SAFETY DATA SHEET

: 1.03 Date of issue/Date of revision Version : 16 February 2024



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

1.1 Product identifier

: AMERLOCK/SIGMACOVER 400 HARDENER **Product name**

: 000001194604 **Product code**

Other means of identification

00466371; 00466891

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

Product use : Professional applications, Used by spraying.

Use of the substance/

mixture

: Coating.

Uses advised against : Product is not intended, labelled or packaged for consumer use.

1.3 Details of the supplier of the safety data sheet

PPG Coatings Belgium BV/SRL Tweemontstraat 104 B-2100 Deurne Belgium Telephone +32-33606311 Fax +32-33606435

e-mail address of person responsible for this SDS

: Product.Stewardship.EMEA@ppg.com

1.4 Emergency telephone number

Supplier

+31 20 4075210

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 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 2, H351 Repr. 2. H361fd Aquatic Acute 1, H400

Aquatic Chronic 1, H410

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

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AMERLOCK/SIGMACOVER 400 HARDENER

SECTION 2: Hazards identification

See Section 16 for the full text of the H statements declared above.

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

2.2 Label elements

Hazard pictograms











Signal word : Danger

Hazard statements : Flammable liquid and vapor.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction. Suspected of causing cancer.

Suspected of damaging fertility. Suspected of damaging the unborn child.

Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention: Wear protective gloves, protective clothing and eye or face protection. Keep away from

heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid

release to the environment.

Response : Collect spillage. IF INHALED: Immediately call a POISON CENTER or doctor.

Storage : Not applicable.

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

international regulations.

P280, P210, P273, P391, P304 + P310, P501

Hazardous ingredients :

✓-methylpentan-2-one

Polyaminoamide

3-aminomethyl-3,5,5-trimethylcyclohexylamine

4-nonylphenol, branched

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-

2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Amines, polyethylenepoly-, triethylenetetramine fraction

Supplemental label

elements

: Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and : Not applicable.

articles

Special packaging requirements

Containers to be fitted

with child-resistant

fastenings

: Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria

for PBT or vPvB

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

English (US) Europe 2/20

AMERLOCK/SIGMACOVER 400 HARDENER

SECTION 2: Hazards identification

Other hazards which do not result in classification

: Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.

May cause endocrine disruption.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

English (US)

Product/ingredient name	Identifiers	% by weight	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
4-methylpentan-2-one	REACH #: 01-2119473980-30 EC: 203-550-1 CAS: 108-10-1 Index: 606-004-00-4	≥10 - ≤16	Flam. Liq. 2, H225 Acute Tox. 4, H332 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336 EUH066	ATE [Inhalation (vapours)] = 11 mg/l EUH066: C ≥ 20%	[1] [2]
Polyaminoamide	EC: Polymer CAS: 68082-29-1	≥5.0 - ≤10	Eye Dam. 1, H318	-	[1]
benzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥1.0 - ≤5.0	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319	ATE [Oral] = 1230 mg/kg ATE [Inhalation (dusts and mists)] = 1.5 mg/l	[1] [2]
cyclohexanone	EC: 203-631-1 CAS: 108-94-1	≥1.0 - ≤5.0	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335	ATE [Oral] = 1800 mg/kg ATE [Dermal] = 1100 mg/kg ATE [Inhalation (gases)] = 8000 ppm	[1] [2]
3-aminomethyl- 3,5,5-trimethylcyclohexylamine	REACH #: 01-2119514687-32 EC: 220-666-8 CAS: 2855-13-2 Index: 612-067-00-9	≥1.0 - ≤5.0	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317	ATE [Oral] = 1030 mg/ kg Skin Sens. 1, H317: C ≥ 0.001%	[1]
4-nonylphenol, branched	REACH #: 01-2119510715-45 EC: 284-325-5 CAS: 84852-15-3 Index: 601-053-00-8	≥1.0 - ≤5.0	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Repr. 2, H361fd Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 1300 mg/ kg M [Acute] = 10 M [Chronic] = 10	[1] [3]
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	EC: 500-101-4 CAS: 38294-64-3	≥1.0 - ≤5.0	Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 3, H412	_	[1]

