

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

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

Identified uses
Consumer use Industrial use Professional use

1.3 Details of the supplier of the safety data sheet

Watco UK Limited
Eastgate Court
195-205 High Street
Guildford
Surrey
GU1 3EH
Telephone no.: +44 (0) 1483 425000 (08:00 - 18:00)
Fax no.: +44 (0) 1483 428888

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

1.4 Emergency telephone number

Supplier

Telephone number : +44 (0) 207 858 1228
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, H332
Skin Corr. 1B, H314
Eye Dam. 1, H318
Skin Sens. 1, H317
Aquatic Acute 1, H400 (M=1)
Aquatic Chronic 1, H410 (M=1)

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

SECTION 2: Hazards identification

Hazard pictograms



Signal word

: Danger

Hazard statements

: Highly flammable liquid and vapour.
Harmful if inhaled.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Very toxic to aquatic life with long lasting effects.

Precautionary statements

General

: P102 - Keep out of reach of children.
P103 - Read label before use.
P101 - If medical advice is needed, have product container or label at hand.

Prevention

: P210 - Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
P261 - Avoid breathing vapour.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves and eye protection:
- gloves neoprene Safety glasses with side shields.
P273 - Avoid release to the environment.

Response

: P370 - In case of fire:
P378 - Use water spray, dry chemical powder or carbon dioxide for extinction.
P301 - IF SWALLOWED:
P330 - Rinse mouth.
P331 - Do NOT induce vomiting.
P303 - IF ON SKIN (or hair):
P361 - Take off immediately all contaminated clothing.
P353 - Rinse skin with water or shower.
P310 - Immediately call a doctor.
P305 - IF IN EYES:
P351 - Rinse cautiously with water for several minutes.
P338 - Remove contact lenses, if present and easy to do. Continue rinsing.

Storage

: P403 - Store in a well-ventilated place.
P235 - 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; 2,4,6-tris(dimethylaminomethyl)phenol;
3-aminopropyl dimethylamine

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

: Yes, applicable.

Tactile warning of danger

: Yes, applicable.

SECTION 2: Hazards identification

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.

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	
			Regulation (EC) No. 1272/2008 [CLP]	Type
Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine benzyl alcohol	REACH #: 01-2119983521-35 EC: 606-078-8 CAS: 186321-96-0	≥25 - ≤50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥10 - ≤25	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1]
Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis (methylamine) benzyl alcohol	EC: 500-137-0 CAS: 57214-10-5	≥10 - ≤25	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥10 - ≤25	Acute Tox. 4, H302 Acute Tox. 4, H332	[1]
m-fenilenbis (methylamine)	REACH #: 01-2119480150-50 EC: 216-032-5 CAS: 1477-55-0 Index: 216-032-5	≤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	[1]
	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 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with ethylenediamine ethanol	REACH #: 01-2119457610-43 EC: 200-578-6 CAS: 64-17-5 Index: 603-002-00-5	≤3	Flam. Liq. 2, H225	[2]
2,4,6-tris (dimethylaminomethyl) phenol	EC: 202-013-9 CAS: 90-72-2	≤3	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317	[1]
	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2	≤3	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]

SECTION 3: Composition/information on ingredients

3-aminopropyl dimethylamine	Index: 603-069-00-0 REACH #: 01-2119486842-27 EC: 203-680-9 CAS: 109-55-7	≤3	Aquatic Chronic 3, H412 Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317	[1]
Calcium nitrate	Index: 612-061-00-6 REACH #: 01-2119495093-35 EC: 233-332-1 CAS: 10124-37-5	≤3	Ox. Sol. 3, H272 Acute Tox. 4, H302 Eye Dam. 1, H318	[1]
bis[(dimethylamino) methyl]phenol	EC: 275-162-0 CAS: 71074-89-0	≤1	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317	[1]
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	[1]
			See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
 [2] Substance with a workplace exposure limit
 [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
 [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
 [5] Substance of equivalent concern
 [6] Additional disclosure due to company policy

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

SECTION 4: First aid measures**4.1 Description of first aid measures**

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- 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.
- 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

SECTION 4: First aid measures

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine

, m-fenilenbis(methylamine), 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with ethylenediamine, 2,4,6-tris(dimethylaminomethyl)phenol, 3-aminopropyldimethylamine, bis[(dimethylamino)methyl]phenol, 3-aminopropyltriethoxysilane. May produce an allergic reaction.

