watco® SAFETY DATA SHEET

Tack Coat - Curing Agent

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

1.1 Product identifier

Product name : Tack Coat - Curing Agent

Product description : Hardener.

Product type : Liquid.

UFI : E361-H0U7-C000-52YE

Product code : WAT0230

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

Identified uses
Consumer Industrial Professional

Uses advised against	Reason
None identified.	-

1.3 Details of the supplier of the safety data sheet

Watco UK Limited
Eastgate Court
195-205 High Street
Guildford
Surrey
GU1 3EH
United Kingdom
Watco UK:
T: +44 (0) 1483 425000 (08:00 - 18:00)
F: +44 (0) 1483 428888

Watco FR
COLOFT - Espace de coworking
Arteparc
9 rue des Bouleaux
59810 Lesquin, France
Watco FR:
T: +33 (0) 3 20 52 77 77
F: +33 (0) 3 20 52 38 39
info@watco.fr
Watco BE:
T: +32 13 458 905

Watco GmbH DE
Kränkelsweg 14
41748 Viersen
Germany
Watco DE:
T: +49 (0) 21 62 530 17 17(08:00 - 17:00)
F: +49 (0) 21 62 530 17 77
info@watco.de
Watco AT:
T: +43 1 310 09 10

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

e-mail address of person responsible for this SDS : rpmeurohas@rustoleum.eu

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number United Kingdom: Northern Ireland : 01 809 2166
Available 8am to 10pm 7 days per week

Supplier

Telephone number United Kingdom: Northern Ireland : +353 19014670

Hours of operation : 24 / 7

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. 2, H225
Acute Tox. 4, H302
Skin Corr. 1, H314
Eye Dam. 1, H318
Skin Sens. 1, H317
Aquatic Acute 1, H400
Aquatic Chronic 1, H410

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

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 :
H225 - Highly flammable liquid and vapour.
H302 - Harmful if swallowed.
H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements

General :
P103 - Read carefully and follow all instructions.
P102 - Keep out of reach of children.
P101 - If medical advice is needed, have product container or label at hand.

Prevention :
P280 - Wear protective gloves, protective clothing and eye or face protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 - Avoid release to the environment.

SECTION 2: Hazards identification

Response : P391 - Collect spillage.
P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor.
P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Storage : P405 - Store locked up.
P403 + P235 - Store in a well-ventilated place. Keep cool.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients : Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine
benzyl alcohol
m-fenilenbis(methylamine)
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with ethylenediamine

Supplemental label elements : Not applicable.

Supplemental label elements : Detergents - Regulation (EC) No 907/2006 : 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 : Yes, applicable.

Tactile warning of danger : Yes, 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.

Product meets the criteria for endocrine disrupting properties according to Regulation (EC) No. 1907/2006. : Not applicable

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

United Kingdom: Northern Ireland

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine	REACH #: 01-2119983521-35 CAS: 186321-96-0	≥25 - ≤50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
benzyl alcohol	EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥10 - ≤25	Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317	ATE [Oral] = 1200 mg/kg	[1]
Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis (methylamine)	EC: 500-137-0 CAS: 57214-10-5	≥10 - ≤25	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
benzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥10 - ≤21	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319 Skin Sens. 1B, H317	ATE [Oral] = 1200 mg/kg ATE [Inhalation (dusts and mists)] = 4,178 mg/l	[1]
m-fenilenbis(methylamine)	REACH #: 01-2119480150-50 EC: 216-032-5 CAS: 1477-55-0	≤10	Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412	ATE [Oral] = 930 mg/kg ATE [Inhalation (gases)] = 4500 ppm	[1]
2,4,6-tris (dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2 Index: 603-069-00-0	≤10	Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318	ATE [Oral] = 500 mg/kg	[1]
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with ethylenediamine	REACH #: 01-2120766318-46 EC: 500-253-1 CAS: 72480-18-3	≤5	Acute Tox. 4, H302 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 500 mg/kg M [Acute] = 1 M [Chronic] = 1	[1]
3-aminopropyldimethylamine	EC: 203-680-9 CAS: 109-55-7 Index: 612-061-00-6	<3	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 2, H361 STOT SE 3, H335	ATE [Oral] = 1870 mg/kg ATE [Dermal] = 1100 mg/kg	[1]
nitric acid, ammonium calcium salt	EC: 239-289-5 CAS: 15245-12-2	≤3	Acute Tox. 4, H302 Eye Dam. 1, H318	ATE [Oral] = 500 mg/kg	[1]
ethanol	REACH #: Not yet	≤3	Flam. Liq. 2, H225	-	[1] [2]

SECTION 3: Composition/information on ingredients

	registered EC: 200-578-6 CAS: 64-17-5 Index: 603-002-00-5		Eye Irrit. 2, H319		
3-aminopropyltriethoxysilane	REACH #: 01-2119480479-24 EC: 213-048-4 CAS: 919-30-2 Index: 612-108-00-0	≤0,3	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 **See Section 16 for the full text of the H statements declared above.**	ATE [Oral] = 500 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.