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SECTION 3: Composition/information on ingredients

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2-methylpropan-1-ol	REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1	≥1.0 - ≤3.7	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	-	[1] [2]
2,4,6-tris (dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2 Index: 603-069-00-0	≥1.0 - ≤5.0	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1C, H314 Eye Dam. 1, H318	ATE [Oral] = 1200 mg/ kg ATE [Dermal] = 1280 mg/kg	[1]
Fatty acids, tall-oil, reaction products with diethylenetriamine	EC: 263-160-2 CAS: 61790-69-0	<1.0	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT RE 2, H373 (oral) Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 500 mg/ kg M [Acute] = 1 M [Chronic] = 1	[1]
Amines, polyethylenepoly-, triethylenetetramine fraction	REACH #: 01-2119487919-13 EC: 292-588-2 CAS: 90640-67-8	<1.0	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	ATE [Oral] = 1716 mg/ kg ATE [Dermal] = 1465 mg/kg	[1]
salicylic acid	REACH #: 01-2119486984-17 EC: 200-712-3 CAS: 69-72-7 Index: 607-732-00-5	≤0.30	Acute Tox. 4, H302 Eye Dam. 1, H318 Repr. 2, H361d	ATE [Oral] = 891 mg/ kg	[1]
			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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

Inhalation

Skin contact

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

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

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SECTION 4: First aid measures

Ingestion

If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

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 severe burns. Defatting to the skin. May cause an allergic skin reaction.

Ingestion : Corrosive to the digestive tract. Causes burns.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain watering redness

Inhalation : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

pain or irritation redness

dryness cracking

blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion: Adverse symptoms may include the following:

stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments: No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing

media

: Use dry chemical, CO2, water spray (fog) or foam.

Unsuitable extinguishing

media

: Do not use water jet.

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SECTION 5: Firefighting measures

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 very toxic 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

halogenated compounds metal oxide/oxides

5.3 Advice for firefighters

Special precautions for fire-fighters

: 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters 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

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

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. Collect spillage.

6.3 Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

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SECTION 6: Accidental release measures

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

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

: Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

See Section 1.2 for Identified uses.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

English (US) Europe 7/20

Code : 000001194604 Date of issue/Date of revision : 16 February 2024

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SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure limit values
✓ methylpentan-2-one	EU OEL (Europe, 1/2022).
	STEL: 208 mg/m³ 15 minutes.
	STEL: 50 ppm 15 minutes.
	TWA: 83 mg/m³ 8 hours.
	TWA: 20 ppm 8 hours.
benzyl alcohol	IPEL (-).
	TWA: 5 ppm
	STEL: 10 ppm
cyclohexanone	EU OEL (Europe, 1/2022). Absorbed through skin.
	STEL: 81.6 mg/m³ 15 minutes.
	STEL: 20 ppm 15 minutes.
	TWA: 40.8 mg/m³ 8 hours.
	TWA: 10 ppm 8 hours.
2-methylpropan-1-ol	ACGIH TLV (United States, 1/2023).
	TWA: 152 mg/m³ 8 hours.
	TWA: 50 ppm 8 hours.

Recommended monitoring procedures

English (US)

: 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.

DNELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
≠ -methylpentan-2-one	DNEL	Long term Dermal	4.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	11.8 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	14.7 mg/m³	General population	Local
	DNEL	Long term Inhalation	14.7 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	83 mg/m³	Workers	Local
	DNEL	Long term Inhalation	83 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	155.2 mg/m³	General population	Local
	DNEL	Short term Inhalation	155.2 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	208 mg/m³	Workers	Local
	DNEL	Short term Inhalation	208 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	4.2 mg/kg bw/day	General population	Systemic
benzyl alcohol	DNEL	Long term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	5.4 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	8 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Oral	20 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	20 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	22 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	27 mg/m ³	General population	Systemic
	DNEL	Short term Dermal	40 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	110 mg/m³	Workers	Systemic
cyclohexanone	DNEL	Short term Dermal	1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	1.5 mg/kg bw/day	General population	
	DNEL	Long term Oral	1.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	2.55 mg/m³	General population	Systemic

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SECTION 8: Exposure controls/personal protection

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	DNEL	Short term Dermal	4 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	4 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	5 mg/m³	General population	Systemic
					•
	DNEL	Long term Inhalation	10 mg/m³	Workers	Local
	DNEL	Long term Inhalation	10 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	20 mg/m³	Workers	Local
	DNEL	Short term Inhalation	20 mg/m³	Workers	Systemic
3-aminomethyl-	DNEL	Short term Inhalation	0.073 mg/m ³	Workers	Local
3,5,5-trimethylcyclohexylamine			3.		
	DNEL	Long term Inhalation	0.073 mg/m³	Workers	Local
	DNEL	Long term Oral	0.3 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	0.3 mg/kg bw/day	General population	Systemic
4-nonylphenol, branched	DNEL	Short term Oral	0.4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	0.8 mg/m³	General population	Systemic
	DNEL	Short term Dermal	7.6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	0.08 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.4 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	0.5 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	1 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	3.8 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	7.5 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	15 mg/kg bw/day	Workers	Systemic
4,4'-Isopropylidenediphenol,	DNEL	Long term Oral	50 μg/kg bw/day	General population	Systemic
oligomeric reaction products			3. 3. 3	- 1	,
with 1-chloro-					
2,3-epoxypropane, reaction					
products with 3-aminomethyl-					
3,5,5-trimethylcyclohexylamine					
	DNEL	Long term Dermal	50 μg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	74 µg/m³	General population	Systemic
	DNEL	Long term Dermal	0.14 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.493 mg/m ³	Workers	Systemic
		Long term initialation		VVOINCIO	
l 2 methylpropan 1 ol	DVIEL	Long term Inhalation		Ceneral population	
2-methylpropan-1-ol	DNEL	Long term Inhalation	55 mg/m³	General population	Local
	DNEL	Long term Inhalation	55 mg/m³ 310 mg/m³	Workers	Local Local
2,4,6-tris			55 mg/m³		Local Local
	DNEL DNEL	Long term Inhalation Long term Oral	55 mg/m³ 310 mg/m³ 0.075 mg/kg bw/day	Workers General population	Local Local Systemic
2,4,6-tris	DNEL	Long term Inhalation	55 mg/m³ 310 mg/m³	Workers	Local Local Systemic