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.

See toxicological information (Section 11)

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Recommended: alcohol-resistant foam, CO₂, powders, water spray.

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.

SECTION 5: Firefighting measures

Hazardous thermal decomposition 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.

Additional information : No unusual hazard if involved in a fire.

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. 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.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

- 7.1 Precautions for safe handling**
- : Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.
 - Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.
 - Operators should wear antistatic footwear and clothing and floors should be of the conducting type.
 - Keep away from heat, sparks and flame. No sparking tools should be used.
 - Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.
 - Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
 - Put on appropriate personal protective equipment (see Section 8).
 - Never use pressure to empty. Container is not a pressure vessel.
 - Always keep in containers made from the same material as the original one.
 - Comply with the health and safety at work laws.
 - Do not allow to enter drains or watercourses.
- Information on fire and explosion protection**
- Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Danger criteria

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

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

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
ethanol	EH40/2005 WELs (United Kingdom (UK), 12/2011). TWA: 1920 mg/m ³ 8 hours. TWA: 1000 ppm 8 hours.

SECTION 8: Exposure controls/personal protection

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. 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	Type	Exposure	Value	Population	Effects
benzyl alcohol	DNEL	Short term Dermal	47 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	450 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	9,5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	90 mg/m ³	Workers	Systemic
	DNEL	Short term Dermal	28,5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Inhalation	40,55 mg/m ³	General population [Consumers]	Systemic
	DNEL	Short term Oral	25 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Dermal	5,7 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	8,11 mg/m ³	General population [Consumers]	Systemic
	DNEL	Long term Oral	5 mg/kg bw/day	General population [Consumers]	Systemic
benzyl alcohol	DNEL	Short term Dermal	47 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	450 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	9,5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	90 mg/m ³	Workers	Systemic
	DNEL	Short term Dermal	28,5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Inhalation	40,55 mg/m ³	General population [Consumers]	Systemic
	DNEL	Short term Oral	25 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Dermal	5,7 mg/kg bw/day	General population [Consumers]	Systemic

SECTION 8: Exposure controls/personal protection

2,4,6-tris(dimethylaminomethyl) phenol 2,4,6-tris(dimethylaminomethyl) phenol 3-aminopropyltriethoxysilane	DNEL	Long term Inhalation	8,11 mg/m ³	General population [Consumers]	Systemic
	DNEL	Long term Oral	5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	0,31 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	0,31 mg/m ³	Workers	Systemic
	DNEL	Short term Dermal	8,3 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	59 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	8,3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	59 mg/m ³	Workers	Systemic
	DNEL	Short term Oral	5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Dermal	5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Inhalation	17,4 mg/m ³	General population [Consumers]	Systemic
	DNEL	Long term Oral	5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Dermal	5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	17 mg/m ³	General population [Consumers]	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
benzyl alcohol	Fresh water	1 mg/l	Assessment Factors
	Marine	0,1 mg/l	Assessment Factors
	Fresh water sediment	5,27 mg/kg	Assessment Factors
	Marine water sediment	0,527 mg/kg	Assessment Factors
	Soil	0,456 mg/kg	Assessment Factors
	Sewage Treatment Plant	39 mg/l	Assessment Factors
benzyl alcohol	Fresh water	1 mg/l	Assessment Factors
	Marine	0,1 mg/l	Assessment Factors
	Fresh water sediment	5,27 mg/kg	Assessment Factors
	Marine water sediment	0,527 mg/kg	Assessment Factors
	Soil	0,456 mg/kg	Assessment Factors
	Sewage Treatment Plant	39 mg/l	Assessment Factors
2,4,6-tris(dimethylaminomethyl)phenol	Fresh water	0,84 mg/l	-
	Fresh water	0,84 mg/l	-
2,4,6-tris(dimethylaminomethyl)phenol 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	-

SECTION 8: Exposure controls/personal protection

8.2 Exposure controls

Appropriate engineering controls : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

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. 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.

Skin protection

Hand 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.