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

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit

List numbers have no legal significance.

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.

Skin contact : Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

SECTION 4: First aid measures

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

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion : Adverse symptoms may include the following:
stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : 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, CO_2, 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 : Highly 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 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 dioxide
carbon monoxide
nitrogen oxides
halogenated compounds
metal oxide/oxides

5.3 Advice for firefighters

Special protective actions 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. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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. Absorb with an inert 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. 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.

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.

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. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Keep away from acids. 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.

SECTION 7: Handling and storage

7.2 Conditions for safe storage, including any incompatibilities

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 acids. 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.

Seveso Directive - Reporting thresholds

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
P5c E1	5000 tonnes 100 tonnes	50000 tonnes 200 tonnes

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits / Biological exposure indices

United Kingdom: Northern Ireland

Product/ingredient name	Exposure limit values
ethanol	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** TWA 8 hours: 1000 ppm. TWA 8 hours: 1920 mg/m³.

No exposure indices known.

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

DNELs/DMELs

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Result	Value	Effects
Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine	**DNEL - General population - Long term - Oral**	0,5 mg/kg bw/ day	Effects: Systemic
	DNEL - General population - Long term - Dermal	0,5 mg/kg bw/ day	Effects: Systemic
	DNEL - Workers - Long term - Dermal	1 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Long term - Inhalation	1,74 mg/m³	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	7,05 mg/m³	Effects: Systemic
benzyl alcohol	**DNEL - General population - Long term - Oral**	4 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Long term - Dermal	4 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Long term - Inhalation	5,4 mg/m³	Effects: Systemic
	DNEL - Workers - Long term - Dermal	8 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Short term - Oral	20 mg/kg bw/ day	Effects: Systemic
	DNEL - General population - Short term - Dermal	20 mg/kg bw/ day	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	22 mg/m³	Effects: Systemic
	DNEL - General population - Short term - Inhalation	27 mg/m³	Effects: Systemic
	DNEL - Workers - Short term - Dermal	40 mg/kg bw/ day	Effects: Systemic
	DNEL - Workers - Short term - Inhalation	110 mg/m³	Effects: Systemic
benzyl alcohol	**DNEL - General population - Long term - Oral**	4 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Long term - Dermal	4 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Long term - Inhalation	5,4 mg/m³	Effects: Systemic
	DNEL - Workers - Long term - Dermal	8 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Short term - Oral	20 mg/kg bw/ day	Effects: Systemic
	DNEL - General population -	20 mg/kg bw/	Effects:

SECTION 8: Exposure controls/personal protection

	Short term - Dermal	day	Systemic
	DNEL - Workers - Long term - Inhalation	22 mg/m³	Effects: Systemic
	DNEL - General population - Short term - Inhalation	27 mg/m³	Effects: Systemic
	DNEL - Workers - Short term - Dermal	40 mg/kg bw/ day	Effects: Systemic
	DNEL - Workers - Short term - Inhalation	110 mg/m³	Effects: Systemic
m-fenilenbis(methylamine)	**DNEL - Workers - Long term - Inhalation**	0,2 mg/m³	Effects: Local
	DNEL - Workers - Long term - Dermal	0,33 mg/kg bw/ day	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	1,2 mg/m³	Effects: Systemic
2,4,6-tris(dimethylaminomethyl)phenol	**DNEL - Workers - Long term - Inhalation**	0,31 mg/m³	Effects: Systemic
	DNEL - General population - Long term - Oral	0,075 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Short term - Dermal	0,075 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Long term - Dermal	0,075 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Short term - Inhalation	0,13 mg/m³	Effects: Systemic
	DNEL - General population - Long term - Inhalation	0,13 mg/m³	Effects: Systemic
	DNEL - Workers - Long term - Dermal	0,15 mg/kg bw/ day	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	0,53 mg/m³	Effects: Systemic
	DNEL - Workers - Short term - Dermal	0,6 mg/kg bw/ day	Effects: Systemic
	DNEL - Workers - Short term - Inhalation	2,1 mg/m³	Effects: Systemic
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with ethylenediamine	**DNEL - Workers - Long term - Dermal**	0,28 mg/kg bw/ day	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	0,705 mg/m³	Effects: Systemic
3-aminopropyldimethylamine	**DNEL - Workers - Long term - Inhalation**	1,2 mg/m³	Effects: Systemic