2,4,6-tris	DNEL DNEL	Long term Inhalation Long term Oral	55 mg/m³ 310 mg/m³ 0.075 mg/kg bw/day	Workers General population	Local Local Systemic
2,4,6-tris	DNEL DNEL	Long term Inhalation Long term Oral Short term Dermal	55 mg/m³ 310 mg/m³ 0.075 mg/kg bw/day 0.075 mg/kg bw/day 0.075 mg/kg bw/day	Workers General population General population General population	Local Local Systemic Systemic Systemic
2,4,6-tris	DNEL DNEL DNEL DNEL DNEL	Long term Inhalation Long term Oral Short term Dermal Long term Dermal Short term Inhalation	55 mg/m³ 310 mg/m³ 0.075 mg/kg bw/day 0.075 mg/kg bw/day 0.075 mg/kg bw/day 0.13 mg/m³	Workers General population General population General population General population	Local Local Systemic Systemic Systemic Systemic
2,4,6-tris	DNEL DNEL DNEL DNEL DNEL DNEL	Long term Inhalation Long term Oral Short term Dermal Long term Dermal Short term Inhalation Long term Inhalation	55 mg/m³ 310 mg/m³ 0.075 mg/kg bw/day 0.075 mg/kg bw/day 0.075 mg/kg bw/day 0.13 mg/m³ 0.13 mg/m³	Workers General population General population General population General population General population	Local Local Systemic Systemic Systemic Systemic Systemic
2,4,6-tris	DNEL DNEL DNEL DNEL DNEL DNEL DNEL	Long term Inhalation Long term Oral Short term Dermal Long term Dermal Short term Inhalation Long term Inhalation Long term Dermal	55 mg/m³ 310 mg/m³ 0.075 mg/kg bw/day 0.075 mg/kg bw/day 0.075 mg/kg bw/day 0.13 mg/m³ 0.13 mg/m³ 0.15 mg/kg bw/day	Workers General population General population General population General population General population Workers	Local Local Systemic Systemic Systemic Systemic Systemic Systemic
2,4,6-tris	DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL	Long term Inhalation Long term Oral Short term Dermal Long term Dermal Short term Inhalation Long term Inhalation Long term Dermal Long term Inhalation	55 mg/m³ 310 mg/m³ 0.075 mg/kg bw/day 0.075 mg/kg bw/day 0.075 mg/kg bw/day 0.13 mg/m³ 0.13 mg/m³ 0.15 mg/kg bw/day 0.53 mg/m³	Workers General population General population General population General population General population Workers Workers	Local Local Systemic Systemic Systemic Systemic Systemic Systemic Systemic Systemic Systemic
2,4,6-tris	DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL	Long term Inhalation Long term Oral Short term Dermal Long term Dermal Short term Inhalation Long term Inhalation Long term Dermal Long term Inhalation Short term Dermal	55 mg/m³ 310 mg/m³ 0.075 mg/kg bw/day 0.075 mg/kg bw/day 0.075 mg/kg bw/day 0.13 mg/m³ 0.13 mg/m³ 0.15 mg/kg bw/day 0.53 mg/m³ 0.6 mg/kg bw/day	Workers General population General population General population General population General population Workers Workers Workers	Local Local Systemic
2,4,6-tris (dimethylaminomethyl)phenol	DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL	Long term Inhalation Long term Oral Short term Dermal Long term Dermal Short term Inhalation Long term Inhalation Long term Dermal Long term Inhalation Short term Dermal Short term Inhalation	55 mg/m³ 310 mg/m³ 0.075 mg/kg bw/day 0.075 mg/kg bw/day 0.075 mg/kg bw/day 0.13 mg/m³ 0.13 mg/m³ 0.15 mg/kg bw/day 0.53 mg/m³ 0.6 mg/kg bw/day 2.1 mg/m³	Workers General population General population General population General population General population Workers Workers Workers Workers Workers	Local Local Systemic
2,4,6-tris (dimethylaminomethyl)phenol Amines, polyethylenepoly-,	DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL	Long term Inhalation Long term Oral Short term Dermal Long term Dermal Short term Inhalation Long term Inhalation Long term Dermal Long term Inhalation Short term Dermal	55 mg/m³ 310 mg/m³ 0.075 mg/kg bw/day 0.075 mg/kg bw/day 0.075 mg/kg bw/day 0.13 mg/m³ 0.13 mg/m³ 0.15 mg/kg bw/day 0.53 mg/m³ 0.6 mg/kg bw/day	Workers General population General population General population General population General population Workers Workers Workers	Local Local Systemic
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SECTION 8: Exposure controls/personal protection