Gloves : For prolonged or repeated handling, use the following type of gloves:

Recommended: neoprene rubber

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

EN 374

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.

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.

SECTION 8: Exposure controls/personal protection

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	: Liquid.
Colour	: Amber.
Odour	: Characteristic.
Odour threshold	: Not available.
pH	: Not available.
Melting point/freezing point	: Not available.
Initial boiling point and boiling range	: Not available.
Flash point	: Closed cup: 19°C
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Upper/lower flammability or explosive limits	: Not available.
Vapour pressure	: Not available.
Vapour density	: Not available.
Relative density	: 1 to 1,1
Solubility(ies)	: Not available.
Partition coefficient: n-octanol/ water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.
Explosive properties	: Not available.
Oxidising properties	: Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

- 10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability** : Stable under recommended storage and handling conditions (see Section 7).
- 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.
- 10.5 Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.

SECTION 10: Stability and reactivity

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced. If involved in a fire, toxic gases including CO, CO₂ and smoke can be generated.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
benzyl alcohol	LC50 Inhalation Vapour	Rat	>4178 mg/l	4 hours
	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1230 mg/kg	-
benzyl alcohol	LD50 Oral	Rat	1620 mg/kg	-
	LC50 Inhalation Vapour	Rat	>4178 mg/l	4 hours
	LD50 Dermal	Rabbit	2000 mg/kg	-
m-fenilenbis(methylamine)	LC50 Inhalation Dusts and mists	Rat	1900 mg/m ³	1 hours
	LC50 Inhalation Gas.	Rat	700 ppm	1 hours
	LC50 Inhalation Vapour	Rat	1,34 mg/l	4 hours
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with ethylenediamine	LD50 Dermal	Rabbit	2 g/kg	-
	LD50 Oral	Rat	930 mg/kg	-
	LD50 Oral	Rat	980 mg/kg	-
2,4,6-tris(dimethylaminomethyl)phenol	LD50 Oral	Rabbit	300 to 2000 mg/kg	-
	LD50 Dermal	Rabbit	1242 mg/kg	-
2,4,6-tris(dimethylaminomethyl)phenol	LD50 Oral	Rat	1673 mg/kg	-
	LD50 Dermal	Rabbit	1242 mg/kg	-
3-aminopropyldimethylamine	LD50 Oral	Rat	2169 mg/kg	-
	LC50 Inhalation Vapour	Rat	24,8 mg/l	4 hours
	LD50 Dermal	Rabbit	2140 mg/kg	-
Calcium nitrate	LD50 Oral	Rat	1870 mg/kg	-
	LD50 Oral	Rat	302 mg/kg	-
	LD50 Dermal	Rabbit	4,29 g/kg	-
3-aminopropyltriethoxysilane	LD50 Oral	Rat - Male	2,83 g/kg	-
	LD50 Oral	Rat - Female	1490 mg/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Route	ATE value
Inhalation (vapours)	11 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
benzyl alcohol	Skin - Moderate irritant	Pig	-	100 Percent	-
	Eyes - Irritant	Rabbit	-	-	-
benzyl alcohol	Skin - Moderate irritant	Pig	-	100 Percent	-
	Eyes - Severe irritant	Rabbit	-	24 hours 50 Micrograms	-
2,4,6-tris	Skin - Severe irritant	Rabbit	-	24 hours 750 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	24 hours 50	-

SECTION 11: Toxicological information

(dimethylaminomethyl) phenol	Skin - Mild irritant	Rat	-	Micrograms	-
	Skin - Severe irritant	Rat	-	0.025 Milliliters	-
	Skin - Severe irritant	Rabbit	-	0.25 Milliliters	-
			-	24 hours 2 milligrams	-
2,4,6-tris (dimethylaminomethyl) phenol	Eyes - Severe irritant	Rabbit	-	24 hours 50 Micrograms	-
	Skin - Mild irritant	Rat	-	0.025 Milliliters	-
	Skin - Severe irritant	Rat	-	0.25 Milliliters	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
3-aminopropyldimethylamine	Eyes - Moderate irritant	Rabbit	-	5 milligrams	-
3-aminopropyltriethoxysilane	Eyes - Mild irritant	Rabbit	-	100 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 750 Micrograms	-
	Skin - Severe irritant	Rabbit	-	24 hours 5 milligrams	-
	Eyes - Severe irritant	Rabbit	-	-	-

Conclusion/Summary

Skin : Causes severe skin burns and eye damage.

