

SAFETY DATA SHEET

Date of issue/Date of revision

: 16 September 2026

Version

: 5



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

1.1 Product identifier

Product name : SIGMAFAST 278 HARDENER

Product code : 000001085137

Other means of identification

00323232; 00345239 ; 00351714 ; 00453392 ; 40278-BHARD/5L

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 : Hardener.

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

National advisory body/Poison Centre

National Poison Information Centre at Beaumont Hospital. Tel: +353 (0)1 809 2166 (8 am to 10 pm, 7 days a week),
Tel: +353 1 809 2566 (Healthcare professionals, 24/7) email: npicdublin@beaumont.ie.

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 Irrit. 2, H315

Eye Dam. 1, H318

Skin Sens. 1, H317

STOT SE 3, H335

Aquatic Chronic 2, H411

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

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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 vapour.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
May cause respiratory irritation.
Toxic to aquatic life with long lasting effects.

Precautionary statements

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.

Response

: Collect spillage.

Storage

: Store in a well-ventilated place. Keep container tightly closed.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.
P280, P210, P273, P391, P403 + P233, P501

Hazardous ingredients

: xylene; proprietary aralkylpolyamine; benzyl alcohol; 2,4,6-tris(dimethylaminomethyl) phenol; Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine; 3,6-diazaoctanethylenediamine; ethylenediamine and 3-aminopropyldimethylamine

Supplemental label elements

: Not applicable.

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

: Not applicable.

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 according to Regulation (EC) No. 1907/2006, Annex XIII

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

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SECTION 2: Hazards identification

Product meets the criteria for endocrine disrupting properties according to Regulation (EC) No. 1907/2006. : Based on available data, the classification criteria are not met.

Other hazards which do not result in classification : Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	% by weight	Classification	Specific Conc. Limits, M-factors and ATEs	Type
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥25 - ≤49	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Dermal] = 1700 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
proprietary aralkylpolyamine	CAS: SUB119920	≥10 - ≤25	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317	-	[1]
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≥5.0 - ≤10	Flam. Liq. 3, H226 STOT SE 3, H336	-	[1] [2]
benzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥5.0 - ≤10	Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317	ATE [Oral] = 1200 mg/kg	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥1.0 - ≤5.0	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Inhalation (vapours)] = 17.8 mg/l	[1] [2]
2,4,6-tris (dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2	≥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]
Formaldehyde, polymer with N,N-dimethyl-1,3-propanediamine and phenol	CAS: 445498-00-0	≥1.0 - ≤5.0	Acute Tox. 4, H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 500 mg/kg M [Acute] = 1 M [Chronic] = 1	[1]
Fatty acids, C18-unsatd.,	REACH #:	≥1.0 - ≤5.0	Skin Irrit. 2, H315	-	[1]

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dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	01-2119972320-44 EC: 500-191-5 CAS: 68082-29-1		Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 2, H411		
3,6-diazaoctanethylenediamin	EC: 203-950-6 CAS: 112-24-3 Index: 612-059-00-5	<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]
ethylenediamine	REACH #: 01-2119480383-37 EC: 203-468-6 CAS: 107-15-3 Index: 612-006-00-6	≤0.89	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 3, H311 Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1B, H334 Skin Sens. 1, H317 Aquatic Chronic 3, H412	ATE [Oral] = 841 mg/kg ATE [Dermal] = 560 mg/kg ATE [Inhalation (gases)] = 6000 ppm	[1] [2]
3-aminopropyldimethylamine	REACH #: 01-2119486842-27 EC: 203-680-9 CAS: 109-55-7	≤0.30	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Repr. 2, H361d STOT SE 3, H335 See Section 16 for the full text of the H statements declared above.	ATE [Oral] = 410 mg/kg ATE [Dermal] = 1100 mg/kg	[1]

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

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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.
- Inhalation** : 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.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised 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 the 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** : May cause respiratory irritation.
- Skin contact** : Causes skin irritation. Defatting to the skin. 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** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
dryness
cracking
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** : 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.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Flammable liquid and vapour. 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 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.

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SECTION 5: Firefighting measures

Hazardous combustion products : Decomposition products may include the following materials:
carbon oxides
nitrogen 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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour. Put on appropriate personal protective equipment. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

For emergency responders : If specialised 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 non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilt 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 material 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 the 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 spilt 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.