Product/ingredient name	Type	Compartment Detail	Value	Method Detail
4-methylpentan-2-one	-	Fresh water	0.6 mg/l	Assessment Factors
	-	Marine water	0.06 mg/l	Assessment Factors
	-		27.5 mg/l	Assessment Factors
	-	Fresh water sediment	8.27 mg/kg	Equilibrium Partitioning
	-	Marine water sediment	0.83 mg/kg	Equilibrium Partitioning
	-	Soil	1.3 mg/kg	Equilibrium Partitioning
2-methylpropan-1-ol	-	Fresh water	0.4 mg/l	Assessment Factors
	-	Marine water	0.04 mg/l	Assessment Factors
	-	Sewage Treatment Plant	10 mg/l	Assessment Factors
	-	Fresh water sediment	1.56 mg/kg dwt	Equilibrium Partitioning
	-	Marine water sediment	0.156 mg/kg dwt	-
	-	Soil	0.076 mg/kg dwt	Equilibrium Partitioning

8.2 Exposure controls

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Skin protection

Hand protection

Chemical splash goggles and face shield. Use eye protection according to EN 166.

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use,

Gloves

: butyl rubber

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

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as included in the user's risk assessment.

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SECTION 8: Exposure controls/personal protection

Respiratory protection

: 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 workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapor (Type A) and particulate filter P3

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

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. Color : Clear.

Odor : Amine-like. [Strong] **Odor threshold** Not available.

Melting point/freezing point

: May start to solidify at the following temperature: 8°C (46.4°F) This is based on data

for the following ingredient: 3-aminomethyl-3,5,5-trimethylcyclohexylamine.

Weighted average: -42.77°C (-45°F)

Initial boiling point and

boiling range

: >37.78°C

Flammability : Not available.

Upper/lower flammability or

explosive limits

Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)

Flash point Closed cup: 37°C

Auto-ignition temperature

Ingredient name	°C	°F	Method
4-nonylphenol, branched	372	701.6	ASTM E 659

Decomposition temperature

Stable under recommended storage and handling conditions (see Section 7).

pН

Not applicable.

Kinematic (40°C): >21 mm²/s **Viscosity**

Viscosity : 40 - <60 s (ISO 6mm)

Solubility(ies)

Media	Result
cold water	Not soluble

Partition coefficient: n-octanol/: Not applicable.

water

Vapor pressure

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SECTION 9: Physical and chemical properties

	Vapo	r Pressu	re at 20°C	Vapor pressure at 50		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
methylpentan-2-one	15.75128	2.1				

Evaporation rate : Highest known value: 1.7 (4-methylpentan-2-one) Weighted average:

0.93compared with butyl acetate

Relative density : 1.3

Vapor density: Highest known value: 15.4 (Air = 1) (1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich). Weighted average: 6.07 (Air = 1)

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Explosive properties : The product itself is not explosive, but the formation of an explosible mixture of

vapor or dust with air is possible.

Oxidizing properties

: Product does not present an oxidizing hazard.

Particle characteristics

Median particle size : Not applicable.

9.2 Other information

No additional information.

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

: When exposed to high temperatures may produce hazardous decomposition products.

Refer to protective measures listed in sections 7 and 8.

10.5 Incompatible materials

: Keep away from the following materials to prevent strong exothermic reactions:

oxidizing agents, strong alkalis, strong acids.

10.6 Hazardous decomposition products

: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 <u>Acute toxicity</u>

Product/ingredient name	Result	Species	Dose	Exposure
☐ ✓	LC50 Inhalation Vapor	Rat	11 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	2.08 g/kg	-
benzyl alcohol	LC50 Inhalation Dusts and	Rat	>4178 mg/m³	4 hours
	mists			
	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1.23 g/kg	-
cyclohexanone	LC50 Inhalation Gas.	Rat	8000 ppm	4 hours
	LD50 Dermal	Rabbit	1100 mg/kg	-
	LD50 Oral	Rat	1800 mg/kg	-

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SECTION 11: Toxicological information

3-aminomethyl-	LC50 Inhalation Dusts and	Rat	>5.01 mg/l	4 hours
		ιται	-3.01 mg/i	4 Hours
3,5,5-trimethylcyclohexylamine	mists			
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	1030 mg/kg	-
4-nonylphenol, branched	LD50 Dermal	Rabbit	2.14 g/kg	-
	LD50 Oral	Rat	1300 mg/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
2,4,6-tris(dimethylaminomethyl)phenol	LD50 Dermal	Rabbit	1.28 g/kg	-
	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
Amines, polyethylenepoly-,	LD50 Dermal	Rabbit	1465 mg/kg	-
triethylenetetramine fraction				
	LD50 Oral	Rat	1716 mg/kg	-
salicylic acid	LD50 Oral	Rat	0.891 g/kg	-