SECTION 8: Exposure controls/personal protection

nitric acid, ammonium calcium salt	**DNEL - Workers - Long term - Dermal**	13,9 mg/kg	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	98 mg/m³	Effects: Systemic
	DNEL - General population - Long term - Oral	8,33 mg/kg	Effects: Systemic
	DNEL - General population - Long term - Inhalation	29 mg/m³	Effects: Systemic
	DNEL - General population - Long term - Dermal	8,33 mg/kg	Effects: Systemic
	DNEL - General population - Short term - Oral	10 mg/kg bw/day	Effects: Systemic
ethanol	**DNEL - General population - Long term - Oral**	87 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Long term - Inhalation	114 mg/m³	Effects: Systemic
	DNEL - General population - Long term - Dermal	206 mg/kg bw/day	Effects: Systemic
	DNEL - Workers - Long term - Dermal	343 mg/kg bw/day	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	380 mg/m³	Effects: Systemic
	DNEL - General population - Short term - Inhalation	950 mg/m³	Effects: Local
	DNEL - Workers - Short term - Inhalation	1900 mg/m³	Effects: Local
3-aminopropyltriethoxysilane	**DNEL - Workers - Short term - Dermal**	8,3 mg/kg bw/day	Effects: Systemic
	DNEL - Workers - Short term - Inhalation	59 mg/m³	Effects: Systemic
	DNEL - Workers - Long term - Dermal	8,3 mg/kg bw/day	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	59 mg/m³	Effects: Systemic
	DNEL - General population - Consumers - Short term - Oral	5 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Consumers - Short term - Dermal	5 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Consumers - Short term - Inhalation	17,4 mg/m³	Effects: Systemic
	DNEL - General population -	5 mg/kg bw/day	Effects:

SECTION 8: Exposure controls/personal protection

	Consumers - Long term - Oral		Systemic
	DNEL - General population - Consumers - Long term - Dermal	5 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Consumers - Long term - Inhalation	17 mg/m³	Effects: Systemic
	DNEL - General population - Long term - Oral	1 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Long term - Dermal	1 mg/kg bw/day	Effects: Systemic
	DNEL - Workers - Long term - Dermal	2 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Long term - Inhalation	3,5 mg/m³	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	14 mg/m³	Effects: Systemic

PNECs

Product/ingredient name	Result	Value	Remarks
benzyl alcohol	**Fresh water**	2,3 mg/l	-
	Sewage Treatment Plant	39 mg/l	-
	Fresh water sediment	5,27 mg/kg	-
	Soil	0,456 mg/kg	-
	Marine water sediment	0,527 mg/kg	-
	Fresh water	1 mg/l	-
	Marine water	0,1 mg/l	-
benzyl alcohol	**Fresh water**	2,3 mg/l	-
	Sewage Treatment Plant	39 mg/l	-
	Fresh water sediment	5,27 mg/kg	-
	Soil	0,456 mg/kg	-
	Marine water sediment	0,527 mg/kg	-
	Fresh water	1 mg/l	-
	Marine water	0,1 mg/l	-
2,4,6-tris(dimethylaminomethyl)phenol	**Fresh water**	0,84 mg/l	-
	Marine water	0,005 mg/l	-
	Sewage Treatment Plant	0,2 mg/l	-
	Soil	0,025 mg/kg	-

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	Marine water sediment	0,026 mg/kg	-
	Fresh water sediment	0,262 mg/kg	-
	Marine water	0,046 mg/l	-
3-aminopropyltriethoxysilane	**Fresh water**	0,33 mg/l	-
	Marine	0,033 mg/l	-
	Sewage Treatment Plant	3,3 mg/l	-
	Fresh water sediment	0,26 mg/l	-
	Soil	0,04 mg/l	-

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, 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 : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Use eye protection according to EN 166. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead. Recommended: face shield

Skin protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.
The breakthrough time must be greater than the end use time of the product.
The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.
Gloves should be replaced regularly and if there is any sign of damage to the glove material.
Always ensure that gloves are free from defects and that they are stored and used correctly.
The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.
Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

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. > 8 hours (breakthrough time): neoprene (0.65mm) Viton® (0.65mm)

SECTION 8: Exposure controls/personal protection

The recommendation for the type or types of glove to use when handling this product is based on information from the following source: EN374. 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.