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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. Do not get in eyes or on skin or clothing. Do not breathe vapour 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 oxidising 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 unlabelled 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

Product/ingredient name	Exposure limit values
xylene	NAOSH (Ireland, 4/2024) [xylene] Absorbed through skin. OELV 8 hours: 50 ppm. OELV 8 hours: 221 mg/m³. OELV 15 minutes: 100 ppm. OELV 15 minutes: 442 mg/m³.
1-methoxy-2-propanol	NAOSH (Ireland, 4/2024) OELV 8 hours: 100 ppm. OELV 8 hours: 375 mg/m³. OELV 15 minutes: 150 ppm. OELV 15 minutes: 568 mg/m³.
ethylbenzene	NAOSH (Ireland, 4/2024) Absorbed through skin.
English (GB)	Ireland
7/22	

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ethylenediamine	OELV 8 hours: 100 ppm. OELV 8 hours: 442 mg/m³. OELV 15 minutes: 200 ppm. OELV 15 minutes: 884 mg/m³. NAOSH (Ireland, 4/2024) Sensitiser. OELV 8 hours: 10 ppm. OELV 8 hours: 25 mg/m³.
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Biological exposure indices

Product/ingredient name	Exposure indices
Xylene	NAOSH BGVs (Ireland, 1/2011) [Xylene] BMGV: 1.5 g/g creatinine, methylhippuric acids [in urine]. Sampling time: end of shift - As soon as possible after exposure ceases.
ethylbenzene	NAOSH BGVs (Ireland, 1/2011) BMGV: Semi-quantitative, the biological analyte is an indicator of exposure to the substance but the quantitative interpretation of the measurement is ambiguous. These analytes should be used as a screening test if a quantitative test is not practical; or as a confirmatory test if the quantitative test is not specific and the origin of the determinant is in question., ethylbenzene [in endexhaled air]. Sampling time: not critical. BMGV: 0.7 g/g creatinine [Semi-quantitative, the biological analyte is an indicator of exposure to the substance but the quantitative interpretation of the measurement is ambiguous. These analytes should be used as a screening test if a quantitative test is not practical; or as a confirmatory test if the quantitative test is not specific and the origin of the determinant is in question.], mandelic acid and phenylglyoxylic acid [in urine]. Sampling time: end of shift at end of workweek.

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.

DNELs/DMELs

Product/ingredient name	Exposure	Value
Xylene	DNEL - General population - Long term - Oral DNEL - General population - Long term - Inhalation DNEL - General population - Long term - Inhalation DNEL - General population - Long term - Dermal DNEL - Workers - Long term - Dermal DNEL - Workers - Long term - Inhalation DNEL - Workers - Long term - Inhalation DNEL - General population - Short term - Inhalation	Systemic Local Systemic Systemic Systemic Local Systemic Local 5 mg/kg bw/day 65.3 mg/m³ 65.3 mg/m³ 125 mg/kg bw/day 212 mg/kg bw/day 221 mg/m³ 221 mg/m³ 260 mg/m³

