracht op een wijze die geen aerosol verwekt zoals, kwast en roller applicatie draag half- of volgelaatsmaskers voorzien van gasfilter type A , bij slijpsel van type P. (EN140) Verzeker u ervan dat u een goedgekeurd/gecertificeerd masker of equivalent daarvan gebruikt.

Beheersing van milieublootstelling

Uitstoot van ventilatie of bewerkingsapparatuur moet worden gecontroleerd om er zeker van te zijn dat deze voldoet aan de eisen van de milieubeschermingswetgeving. In sommige gevallen zijn gaswassers, filters of technische modificaties van de procesapparatuur nodig om de emissie terug te brengen tot een aanvaardbaar niveau.

RUBRIEK 9: Fysische en chemische eigenschappen

9.1 Informatie over fysische en chemische basiseigenschappen

Fysische toestand :	Vloeistof.
Kleur :	Zwart.
Geur :	Oplosmiddel
pH :	Tests niet relevant of niet mogelijk door de aard van het product.
Smelt-/vriespunt :	Tests niet relevant of niet mogelijk door de aard van het product.
Kookpunt/kookbereik :	Tests niet relevant of niet mogelijk door de aard van het product.
Vlampunt :	Gesloten kroes: 47°C (116.6°F)
Verdampingssnelheid :	Tests niet relevant of niet mogelijk door de aard van het product.
Ontvlambaarheid :	Brandbaar in aanwezigheid van de volgende materialen of condities: open vuur, vonken en statische ontlading, warmte en oxyderende stoffen.
Dampspanning :	Niet van toepassing. [50°C (122°F)]
Dampdichtheid :	Niet beschikbaar.
Relatieve dichtheid :	1.03 g/cm³
Verdelingscoëfficiënt (LogKow) :	Tests niet relevant of niet mogelijk door de aard van het product.

Zelfontbrandingstemperatuur :

Naam bestanddeel	°C	°F	Methode
n-butylacetaat	415	779	EU A.15

Ontledingstemperatuur :	Tests niet relevant of niet mogelijk door de aard van het product.
Viscositeit :	Tests niet relevant of niet mogelijk door de aard van het product.
Ontploffingseigenschappen :	Weinig explosief in aanwezigheid van de volgende materialen of condities: open vuur, vonken en statische ontlading.
Oxiderende eigenschappen :	Tests niet relevant of niet mogelijk door de aard van het product.

9.2 Overige informatie

Oplosmiddel(en) % naar gewicht :	Gewogen gemiddelde: 11 %
Water % naar gewicht :	Gewogen gemiddelde: 0 %
VOS inhoud :	117.3 g/l
TOS-inhoud :	Gewogen gemiddelde: 72 g/l
Oplosmiddel Gas :	Gewogen gemiddelde: 0.024 m³/l

RUBRIEK 10: Stabiliteit en reactiviteit

10.1 Reactiviteit

Er zijn voor dit product of de bestanddelen ervan geen specifieke testgegevens beschikbaar met betrekking tot de reactiviteit.

10.2 Chemische stabiliteit

Het product is stabiel.

10.3 Mogelijke gevaarlijke reacties

Onder normale opslagomstandigheden en bij normaal gebruik zullen geen gevaarlijke reacties optreden.

10.4 Te vermijden omstandigheden

Vermijd alle mogelijke ontstekingsbronnen (vonk of vlam). Zet verpakkingen niet onder druk, niet snijden, lassen, harden, solderen, gaten boren, schuren of niet aan warmte- of ontstekingsbronnen blootstellen.

10.5 Chemisch op elkaar inwerkende materialen

Zeer reactief of niet verenigbaar met de volgende materialen: oxyderende stoffen.