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. Recommended: Overalls buttoned to the neck and wrist.

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 : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: (EN 140) organic vapour (Type A) and acid gas (Type E) filter

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

Physical state : Liquid.

Colour : Yellow.

Odour : Characteristic.

Odour threshold : Not available.

Melting point/freezing point : Not available.

Initial boiling point and boiling range : 78,29°C (172,9°F) [Literature Ethanol]

Flammability (solid, gas) : Not available.

Lower and upper explosion limit : Lower: 1,4% [Calculated (Le Chatelier mixture rule)]
Upper: 13,085% [Calculated (Le Chatelier mixture rule)]

Flash point : Closed cup: 19°C (66,2°F) [Literature DIN 51755]

Auto-ignition temperature : 436°C (816,8°F) [Literature benzyl alcohol]

Decomposition temperature : Not available.

pH : >11 [Conc. (% w/w): 100%] [Literature]

pH : Justification : Not available.

Viscosity : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C): Not available.

Solubility(ies) :

Not available.

Solubility in water : Not available.

Miscible with water : No.

SECTION 9: Physical and chemical properties

Partition coefficient: n-octanol/ water : Not applicable.

Vapour pressure :

Ingredient name	Vapour Pressure at 20˚C			Vapour pressure at 50˚C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
benzyl alcohol	0,05	0,0067				
benzyl alcohol	0,05	0,0067				

Evaporation rate : Not available.

Relative density : Not available.

Density : 1,023 to 1,083 g/cm³ [20°C (68°F)] [DIN 53217]

Vapour density : Not available.

Explosive properties : Not available.

Oxidising properties : Not available.

Particle characteristics

Median particle size : Not applicable.

SECTION 10: Stability and reactivity

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

10.2 Chemical stability : The product is stable.

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

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

10.5 Incompatible materials : Reactive or incompatible with the following materials:
acids
oxidising materials

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

SECTION 11: Toxicological information

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

Acute toxicity

Product/ingredient name	Result	Value
benzyl alcohol	**Rat - Oral - LD50**	1660 mg/kg
	Rabbit - Dermal - LD50	2000 mg/kg
	Rat - Inhalation - LC50 Dusts and mists	4,178 mg/l [4 hours]
benzyl alcohol	**Rat - Oral - LD50**	1660 mg/kg
	Rabbit - Dermal - LD50	2000 mg/kg
	Rat - Inhalation - LC50 Dusts and mists	4,178 mg/l [4 hours]

SECTION 11: Toxicological information

m-fenilenbis(methylamine)	**Rat - Oral - LD50**	930 mg/kg
	Rabbit - Dermal - LD50	2 g/kg
	Rat - Inhalation - LC50 Gas.	700 ppm [1 hours]
	Rat - Inhalation - LC50 Dusts and mists	1,34 mg/l [4 hours]
2,4,6-tris(dimethylaminomethyl)phenol	**Rabbit - Dermal - LD50**	1242 mg/kg
	Rat - Oral - LD50	2169 mg/kg
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with ethylenediamine	**Rabbit - Oral - LD50**	300 to 2000 mg/kg
3-aminopropyldimethylamine	**Rat - Oral - LD50**	1870 mg/kg
	Rat - Inhalation - LC50 Vapour	24,8 mg/l [4 hours]
nitric acid, ammonium calcium salt	**Rat - Oral - LD50**	4715 mg/kg
ethanol	**Rat - Oral - LD50**	7 g/kg
	Rat - Inhalation - LC50 Vapour	124700 mg/m³ [4 hours]
3-aminopropyltriethoxysilane	**Rabbit - Dermal - LD50**	4,29 g/kg
	Rat - Male - Oral - LD50	2,83 g/kg
	Rat - Female - Oral - LD50	1490 mg/kg
	Rabbit - Dermal - LD50	4076 mg/kg
	Rat - Female - Inhalation - LC50 Vapour	>7350 mg/m³ [4 hours]

Conclusion/Summary [Product] : Harmful if swallowed.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Tack Coat - Curing Agent	1716,3	47956,4	49541,7	N/A	10,9
benzyl alcohol	1200	N/A	N/A	N/A	N/A
benzyl alcohol	1200	N/A	N/A	N/A	4,178
m-fenilenbis(methylamine)	930	N/A	4500	N/A	1,34
2,4,6-tris(dimethylaminomethyl)phenol	500	N/A	N/A	N/A	N/A
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with ethylenediamine	500	N/A	N/A	N/A	N/A
3-aminopropyldimethylamine	1870	1100	N/A	24,8	N/A
nitric acid, ammonium calcium salt	500	N/A	N/A	N/A	N/A
ethanol	7000	N/A	N/A	124,7	N/A
3-aminopropyltriethoxysilane	500	N/A	N/A	N/A	N/A