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1-methoxy-2-propanol	DNEL - General population - Short term - Inhalation	Systemic	260 mg/m ³
	DNEL - Workers - Short term - Inhalation	Local	442 mg/m ³
	DNEL - Workers - Short term - Inhalation	Systemic	442 mg/m ³
	DNEL - General population - Long term - Oral	Systemic	33 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	Systemic	43.9 mg/m ³
benzyl alcohol	DNEL - General population - Long term - Dermal	Systemic	78 mg/kg bw/day
	DNEL - Workers - Long term - Dermal	Systemic	183 mg/kg bw/day
	DNEL - Workers - Long term - Inhalation	Systemic	369 mg/m ³
	DNEL - Workers - Short term - Inhalation	Local	553.5 mg/m ³
	DNEL - Workers - Short term - Inhalation	Systemic	553.5 mg/m ³
	DNEL - General population - Long term - Oral	Systemic	4 mg/kg bw/day
	DNEL - General population - Long term - Dermal	Systemic	4 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	Systemic	5.4 mg/m ³
	DNEL - Workers - Long term - Dermal	Systemic	8 mg/kg bw/day
	DNEL - General population - Short term - Oral	Systemic	20 mg/kg bw/day
ethylbenzene	DNEL - General population - Short term - Dermal	Systemic	20 mg/kg bw/day
	DNEL - Workers - Long term - Inhalation	Systemic	22 mg/m ³
	DNEL - General population - Short term - Inhalation	Systemic	27 mg/m ³
	DNEL - Workers - Short term - Dermal	Systemic	40 mg/kg bw/day
	DNEL - Workers - Short term - Inhalation	Systemic	110 mg/m ³
2,4,6-tris (dimethylaminomethyl) phenol	DMEL - Workers - Long term - Inhalation	Local	442 mg/m ³
	DMEL - Workers - Short term - Inhalation	Systemic	884 mg/m ³
	DNEL - General population - Long term - Oral	Systemic	1.6 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	Systemic	15 mg/m ³
	DNEL - Workers - Long term - Inhalation	Systemic	77 mg/m ³
	DNEL - Workers - Long term - Dermal	Systemic	180 mg/kg bw/day
	DNEL - Workers - Short term - Inhalation	Local	293 mg/m ³
	DNEL - General population - Long term - Oral	Systemic	0.075 mg/kg bw/day
	DNEL - General population - Short term - Dermal	Systemic	0.075 mg/kg bw/day
	DNEL - General population - Long term - Dermal	Systemic	0.075 mg/kg bw/day
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	DNEL - General population - Short term - Inhalation	Systemic	0.13 mg/m ³
	DNEL - General population - Long term - Inhalation	Systemic	0.13 mg/m ³
	DNEL - Workers - Long term - Dermal	Systemic	0.15 mg/kg bw/day
	DNEL - Workers - Long term - Inhalation	Systemic	0.53 mg/m ³
	DNEL - Workers - Short term - Dermal	Systemic	0.6 mg/kg bw/day
3,6-diazaoctanethylenediamin	DNEL - Workers - Short term - Inhalation	Systemic	2.1 mg/m ³
	DNEL - General population - Long term - Oral	Systemic	97.2 µg/kg bw/day
	DNEL - General population - Long term - Dermal	Systemic	97.2 µg/kg bw/day
	DNEL - General population - Long term - Inhalation	Systemic	0.169 mg/m ³
	DNEL - Workers - Long term - Dermal	Systemic	0.272 mg/kg bw/day
	DNEL - Workers - Long term - Inhalation	Systemic	0.952 mg/m ³
	DNEL - Workers - Long term - Dermal	Local	28 µg/cm ²

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ethylenediamine	DNEL - General population - Long term - Dermal	Systemic	0.25 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	Systemic	0.29 mg/m ³
	DNEL - General population - Long term - Oral	Systemic	0.41 mg/kg bw/day
	DNEL - General population - Long term - Dermal	Local	0.43 mg/cm ²
	DNEL - Workers - Long term - Dermal	Systemic	0.57 mg/kg bw/day
	DNEL - General population - Short term - Dermal	Local	1 mg/cm ²
	DNEL - Workers - Long term - Inhalation	Systemic	1 mg/m ³
	DNEL - General population - Short term - Dermal	Systemic	8 mg/kg bw/day
	DNEL - General population - Short term - Oral	Systemic	20 mg/kg bw/day
	DNEL - General population - Short term - Inhalation	Systemic	1600 mg/m ³
	DNEL - Workers - Short term - Inhalation	Systemic	5380 mg/m ³
	DNEL - General population - Long term - Oral	Systemic	0.11 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	Systemic	6.25 mg/m ³
	DNEL - Workers - Long term - Inhalation	Systemic	25 mg/m ³
3-aminopropyldimethylamine	DNEL - Workers - Long term - Inhalation	Systemic	1.2 mg/m ³