10.6 Gevaarlijke ontledingsproducten

Kan bij blootstelling aan hoge temperaturen gevaarlijke ontledingsproducten vormen:

Afbraakproducten kunnen onder meer zijn: koolstofoxiden stikstofoxiden metaaloxide(n)

RUBRIEK 11: Toxicologische informatie

11.1 Informatie over gevarenklassen als omschreven in Verordening (EG) nr. 1272/2008

Blootstelling aan een concentratie van dampen van oplosmiddelen in het preparaat die de toegestane grens voor beroepsmatige blootstelling overschrijdt, kan schadelijke effecten voor de gezondheid hebben, zoals irritatie van slijmvliezen en luchtwegen, alsmede schadelijke effecten voor nieren, lever en het centrale zenuwstelsel. Bij opname via de huid kunnen oplosmiddelen een aantal van de bovenstaande uitwerkingen hebben. Symptomen en verschijnselen zijn onder meer hoofdpijn, duizeligheid, vermoeidheid, spierslapte, sufheid en, in extreme gevallen, bewusteloosheid. Herhaald of langdurig contact met het preparaat kan het verwijderen van het natuurlijke vet van de huid tot gevolg hebben en resulteren in contacteczeem en opname via de huid. Wanneer de vloeistof in de ogen wordt gespat, kan dit irritatie en onherstelbare schade tot gevolg hebben.

Acute toxiciteit

Product- /ingrediëntennaam	Resultaat	Dosis / Blootstelling	Effecten
n-butylacetaat	Rat - Oraal - LD50 Konijn - Dermaal - LD50 Rat - Inademing - LC50 Damp	10768 mg/kg >14112 mg/kg >21 mg/l [4 uren]	
2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime	Rat - Oraal - LD50	1000 - 2000 mg/kg	
oppervlakte behandeld (trimethylsilyl)	Rat - Oraal - LD50	>2000 mg/kg	
octamethylcyclotetrasiloxaan	Rat - Oraal - LD50 Rat - Dermaal - LD50 Rat - Inademing - LC50 Stof en nevels	>4800 mg/kg >2400 mg/kg 36 mg/l [4 uren]	

Schattingen van acute toxiciteit

Product- /ingrediëntennaam	Oraal mg/kg	Dermaal mg/kg	Inhalatie (gassen) ppm	Inhalatie (dampen) mg/l	Inhalatie (stof en aerosolen) mg/l
Hempel's Silic One 77450	5426.1				
n-butylacetaat	10768				
2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime	500				
octamethylcyclotetrasiloxaan					36

Irritatie/corrosie

Product- /ingrediëntennaam	Resultaat	Soorten	Blootstelling
n-butylacetaat	Konijn - Huid - Gematigd irriterend	Duur van de behandeling/ blootstelling: 24 uren	Toegepaste hoeveelheid/ concentratie: 500 mg
	Konijn - Ogen - Licht irriterend		
	Konijn - Ademhaling - Licht irriterend		
octamethylcyclotetrasiloxaan	Konijn - Ogen - Licht irriterend	Duur van de behandeling/ blootstelling: 24 uren	Toegepaste hoeveelheid/ concentratie: 500 milligrams
	Konijn - Huid - Licht irriterend	Duur van de behandeling/ blootstelling: 24 uren	Toegepaste hoeveelheid/ concentratie: 500 milligrams

Overgevoeligheid veroorzakend

Product- /ingrediëntennaam	Soorten - Wijze van blootstelling	Resultaat
oppervlakte behandeld (trimethylsilyl)	Cavia (Guinese big) - huid	Niet sensibiliserend

Mutagene effecten

Voor zover bekend geen effect volgens onze databank.

Kankerverwekkendheid

Voor zover bekend geen effect volgens onze databank.

Giftigheid voor de voortplanting

Voor zover bekend geen effect volgens onze databank.

STOT bij eenmalige blootstelling

Product- /ingrediëntennaam	Categorie	Wijze van blootstelling	Doelorganen
n-butylacetaat	Categorie 3		Narcotische werking

STOT bij herhaalde blootstelling

RUBRIEK 11: Toxicologische informatie

Product- /ingrediëntennaam	Categorie	Wijze van blootstelling	Doelorganen
oppervlakte behandeld (trimethylsilyl)	Categorie 2	inademing	longen

Gevaar bij inademing

Product- /ingrediëntennaam	Resultaat
Voor zover bekend geen effect volgens onze databank.	

Informatie over waarschijnlijke blootstellingsrouten

Te verwachten opnameroutes: Oraal, Dermaal, Inademing.

Mogelijke chronische gevolgen voor de gezondheid

Significante effecten of kritische gevaren zijn niet bekend.