Conclusion/Summary: There are no data available on the mixture itself.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
4-nonylphenol, branched	Skin - Erythema/Eschar	Rabbit	4	-	-
2,4,6-tris(dimethylaminomethyl)phenol	Skin - Visible necrosis	Rabbit	-	4 hours	7 days

Conclusion/Summary

Skin : There are no data available on the mixture itself.
 Eyes : There are no data available on the mixture itself.
 Respiratory : There are no data available on the mixture itself.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
3-aminomethyl-3,5,5-trimethylcyclohexylamine	skin	Guinea pig	Sensitizing

Conclusion/Summary

Skin: There are no data available on the mixture itself.Respiratory: There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary: There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary: There are no data available on the mixture itself.

Reproductive toxicity

Conclusion/Summary: There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary: There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
4-methylpentan-2-one cyclohexanone 2-methylpropan-1-ol	Category 3 Category 3 Category 3 Category 3	-	Narcotic effects Respiratory tract irritation Respiratory tract irritation Narcotic effects

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SECTION 11: Toxicological information

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Fatty acids, tall-oil, reaction products with diethylenetriamine	Category 2	oral	-

Aspiration hazard

Not available.

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Inhalation : No known significant effects or critical hazards.Ingestion : Corrosive to the digestive tract. Causes burns.

Skin contact: Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.

Eye contact : Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

Eye contact : Adverse symptoms may include the following:

pain watering redness

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects: Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects: Not available.

Potential chronic health effects

Not available.

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SECTION 11: Toxicological information

Conclusion/Summary

: Not available.

General

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity

: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity

: No known significant effects or critical hazards.

Reproductive toxicity

: Suspected of damaging fertility. Suspected of damaging the unborn child.

Other information

: Not available.

Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
rethylpentan-2-one	Acute LC50 >179 mg/l	Fish	96 hours
4-nonylphenol, branched	Acute EC50 0.044 mg/l	Crustaceans - Moina macrocopa	48 hours
	Acute LC50 0.221 mg/l	Fish	96 hours
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
2,4,6-tris(dimethylaminomethyl)phenol	Acute LC50 175 mg/l	Fish	96 hours
Amines, polyethylenepoly-, triethylenetetramine fraction	Acute EC50 20 mg/l	Aquatic plants - Daphnia magna	72 hours
	Acute EC50 31.1 mg/l	Daphnia - <i>Daphnia</i> magna	48 hours
	Acute LC50 330 mg/l	Fish - Pimephales promelas	96 hours
	Acute NOEC 2.5 mg/l	Crustaceans	72 hours
salicylic acid	Acute EC50 1147.57 mg/l Fresh water	Daphnia - <i>Daphnia longispina</i> - Neonate	48 hours
	Chronic NOEC 5.6 mg/l Fresh water	Daphnia - <i>Daphnia</i> <i>magna</i> - Neonate	21 days

Conclusion/Summary

: There are no data available on the mixture itself.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
4-methylpentan-2-one	OECD 301F	83 % - Readily - 28 days	-	-

Conclusion/Summary

: There are no data available on the mixture itself.