PNECs

Product/ingredient name	Compartment Detail - Method	Value
Xylene	Fresh water	0.327 mg/l
	Marine water	0.327 mg/l
	Sewage Treatment Plant	6.58 mg/l
	Fresh water sediment	12.46 mg/kg dwt
	Marine water sediment	12.46 mg/kg dwt
	Soil	2.31 mg/kg
1-methoxy-2-propanol	Fresh water - Assessment Factors	10 mg/l
	Sewage Treatment Plant - Assessment Factors	100 mg/l
	Fresh water sediment - Equilibrium Partitioning	41.6 mg/kg dwt
	Marine water sediment - Equilibrium Partitioning	4.17 mg/kg dwt
	Soil - Equilibrium Partitioning	2.47 mg/kg dwt
	Fresh water - Assessment Factors	0.1 mg/l
ethylbenzene	Marine water - Assessment Factors	0.01 mg/l
	Sewage Treatment Plant - Assessment Factors	9.6 mg/l
	Fresh water sediment - Equilibrium Partitioning	13.7 mg/kg dwt
	Marine water sediment - Equilibrium Partitioning	1.37 mg/kg dwt
	Soil - Equilibrium Partitioning	2.68 mg/kg dwt
	Secondary Poisoning	20 mg/kg
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Fresh water - Assessment Factors	0.043 mg/l
	Marine water - Assessment Factors	0 mg/l
	Sewage Treatment Plant - Assessment Factors	3.84 mg/l
	Fresh water sediment - Equilibrium Partitioning	434.02 mg/kg dwt
	Marine water sediment - Equilibrium Partitioning	43.4 mg/kg dwt
	Soil - Equilibrium Partitioning	86.78 mg/kg dwt
3-aminopropyldimethylamine	Fresh water - Assessment Factors	0.034 mg/l
	Marine water - Assessment Factors	0.003 mg/l
	Sewage Treatment Plant - Assessment Factors	69.5 mg/l
	Fresh water sediment - Equilibrium Partitioning	0.221 mg/kg dwt
	Marine water sediment - Equilibrium Partitioning	0.022 mg/kg dwt
	Soil - Equilibrium Partitioning	0.024 mg/kg dwt

8.2 Exposure controls

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- 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, vapour 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.
- Eye/face protection** : Chemical splash goggles and face shield. Use eye protection according to EN 166.
- Skin protection**
- Hand protection** : 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, as included in the user's risk assessment.
- 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 anti-static 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.
- 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 vapour (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.

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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

Colour

Odour

Melting point/freezing point

Boiling point or initial boiling point and boiling range

Flammability

Lower and upper explosion limit

Flash point

Auto-ignition temperature

Decomposition temperature

pH

Viscosity

Solubility

Partition coefficient n-octanol/ water (log Pow)

Vapour pressure

Relative density

Particle characteristics

Median particle size

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties

Oxidising properties

No additional information.

: Liquid.

: Colourless.

: Aromatic. [Slight]

: Not determined.

: >37.78°C

: Not determined. There are no data available on the mixture itself.

: Not available.

: Closed cup: 29°C

:

Ingredient name	°C	°F	Method
 ethoxy-2-propanol	287	548.6	EU A.15

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

: Not applicable. insoluble in water.

: Dynamic (room temperature): Not available.
Kinematic (room temperature): >400 mm²/s
Kinematic (40°C): >21 mm²/s

:

Media	Result
cold water	Not soluble

: Not applicable.

:

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
 ethylbenzene	9.30076	1.2				

: 0.97

: Not applicable.

: The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.

: Product does not present an oxidizing hazard.

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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: oxidising agents, strong alkalis, strong acids.
10.6 Hazardous decomposition products	: Depending on conditions, 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
The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. Causes serious eye damage. Causes skin irritation. May cause an allergic skin reaction. May cause respiratory irritation.

Acute toxicity		
Product/ingredient name	Result	Dose / Exposure
xylene	Rat - Oral - LD50	4.3 g/kg
1-methoxy-2-propanol	Rabbit - Dermal - LD50	1.7 g/kg
	Rabbit - Dermal - LD50	13 g/kg
	Rat - Oral - LD50	5.2 g/kg
benzyl alcohol	Rat - Inhalation - LC50 Vapour	>7000 ppm [6 hours]
	Rabbit - Dermal - LD50	>2000 mg/kg
	Rat - Oral - LD50	1200 mg/kg
ethylbenzene	Rat - Inhalation - LC50 Dusts and mists	>5 mg/l [4 hours]
	Rat - Oral - LD50	3.5 g/kg
	Rabbit - Dermal - LD50	17.8 g/kg
	Rat - Inhalation - LC50 Vapour	17.8 mg/l [4 hours]
2,4,6-tris(dimethylaminomethyl) phenol	Rat - Dermal - LD50	1280 mg/kg
	Rat - Oral - LD50	1200 mg/kg
	<u>Toxic effects:</u> Peripheral Nerve and Sensation - Flaccid paralysis without anesthesia (usually neuromuscular blockage) Lung, Thorax, or Respiration - Dyspnea	
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Rat - Dermal - LD50	>2000 mg/kg
3,6-diazaoctanethylenediamin	Rat - Oral - LD50	>2000 mg/kg
	Rabbit - Dermal - LD50	1465 mg/kg
	Rat - Oral - LD50	1716 mg/kg
ethylenediamine	Rat - Male, Female - Oral - LD50	841 mg/kg