Skin corrosion/irritation

SECTION 11: Toxicological information

Product/ingredient name	Result	Exposure	Observation
benzyl alcohol	**Pig - Skin - Moderate irritant**	Amount/concentration applied: 100 %	-
benzyl alcohol	**Pig - Skin - Moderate irritant**	Amount/concentration applied: 100 %	-
m-fenilenbis(methylamine)	**Rabbit - Skin - Severe irritant**	Amount/concentration applied: 750 ug	-
2,4,6-tris(dimethylaminomethyl) phenol	**Rat - Skin - Mild irritant**	Amount/concentration applied: 0.025 Ml	-
	Rat - Skin - Severe irritant	Amount/concentration applied: 0.25 Ml	-
	Rabbit - Skin - Severe irritant	Amount/concentration applied: 2 mg	-
	Rabbit - Skin - Severe irritant	Amount/concentration applied: 500 uL	-
ethanol	**Rabbit - Skin - Mild irritant**	Amount/concentration applied: 400 mg	-
	Rabbit - Skin - Moderate irritant	Amount/concentration applied: 20 mg	-

Conclusion/Summary [Product] : Causes severe skin burns and eye damage.

Ingredient name	Conclusion/Summary
Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis (methylamine)	Non-irritating to the skin.
3-aminopropyltriethoxysilane	Corrosive to the skin.

Serious eye damage/eye irritation

Product/ingredient name	Result	Exposure	Observation
benzyl alcohol	**Rabbit - Eyes - Irritant**	-	-
benzyl alcohol	**Rabbit - Eyes - Irritant**	-	-
m-fenilenbis(methylamine)	**Rabbit - Eyes - Severe irritant**	Amount/concentration applied: 50 ug	-
2,4,6-tris(dimethylaminomethyl) phenol	**Rabbit - Eyes - Severe irritant**	Amount/concentration applied: 50 ug	-
3-aminopropyldimethylamine	**Rabbit - Eyes - Moderate irritant**	Amount/concentration applied: 5 mg	-
ethanol	**Rabbit - Eyes - Mild irritant**	Amount/concentration applied: 500 mg	-
	Rabbit - Eyes - Moderate irritant	Amount/concentration applied: 100 mg	-
	Rabbit - Eyes - Moderate irritant	Amount/concentration applied: 100 uL	-

SECTION 11: Toxicological information

	Rabbit - Eyes - Severe irritant	Amount/concentration applied: 500 mg	-
	Rabbit - Eyes - Mild irritant	Amount/concentration applied: 50 pph	-

Conclusion/Summary [Product] : Causes serious eye damage.

Ingredient name	Conclusion/Summary
Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis (methylamine)	Non-irritating to the eyes.
3-aminopropyltriethoxysilane	Risk of serious eye damage

Respiratory corrosion/irritation

Not available.

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

Respiratory or skin sensitization

Product/ingredient name	Species - Route of exposure	Result
2,4,6-tris(dimethylaminomethyl)phenol	**Guinea pig - skin**	Result: Not sensitizing
3-aminopropyldimethylamine	**Guinea pig - skin**	Result: Sensitising
3-aminopropyltriethoxysilane	**Guinea pig - skin**	Result: Sensitising

Skin

Conclusion/Summary [Product] : May cause an allergic skin reaction.

Ingredient name	Conclusion/Summary
m-fenilenbis(methylamine)	May cause sensitisation by skin contact.

Respiratory

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

Germ cell mutagenicity

Product/ingredient name	Species - Route of exposure	Result
3-aminopropyldimethylamine	**Bacteria**	Result: Negative
	In vitro - Mammalian-Animal	Result: Negative
	In vitro - Mammalian-Animal	Result: Negative
	In vitro - Mammalian-Animal	Result: Negative

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

Ingredient name	Conclusion/Summary
3-aminopropyltriethoxysilane	Not mutagenic in Ames test.