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

Code : 000001194604 Date of issue/Date of revision : 16 February 2024

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SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
4-methylpentan-2-one	-	-	Readily
benzyl alcohol	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
rethylpentan-2-one	1.9	-	Low
benzyl alcohol	0.87	-	Low
cyclohexanone	0.86	-	Low
3-aminomethyl-3,5,5-trimethylcyclohexylamine	0.99	-	Low
4-nonylphenol, branched	5.4	251.19	Low
4,4'-Isopropylidenediphenol, oligomeric reaction	-	5.13	Low
products with 1-chloro-2,3-epoxypropane, reaction			
products with 3-aminomethyl-			
3,5,5-trimethylcyclohexylamine			
2-methylpropan-1-ol	1	-	Low
2,4,6-tris(dimethylaminomethyl)phenol	0.219	-	Low
Amines, polyethylenepoly-, triethylenetetramine	-2.65	-	Low
fraction			
salicylic acid	2.21 to 2.26	-	Low

12.4 Mobility in soil

Soil/water partition

coefficient (Koc)

: Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

May cause endocrine disruption.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste

: The classification of the product may meet the criteria for a hazardous waste.

European waste catalogue (EWC)

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SECTION 13: Disposal considerations

	Waste code	Waste designation
80	01 11*	waste paint and varnish containing organic solvents or other hazardous substances

Packaging

Methods of disposal

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.

Type of packaging	European waste catalogue (EWC)	
Container	15 01 06	mixed packaging

Special precautions

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

			1	
	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	UN2920	UN2920	UN2920	UN2920
14.2 UN proper shipping name	CORROSIVE LIQUID, FLAMMABLE, N.O.S.	CORROSIVE LIQUID, FLAMMABLE, N.O.S.	CORROSIVE LIQUID, FLAMMABLE, N.O.S.	CORROSIVE LIQUID, FLAMMABLE, N.O.S.
	(3-aminomethyl- 3,5,5-trimethylcyclohexylamine,	(3-aminomethyl- 3,5,5-trimethylcyclohexylamine,	(3-aminomethyl- 3,5,5-trimethylcyclohexylamine,	(3-aminomethyl- 3,5,5-trimethylcyclohexylamine,
	4-methylpentan-2-one)	4-methylpentan-2-one)	4-methylpentan-2-one)	4-methylpentan-2-one)
14.3 Transport hazard class(es)	8 (3)	8 (3)	8 (3)	8 (3)
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	(4-nonylphenol, branched)	Not applicable.

Additional information

ADR/RID

: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or

ADN

: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or

IMDG

: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

IATA

: The environmentally hazardous substance mark may appear if required by other transportation

regulations.

user

14.6 Special precautions for : 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.

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

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14. Transport information

14.7 Maritime transport in bulk according to IMO

: Not applicable.

instruments

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Endocrine disrupting properties for environment	4-nonylphenol, branched and linear substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof	Candidate	ED/169/2012	12/19/2012

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Explosive precursors : Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
P5c
E1

15.2 Chemical Safety

: No Chemical Safety Assessment has been carried out.

Assessment

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

English (US)	Europe	18/20
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SECTION 16: Other information

ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

PNEC = Predicted No Effect Concentration

RRN = REACH Registration Number

PBT = Persistent, Bioaccumulative and Toxic

vPvB = Very Persistent and Very Bioaccumulative

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

IMDG = International Maritime Dangerous Goods

IATA = International Air Transport Association

Full text of abbreviated H statements

H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
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.
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.
H351	Suspected of causing cancer.
H361d	Suspected of damaging the unborn child.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn
	child.
H373	May cause damage to organs through prolonged or repeated
	exposure.
H400	Very toxic to aquatic life.
H410	Very 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]

Full text of classifications [CEP/GH3]	
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	AQUATIC HAZARD (ACUTE) - Category 1
Aquatic Chronic 1	AQUATIC HAZARD (LONG-TERM) - Category 1
Aquatic Chronic 3	AQUATIC HAZARD (LONG-TERM) - Category 3
Carc. 2	CARCINOGENICITY - Category 2
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
Repr. 2	TOXIC TO REPRODUCTION - Category 2
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C
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

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

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SECTION 16: Other information

History

Date of issue/ Date of : 16 February 2024

revision

Date of previous issue : 20 November 2023

Prepared by : EHS Version : 1.03

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

English (US) Europe 20/20