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SECTION 11: Toxicological information

3-aminopropyldimethylamine	Rabbit - Male - Dermal - LD50 Rat - Inhalation - LC50 Gas. Rat - Oral - LD50 Rabbit - Dermal - LD50 Rat - Dermal - LD50 Rat - Inhalation - LC50 Dusts and mists	560 mg/kg 6000 ppm [4 hours] 410 mg/kg 2139 mg/kg 400 to 2000 mg/kg >21.9 mg/l [4 hours]
----------------------------	--	---

Acute toxicity estimates

Route	ATE value
Oral	7022.92 mg/kg
Dermal	5422.65 mg/kg
Inhalation (vapours)	39.11 mg/l

Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

Product/ingredient name	Result
Xylene	Rabbit - Skin - Moderate irritant Amount/concentration applied: 500 mg Duration of treatment/exposure: 24 hours
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Human - Skin - Irritant
-	Rabbit - Eyes - Severe irritant

Conclusion/Summary

Skin : Causes skin irritation.
Eyes : Causes serious eye damage.
Respiratory : Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

Product/ingredient name	Test	Result
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Mouse - skin	Sensitising
3,6-diazaoctanethylenediamin	Guinea pig - skin OECD 406	Sensitising

Conclusion/Summary

Skin : May cause an allergic skin reaction.
Respiratory : Based on available data, the classification criteria are not met.

Mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

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Product/ingredient name	Category	Route of exposure	Target organs
☒ xylene 1-methoxy-2-propanol 3-aminopropyldimethylamine	Category 3 Category 3 Category 3	- - -	Respiratory tract irritation Narcotic effects Respiratory tract irritation

Conclusion/Summary :

May cause respiratory irritation.

Specific target organ toxicity (repeated exposure)

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

Conclusion/Summary :

Based on available data, the classification criteria are not met.

Aspiration hazard

Product/ingredient name	Result
☒ xylene ☒ ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Conclusion/Summary :

Based on available data, the classification criteria are not met.

Information on likely routes of exposure : Not available.

Potential acute health effects

- Inhalation** : May cause respiratory irritation.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. 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:
respiratory tract irritation
coughing
- Ingestion** : Adverse symptoms may include the following:
stomach pains
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
dryness
cracking
blistering may occur
- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

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SECTION 11: Toxicological information

Long term exposure

- Potential immediate effects : No known significant effects or critical hazards.
- Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

- 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 : No known significant effects or critical hazards.
- Mutagenicity : No known significant effects or critical hazards.
- Reproductive toxicity : No known significant effects or critical hazards.
- Other information : Prolonged or repeated contact may dry skin and cause irritation. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapour/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. Exposure to amine vapor has been reported to cause transient corneal edema described as blue haze, halo effect, foggy or blurred vision for several hours. This condition is typically temporary and does not cause permanent visual effects. When the proper eye protection specified in Section 8 is worn, exposure is significantly reduced and the condition has not been observed.

11.2 Information on other hazards

11.2.1 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.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

There are no data available on the mixture itself.
Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

12.1 Toxicity

Product/ingredient name	Result	Species	Dose / Exposure
4-methoxy-2-propanol	Acute - LC50 - Fresh water	Fish - Goldfish	>4500 mg/l [96 hours]
ethylbenzene	Acute - LC50	Daphnia - Daphnia	23300 mg/l [48 hours]
	Acute - EC50 - Fresh water	Daphnia	1.8 mg/l [48 hours]
	Chronic - NOEC - Fresh water	Daphnia - Ceriodaphnia dubia	1 mg/l
2,4,6-tris (dimethylaminomethyl)phenol	Acute - LC50	Daphnia	>100 mg/l [48 hours]
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Acute - LC50	Fish	>100 mg/l [96 hours]
	EC10	Algae	1.78 mg/l [72 hours]

Conclusion/Summary : Toxic to aquatic life with long lasting effects.