Carcinogenicity

SECTION 11: Toxicological information

Product/ingredient name	Species - Route of exposure	Result
benzyl alcohol	**Rat - Oral - TD**	Result: Negative
benzyl alcohol	**Rat - Oral - TD**	Result: Negative

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

Reproductive toxicity

Product/ingredient name	Species - Route of exposure	Dose - Exposure	Effects
2,4,6-tris(dimethylaminomethyl) phenol	**Rat - Oral**	28 days	-

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

Specific target organ toxicity (single exposure)

Product/ingredient name	Result
3-aminopropyldimethylamine	STOT SE 3, H335 (Respiratory tract irritation)

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure

Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

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

Ingestion : Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion : Adverse symptoms may include the following:
stomach pains

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

SECTION 11: Toxicological information

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Product/ingredient name	Result
3-aminopropyldimethylamine	**Chronic - Rat - Oral - NOAEL** OECD 407 50 mg/kg [7 days per week] [28 days]

Conclusion/Summary [Product] : Not available.

General : 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.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

Conclusion/Summary [Product] : 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

12.1 Toxicity

Product/ingredient name	Result	Species
benzyl alcohol	**Acute - EC50** 770 mg/l [72 hours]	Algae
	Acute - LC50 646 mg/l [48 hours]	Fish
	Acute - LC50 - Fresh water 460 mg/l [96 hours]	Fish - Fathead minnow - Juvenile (Fledgling, Hatchling, Weanling)
	Acute - NOEC 310 mg/l [72 hours]	Algae
	Acute - LC50 - Fresh water 10 ppm [96 hours]	Fish - Bluegill
Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis (methylamine)	**Acute - LC50** 0,5 to 1 mg/l [96 hours]	Fish - Rainbow trout (oncorhynchus mykiss)
benzyl alcohol	**Acute - EC50** 770 mg/l [72 hours]	Algae
	Acute - LC50 646 mg/l [48 hours]	Fish
	Acute - LC50 - Fresh water 460 mg/l [96 hours]	Fish - Fathead minnow - Juvenile (Fledgling, Hatchling, Weanling)
	Acute - NOEC 310 mg/l [72 hours]	Algae

SECTION 12: Ecological information

	Acute - LC50 - Fresh water 10 ppm [96 hours]	Fish - Bluegill
m-fenilenbis(methylamine)	**Acute - EC50** 10 to 100 mg/l [48 hours]	Daphnia spec. - Goldfish (carassius auratus)
	Acute - LC50 >100 mg/l [96 hours]	Fish
2,4,6-tris(dimethylaminomethyl) phenol	**Acute - LC50** 180 to 240 mg/l [96 hours]	Fish - Rainbow trout (oncorhynchus mykiss)
	Acute - LC50 175 mg/l [96 hours]	Fish
	Acute - EC50 84 mg/l [72 hours]	Algae
3-aminopropyldimethylamine	**Acute - EC50** 59,5 mg/l [48 hours]	Daphnia spec.
	Acute - IC50 53,5 mg/l [72 hours]	Algae
	Acute - LC50 122 mg/l [96 hours]	Fish
ethanol	**Acute - LC50 - Fresh water** 5680 mg/l [48 hours]	Daphnia spec. - Water flea - Neonate
	Acute - LC50 - Fresh water 1,272 pph [96 hours]	Fish - Fathead minnow
	Acute - EC50 - Marine water 17,921 mg/l [96 hours]	Algae - Green algae
	Chronic - NOEC - Marine water 4,995 mg/l [96 hours]	Algae - Green algae
	Chronic - NOEC - Fresh water 0,375 µl/l [12 weeks]	Fish - Eastern mosquitofish - Larvae
	Chronic - NOEC - Fresh water 100 µl/l [21 days]	Daphnia spec. - Water flea - Neonate
	Acute - EC50 - Fresh water 2 mg/l [48 hours]	Daphnia spec. - Water flea

Conclusion/Summary [Product] : Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Product/ingredient name	Test	Result
benzyl alcohol	-	96% [21 days] - Readily
benzyl alcohol	-	96% [21 days] - Readily
2,4,6-tris(dimethylaminomethyl)phenol	-	4% [28 days] - Not readily
3-aminopropyldimethylamine	-	>60% [28 days] - Readily
ethanol	**Aerobic**	67,74% [5 days] - Readily

SECTION 12: Ecological information

	Aerobic	97,36% [20 days] - Readily
3-aminopropyltriethoxysilane	-	67% [28 days]

Conclusion/Summary [Product] : Not available.