11.2 Informatie over andere gevaren

Hormoonontregelende eigenschappen : Het product voldoet niet aan de criteria om te worden beschouwd als een product met hormoonontregelende eigenschappen volgens de criteria van Verordening (EG) nr. 1907/2006 of Verordening (EG) nr. 1272/2008.

Overige informatie : Voor zover bekend geen effect volgens onze databank.

RUBRIEK 12: Ecologische informatie

12.1 Toxiciteit

Niet laten weglopen in het riool of waterlopen. Schadelijk voor in het water levende organismen, met langdurige gevolgen.

Product- /ingrediëntennaam	Resultaat	Soorten	Blootstelling
n-butylacetaat	Acuut - EC50	Daphnia	44 mg/l [48 uren]
	Acuut - EC50	Algen	648 mg/l [72 uren]
octamethylcyclotetrasiloxaan	Chronisch - NOEC - Zoetwater	Daphnia - Water flea - *Daphnia magna*	1.7 - 15 µg/l [21 dagen]
	Chronisch - NOEC - Zoetwater	Vis - Rainbow trout,donaldson trout - *Oncorhynchus mykiss* - Ei	4.4 µg/l [93 dagen]
	Acuut - LC50	Vis	>0.022 mg/l [96 uren]
	Acuut - EC50	Daphnia	0.015 mg/l [48 uren]
	Acuut - EC50	Algen	>0.022 mg/l [96 uren]

12.2 Persistentie en afbreekbaarheid

Product- /ingrediëntennaam	Test	Resultaat
n-butylacetaat	OECD Klaar Biologische Afbreekbaarheid - Test met gesloten fles	90% [28 dagen] - Gemakkelijk 80% [5 dagen] - Gemakkelijk
octamethylcyclotetrasiloxaan	OECD Gemakkelijke biologische afbreekbaarheid - CO2 in afgesloten vaten (Headspace-test)	3.7% [28 dagen] - Niet goed

Product- /ingrediëntennaam	Halfwaardetijd in water	Fotolyse	Biologische afbreekbaarheid
n-butylacetaat			Gemakkelijk
octamethylcyclotetrasiloxaan			Niet goed

12.3 Bioaccumulatie

Product- /ingrediëntennaam	$LogP_{ow}$	BCF	Potentieel
n-butylacetaat	2.3	3.1	Laag
octamethylcyclotetrasiloxaan	6.488	13400	Hoog

12.4 Mobiliteit in de bodem

Scheidingscoëfficiënt aarde/water

Product- /ingrediëntennaam	logKoc	Koc
n-butylacetaat	1.5	33.2139
2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime	3.1	1234.32
octamethylcyclotetrasiloxaan	3.5	3064.9

Resultaten van PMT- en zPzM-beoordeling

RUBRIEK 12: Ecologische informatie

Product- /ingrediëntennaam	PMT	P	M	T	zPzM	zP	zM
n-butylacetaat	Nee	Nee	Nee	Nee	Nee	Nee	Nee
2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime	Nee	Nee	Nee	Nee	Nee	Nee	Nee
oppervlakte behandeld (trimethylsilyl)	Nee	Nee	Nee	Nee	Nee	Nee	Nee
octamethylcyclotetrasiloxaan	Nee	Ja	Nee	Ja	Nee	Ja	Nee

Mobiliteit : Het product voldoet niet aan de criteria om als PMT of zPzM te worden beschouwd.

12.5 Resultaten van PBT- en zPzB-beoordeling

Verordening (EG) nr. 1907/2006 [REACH]

Product- /ingrediëntennaam	PBT	P	B	T	zPzB	zP	zB
n-butylacetaat	Nee	N/A	Nee	Nee	Nee	N/A	Nee
2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime	Nee	N/A	N/A	Nee	N/A	N/A	N/A
oppervlakte behandeld (trimethylsilyl)	N/A	N/A	N/A	Ja	N/A	N/A	N/A
octamethylcyclotetrasiloxaan	Ja	Ja	Ja	Ja	Ja	Ja	Ja

Verordening (EG) nr. 1272/2008 [CLP]

Product- /ingrediëntennaam	PBT	P	B	T	zPzB	zP	zB
n-butylacetaat	Nee	Nee	Nee	Nee	Nee	Nee	Nee
2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime	Nee	Nee	Nee	Nee	Nee	Nee	Nee
oppervlakte behandeld (trimethylsilyl)	Nee	Nee	Nee	Nee	Nee	Nee	Nee
octamethylcyclotetrasiloxaan	Ja	Ja	Ja	Ja	Ja	Ja	Ja

Conclusie/Samenvatting : Het product voldoet niet aan de criteria om als PBT of zPzB te worden beschouwd.