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SECTION 12: Ecological information

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose / Inoculum
ethylbenzene	-	79% [10 days] - Readily	
2,4,6-tris	OECD [Ready	4% [28 days] - Not readily	
(dimethylaminomethyl)phenol	Biodegradability -		
ethylenediamine	Closed Bottle Test]		
	-	95% [28 days]	

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene	-	-	Readily
benzyl alcohol	-	-	Readily
ethylbenzene	-	-	Readily
2,4,6-tris	-	-	Not readily
(dimethylaminomethyl)phenol	-	-	
Fatty acids, C18-unsatd.,	-	-	Not readily
dimers, oligomeric reaction			
products with tall-oil fatty			
acids and			
triethylenetetramine			
ethylenediamine	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
xylene	3.12	7.4 to 18.5	Low
1-methoxy-2-propanol	<1	-	Low
benzyl alcohol	0.87	-	Low
ethylbenzene	3.6	79.43	Low
2,4,6-tris(dimethylaminomethyl)phenol	0.219	-	Low
3,6-diazaoctanethylenediamin	-1.66 to -1.4	-	Low
ethylenediamine	-2.04	-	Low
3-aminopropyldimethylamine	-0.352	-	Low

12.4 Mobility in soil

Soil/water partition coefficient

Product/ingredient name	logK _{oc}	K _{oc}
1-methoxy-2-propanol	1	10.447
benzyl alcohol	1.1	12.6442
ethylbenzene	2.2	170.406
2,4,6-tris(dimethylaminomethyl)phenol	2.7	525.589
3,6-diazaoctanethylenediamin	1.5	33.6474
ethylenediamine	0.63	4.24117
3-aminopropyldimethylamine	1.7	46.284

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.

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SECTION 12: Ecological information

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

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 minimised 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 :
[European waste catalogue \(EWC\)](#)

Waste code	Waste designation
08 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 minimised 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. Vapour 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	III	III	III	III

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SECTION 14: Transport information

14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	(Formaldehyde, polymer with N,N-dimethyl-1,3-propanediamine and phenol)	Not applicable.

Additional information

- ADR/RID** : This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in packagings up to 5 L, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 according to 2.2.3.1.5.2.
- Tunnel code** : (D/E)
- ADN** : This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in packagings up to 5 L, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 according to 2.2.3.1.5.2.
- IMDG** : This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in packagings up to 5 L, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 according to 2.3.2.5.
- IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.

- 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 authorisation](#)

- [Annex XIV](#)
None of the components are listed.
[Substances of very high concern](#)

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
 Substance of equivalent concern for human health	ethylenediamine	Recommended	11th recommendation	4/12/2023

[Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles](#)

Product/ingredient name	Entry Number (REACH)
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- Labelling** : Not applicable.

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SECTION 15: Regulatory information

Other EU regulations

Explosive precursors : Not applicable.

Ozone depleting substances (EU 2024/590)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
 5c E2

15.2 Chemical safety assessment : No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

 Indicates information that has changed from previously issued version.

Abbreviations and acronyms

- 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

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

Classification	Justification
 lam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Chronic 2, H411	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method

Full text of abbreviated H statements

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H225 H226 H302 H304 H311 H312 H314 H315 H317 H318 H319 H332 H334 H335 H336 H361d H373 H400 H410 H411 H412 Highly flammable liquid and vapour. Flammable liquid and vapour. Harmful if swallowed. May be fatal if swallowed and enters airways. Toxic in contact with skin. Harmful in contact with skin. Causes severe skin burns and eye damage. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Causes serious eye irritation. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Acute Tox. 3 Acute Tox. 4 Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 2 Aquatic Chronic 3 Asp. Tox. 1 Eye Dam. 1 Eye Irrit. 2 Flam. Liq. 2 Flam. Liq. 3 Repr. 2 Resp. Sens. 1B Skin Corr. 1B Skin Corr. 1C Skin Irrit. 2 Skin Sens. 1 Skin Sens. 1A Skin Sens. 1B STOT RE 2 STOT SE 3 ACUTE TOXICITY - Category 3 ACUTE TOXICITY - Category 4 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 ASPIRATION HAZARD - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 FLAMMABLE LIQUIDS - Category 3 REPRODUCTIVE TOXICITY - Category 2 RESPIRATORY SENSITISATION - Category 1B SKIN CORROSION/IRRITATION - Category 1B SKIN CORROSION/IRRITATION - Category 1C SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITISATION - Category 1 SKIN SENSITISATION - Category 1A SKIN SENSITISATION - Category 1B SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

History

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Version	: 5

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SECTION 16: Other information

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.