Ingredient name	Conclusion/Summary
benzyl alcohol	Readily biodegradable
benzyl alcohol	Readily biodegradable

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
benzyl alcohol	-	-	Readily
benzyl alcohol	-	-	Readily
2,4,6-tris (dimethylaminomethyl) phenol	-	-	Not readily
3-aminopropyldimethylamine	-	-	Readily
ethanol	-	-	Readily
3-aminopropyltriethoxysilane	-	-	Inherent

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
benzyl alcohol	0,87	-	Low
benzyl alcohol	0,87	-	Low
m-fenilenbis(methylamine)	0,18	2,69	Low
2,4,6-tris (dimethylaminomethyl) phenol	0,219	-	Low
3-aminopropyldimethylamine	-0,352	-	Low
ethanol	-0,35	-	Low
3-aminopropyltriethoxysilane	1,7	3,4 [OECD 305 C]	Low

12.4 Mobility in soil

Soil/water partition coefficient

Product/ingredient name	logKoc	Koc
benzyl alcohol	1,1	12,6442
benzyl alcohol	1,1	12,6442
m-fenilenbis(methylamine)	1,7	46,5812
2,4,6-tris(dimethylaminomethyl)phenol	2,7	525,589
3-aminopropyldimethylamine	1,7	46,284
ethanol	0,2	1,59008
3-aminopropyltriethoxysilane	2,5	282,955

Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine	No	No	No	No	No	No	No
benzyl alcohol	No	No	No	No	No	No	No
Formaldehyde, oligomeric reaction products with	No	No	No	No	No	No	No

SECTION 12: Ecological information

phenol and m-phenylenebis (methylamine)							
benzyl alcohol	No	No	No	No	No	No	No
m-fenilenbis(methylamine)	No	No	No	No	No	No	No
2,4,6-tris (dimethylaminomethyl) phenol	No	No	No	No	No	No	No
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with ethylenediamine	No	No	No	No	No	No	No
3-aminopropyldimethylamine	No	No	No	No	No	No	No
nitric acid, ammonium calcium salt	No	No	No	No	No	No	No
ethanol	No	No	No	No	No	No	No
3-aminopropyltriethoxysilane	No	No	No	No	No	No	No

Mobility : Volatile.

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

12.5 Results of PBT and vPvB assessment

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

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine	No	N/A	N/A	No	N/A	N/A	N/A
benzyl alcohol	No	N/A	N/A	No	N/A	N/A	N/A
Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis (methylamine)	No	N/A	N/A	No	N/A	N/A	N/A
benzyl alcohol	No	N/A	N/A	No	N/A	N/A	N/A
m-fenilenbis(methylamine)	No	N/A	No	No	No	N/A	No
2,4,6-tris (dimethylaminomethyl) phenol	No	N/A	N/A	No	N/A	N/A	N/A
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with ethylenediamine	No	N/A	N/A	No	N/A	N/A	N/A
3-aminopropyldimethylamine	N/A	N/A	N/A	Yes	N/A	N/A	N/A
nitric acid, ammonium calcium salt	No	No	No	No	No	No	No
ethanol	No	N/A	N/A	No	N/A	N/A	N/A
3-aminopropyltriethoxysilane	No	No	No	No	No	No	No

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

SECTION 12: Ecological information

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine	No	No	No	No	No	No	No
benzyl alcohol	No	No	No	No	No	No	No
Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis (methylamine)	No	No	No	No	No	No	No
benzyl alcohol	No	No	No	No	No	No	No
m-fenilenbis(methylamine)	No	No	No	No	No	No	No
2,4,6-tris (dimethylaminomethyl) phenol	No	No	No	No	No	No	No
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with ethylenediamine	No	No	No	No	No	No	No
3-aminopropyldimethylamine	No	No	No	No	No	No	No
nitric acid, ammonium calcium salt	No	No	No	No	No	No	No
ethanol	No	No	No	No	No	No	No
3-aminopropyltriethoxysilane	No	No	No	No	No	No	No

Conclusion/Summary Regulation (EC) No. 1272/2008 [CLP] : The product does not meet the criteria to be considered as a PBT or vPvB.

12.6 Endocrine disrupting properties

Not available.

Conclusion/Summary [Product] : 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.

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 : Yes.

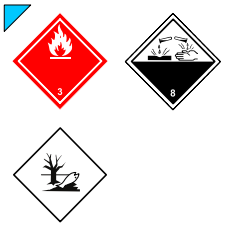
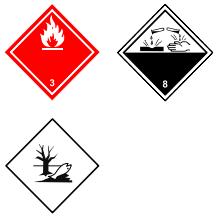
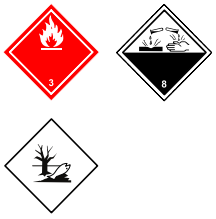
European waste catalogue (EWC)

SECTION 13: Disposal considerations

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

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	UN3469	UN3469	UN3469	UN3469
14.2 UN proper shipping name	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE
14.3 Transport hazard class(es)	3 (8) 	3 (8) 	3 (8) 	3 (8)
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information ADR