12.6 Hormoonontregelende eigenschappen

Het product voldoet niet aan de criteria om te worden beschouwd als een product met hormoonontregelende eigenschappen volgens de criteria van Verordening (EG) nr. 1907/2006 of Verordening (EG) nr. 1272/2008.

12.7 Andere schadelijke effecten

Significante effecten of kritische gevaren zijn niet bekend.

RUBRIEK 13: Instructies voor verwijdering

13.1 Afvalverwerkingsmethoden

Het produceren van afval dient altijd voor zover mogelijk te worden vermeden of tot een minimum te worden beperkt. Dit product is als gevaarlijk opgenomen in de EU-richtlijn betreffende gevaarlijke afvalstoffen. Afvoeren in overeenstemming met alle nationale, provinciale en plaatselijk geldende bepalingen. Afval mag niet onbewerkt afgevoerd worden via de riolering tenzij volledig conform de eisen van de bevoegde instanties. Gemorst of overgebleven product, verontreinigde kleding of poetslappen dienen in een brandveilige container bewaard te worden.

Europese Afvalcatalogus (EAK) staat hieronder vermeld.

Europese Afvalcatalogus (EAK) : 08 01 11*

Verpakking

Het produceren van afval dient altijd voor zover mogelijk te worden vermeden of tot een minimum te worden beperkt. De lege verpakking moet worden gerecycleerd. Verbranding of storten moet alleen worden overwogen wanneer recycleren niet mogelijk is.

RUBRIEK 14: Informatie met betrekking tot het vervoer

Het product transporteren overeenkomstig de beschikkingen van het ADR voor het wegvervoer, RID voor de spoorwegen, IMDG voor zeevervoer, IATA voor luchtvervoer.

	14.1 VN- of ID-nummer	14.2 Vervoersnaam	14.3 Transportgevarenklasse(n)	14.4 PG*	14.5 Env*	Aanvullende informatie
ADR/RID klasse	UN1263	VERF	3 	III	Nee.	**Tunnelcode** (D/E)
IMDG-klasse	UN1263	PAINT	3 	III	No.	**Emergency schedules** F-E, S-E

RUBRIEK 14: Informatie met betrekking tot het vervoer

IATA klasse	UN1263	PAINT	3		III	No. -

PG* : Verpakkingsgroep
Env.* : Milieugevaren

14.6 Bijzondere voorzorgen voor de gebruiker

Transport op eigen terrein: bij verplaatsing van het product moeten verpakkingen altijd goed gesloten zijn en rechtop staan. Personen die bij deze werkzaamheden betrokken zijn, moeten vooraf geinformeerd worden over hoe te handelen bij een calamiteit.

14.7 Zeevervoer in bulk overeenkomstig IMO-instrumenten

Niet van toepassing.

RUBRIEK 15: Regelgeving

15.1 Specifieke veiligheids-, gezondheids- en milieureglementen en -wetgeving voor de stof of het mengsel

EU Verordening (EG) nr. 1907/2006 (REACH) Bijlage XIV - Lijst van stoffen die aan toelating zijn onderworpen - Zeer zorgwekkende stoffen

Bijlage XIV

Geen van de bestanddelen zijn gereguleerd.

Zeer zorgwekkende stoffen

Naam bestanddeel	Intrinsieke eigenschap	Status	Referentienummer	Revisie datum
octamethylcyclotetrasiloxaan octamethylcyclotetrasiloxaan	PBT zPzB	Aanbevolen Aanbevolen	10th recommendation 10th recommendation	4/14/2021 4/14/2021

Bijlage XVII - Beperkingen met betrekking tot de productie, het op de markt brengen en het gebruik van bepaalde gevaarlijke stoffen, mengsels en producten

Niet van toepassing.

Overige EU-regelgeving

Seveso categorie Dit product valt onder de Seveso III-richtlijn.

Seveso categorie
P5c: Ontvlambare vloeistoffen van categorie 2 of 3 die niet onder P5a of P5b vallen

Nationale regelgeving

Emissiebeleid water (ABM) : Z(1) Niet afbreekbare stoffen met gevaarlijke eigenschappen voormens en milieu (carcinogeniteit/ mutageniteit/ reprotoxiciteit/ bioacumulerend vermogen/ toxiciteit of persistentie). Saneringsinspanning: Z

Nationale regelgeving Niet-GHS

15.2 Chemischeveiligheidsbeoordeling

-

RUBRIEK 16: Overige informatie

Afkortingen en acroniemen :
ATE = Acuut toxiciteitsschatting
CLP = Indeling, etikettering en verpakking van stoffen en mengsels [Verordening (EG) No. 1272/2008]
EUH zin = CLP-specifieke gevaarszin
RRN = REACH registratie nummer
DNEL = De afgeleide dosis zonder effect
PNEC = Voorspelde geen effect concentratie

Volledige tekst van afgekorte H-zinnen :

H226	Ontvlambare vloeistof en damp.
H302	Schadelijk bij inslikken.
H319	Veroorzaakt ernstige oogirritatie.
H336	Kan slaperigheid of duizeligheid veroorzaken.
H361f	Wordt ervan verdacht de vruchtbaarheid te schaden.
H373	Kan schade aan organen veroorzaken bij langdurige of herhaalde blootstelling.
H410	Zeer giftig voor in het water levende organismen, met langdurige gevolgen.
H412	Schadelijk voor in het water levende organismen, met langdurige gevolgen.
EUH440	Accumulatie in het milieu en levende organismen, met inbegrip van mensen.
EUH441	Sterke accumulatie in het milieu en levende organismen, met inbegrip van mensen.
EUH066	Herhaalde blootstelling kan een droge of een gebarsten huid veroorzaken.

RUBRIEK 16: Overige informatie

Volledige tekst van indelingen [CLP/GHS] :	Acute Tox. 4	ACUTE TOXICITEIT - Categorie 4
	Aquatic Chronic 1	(CHRONISCH) AQUATISCH GEVAAR OP LANGE TERMIJN - Categorie 1
	Aquatic Chronic 3	(CHRONISCH) AQUATISCH GEVAAR OP LANGE TERMIJN - Categorie 3
	Eye Irrit. 2	ERNSTIG OOGLETSEL/OOGIRRITATIE - Categorie 2
	Flam. Liq. 3	ONTVLAMBARE VLOEISTOFFEN - Categorie 3
	PBT	PERSISTENT, BIOACCUMULEREND EN TOXISCH
	Repr. 2	VOORTPLANTINGSTOXICITEIT - Categorie 2
	STOT RE 2	SPECIFIEKE DOELORGAANTOXICITEIT BIJ HERHAALDE BLOOTSTELLING - Categorie 2
	STOT SE 3	SPECIFIEKE DOELORGAANTOXICITEIT BIJ EENMALIGE BLOOTSTELLING - Categorie 3
	vPvB	ZEER PERSISTENT EN ZEER BIOACCUMULEREND

Procedure gebruikt voor het afleiden van de indeling in overeenstemming met Verordening (EG) nr.1272/2008 [CLP/GHS]

Classificatie	Rechtvaardiging
ONTVLAMBARE VLOEISTOFFEN (CHRONISCH) AQUATISCH GEVAAR OP LANGE TERMIJN	Op basis van testgegevens Calculatiemethode

Kennisgeving aan de lezer

Geeft informatie aan die gewijzigd is sinds de voorgaande uitgave.

De informatie in dit veiligheidsinformatie blad is gebaseerd op de kennis die op dit ogenblik in ons bezit is en in overeenstemming met de nationale, regionale wetten en de wetten van de EG. De informatie in dit blad is bedoeld als beschrijving van de veiligheidsvoorschriften die voor ons product gelden; het dient niet opgevat te worden als een garantie betreffende de eigenschappen of geschikt heid voor bepaalde doeleinden. Het is ten allen tijde de verantwoordelijkheid van de gebruiker om de nodige maatregelen te treffen met betrekking tot het voldoen aan het gestelde in de plaatselijke wetten en reglementeringen.