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

Limited quantity : 1L
Transport Category : 2
Hazard identification number : 338
Classification code : FC
ADR Label Model Number : 3, 8
Excepted Quantity : E2
Tunnel code : (D/E)
Packing instructions : P001, IBC02
Mixed Packing Provisions : MP19
Special provisions : 163, 367

Additional information ADN

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

Limited quantity : 1L

SECTION 14: Transport information

Classification code : FC

Special provisions : 163, 367

Additional information IMDG

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

Limited quantity : 1L

Emergency schedules : F-E, S-C

Special provisions : 163, 367

Additional information IATA

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

Passenger and Cargo Aircraft : Quantity limitation 1L Packaging instruction 352

Cargo aircraft : Quantity limitation 5L Packaging instruction 363

Limited Quantities - Passenger Aircraft : Quantity limitation 0,5L Packaging instruction Y 340

Special provisions : A3, A72, A192, A803

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 available.

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

None of the components are listed.

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

Product/ingredient name	%	Designation [Usage]
Tack Coat - Curing Agent	≥90	3
nitric acid, ammonium calcium salt	≤3	65

Labelling : Not applicable.

Synthetic polymer microparticles - Designation 78

Generic identity of polymer(s) : Not applicable.

Total percentage of synthetic polymer microparticles : Not applicable.

Other EU regulations

VOC : The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.

SECTION 15: Regulatory information

VOC for Ready-for-Use Mixture : IIA/j. Two-pack reactive performance coatings for specific end use such as floors. EU limit value for this product : 500g/l (2010.) This product contains a maximum of 40 g/l VOC.

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

Explosive precursors : This product is regulated by Regulation (EU) 2019/1148. All suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

Ozone depleting substances (EU 2024/590)

Not listed.

Prior Informed Consent (PIC) (649/2012/EC)

Not listed.

Persistent Organic Pollutants (850/2004/EC)

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
P5c E1

National regulations

United Kingdom: Northern Ireland

References : EH40/2005 Workplace exposure limits
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

International regulations

Stockholm Convention on Persistent Organic Pollutants

List name	Ingredient name	Status
Not listed.		

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

List name	Ingredient name	Status
Not listed.		

CN code : 3208 90 91 00

Inventory list

Australia : At least one component is not listed.

Canada : At least one component is not listed in DSL but all such components are listed in NDSL.

SECTION 15: Regulatory information

China : All components are listed or exempted.

Eurasian Economic Union : **Russian Federation inventory**: All components are listed or exempted.

Japan : **Japan inventory (CSCL)**: At least one component is not listed.
Japan inventory (ISHL): At least one component is not listed.

New Zealand : All components are listed or exempted.

Philippines : At least one component is not listed.

Republic of Korea : All components are listed or exempted.

Taiwan : At least one component is not listed.

Thailand : Not determined.

Turkey : Not determined.

United States : All components are active or exempted.

Viet Nam : All components are listed or exempted.

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments are still required.

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]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

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

Classification	Justification
Flam. Liq. 2, H225	On basis of test data
Acute Tox. 4, H302	Calculation method
Skin Corr. 1, H314	On basis of test data
Eye Dam. 1, H318	On basis of test data
Skin Sens. 1, H317	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

Full text of abbreviated H statements

United Kingdom: Northern Ireland

Full text of abbreviated H statements :

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
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.
H361	Suspected of damaging fertility or the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

SECTION 16: Other information

	H412 Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS] :

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
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	REPRODUCTIVE TOXICITY - Category 2
Skin Corr. 1	SKIN CORROSION/IRRITATION - Category 1
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 SENSITISATION - Category 1
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

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Notice to reader

IMPORTANT NOTE: The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The information contained in this data sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and believed to be correct as of the date on which it is prepared. It is the user's responsibility to verify that this data sheet is current prior to using the product to which it relates. Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to use. Where those purposes are other than as specifically recommended in this safety data sheet, then the user uses the product at their own risk.

MANUFACTURER'S DISCLAIMER: the conditions, methods and factors affecting the handling, storage, application, use and disposal of the product are not under the control and knowledge of the manufacturer. Therefore the manufacturer does not assume responsibility for any adverse events which may occur in the handling, storage, application, use, misuse or disposal of the product and, so far as permitted by applicable law, the manufacturer expressly disclaims liability for any and all loss, damages and/or expenses arising out of or in any way connected to the storage, handling, use or disposal of the product. Safe handling, storage, use and disposal are the responsibility of the users. Users must comply with all applicable health and safety laws.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.