Eyes : Causes serious eye damage.

Sensitisation

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

Conclusion/Summary

Skin : May cause an allergic skin reaction.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
3-aminopropyldimethylamine	OECD 476	Experiment: In vitro Subject: Mammalian-Animal	Negative
3-aminopropyltriethoxysilane	OECD 471	Subject: Bacteria	Negative
	-	Experiment: In vitro Subject: Bacteria	Negative

Conclusion/Summary : Not available.

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
benzyl alcohol	Negative - Oral - TD	Rat	-	103 weeks; 5 days per week
benzyl alcohol	Negative - Oral - TD	Rat	-	103 weeks; 5 days per week

Conclusion/Summary : Not available.

Reproductive toxicity

SECTION 11: Toxicological information

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
2,4,6-tris (dimethylaminomethyl) phenol	-	-	Negative	Rat	Oral	28 days
2,4,6-tris (dimethylaminomethyl) phenol	-	-	Negative	Rat	Oral	28 days

Conclusion/Summary : Not available.

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
benzyl alcohol	Negative - Route of exposure unreported	Mouse - Female	550 mg/kg	-
benzyl alcohol	Negative - Route of exposure unreported	Mouse - Female	550 mg/kg	-

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

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

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
3-aminopropyldimethylamine	Chronic NOAEL Oral	Rat	50 mg/kg	28 days; 7 days per week
3-aminopropytriethoxysilane	Chronic NOAEL Oral	Rat	200 mg/kg	90 days

Conclusion/Summary : 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.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information**12.1 Toxicity**

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.

Product/ingredient name	Result	Species	Exposure
benzyl alcohol	Acute EC50 770 mg/l Acute LC50 646 mg/l Acute LC50 460000 µg/l Fresh water	Algae Fish - Leuciscus idus Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	72 hours 48 hours 96 hours
Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis (methylamine)	Acute LC50 0,5 to 1 mg/l	Fish	96 hours
benzyl alcohol	Acute EC50 770 mg/l Acute LC50 646 mg/l Acute LC50 460000 µg/l Fresh water	Algae Fish - Leuciscus idus Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	72 hours 48 hours 96 hours
m-fenilenbis(methylamine)	Acute EC50 10 to 100 mg/l Acute LC50 >100 mg/l	Daphnia spec. Fish	48 hours 96 hours
2,4,6-tris (dimethylaminomethyl) phenol	Acute EC50 84 mg/l	Algae	72 hours
2,4,6-tris (dimethylaminomethyl) phenol	Acute LC50 175 mg/l Acute LC50 180 to 240 mg/l Acute EC50 84 mg/l	Fish - Cyprinus carpio Fish Algae	96 hours 96 hours 72 hours
3-aminopropyldimethylamine	Acute LC50 175 mg/l Acute LC50 180 to 240 mg/l Acute EC50 59,5 mg/l Acute IC50 53,5 mg/l Acute LC50 122 mg/l	Fish - Cyprinus carpio Fish Daphnia spec. - Daphnia magna Algae Fish	96 hours 96 hours 48 hours 72 hours 96 hours
Calcium nitrate	Acute LC50 2400000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours

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

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
benzyl alcohol	OECD 301A	96 % - Readily - 21 days	-	-
benzyl alcohol	OECD 301A	96 % - Readily - 21 days	-	-
2,4,6-tris (dimethylaminomethyl) phenol	OECD 301D	4 % - Not readily - 28 days	-	-
2,4,6-tris (dimethylaminomethyl) phenol	OECD 301D	4 % - Not readily - 28 days	-	-
3-aminopropyldimethylamine	-	>60 % - Readily - 28 days	-	-
3-aminopropyltriethoxysilane	EU 79/831 - C. 4-A	67 % - 28 days	-	-

Conclusion/Summary : Not available.

SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
benzyl alcohol	-	-	Readily
benzyl alcohol	-	-	Readily
2,4,6-tris (dimethylaminomethyl)	-	-	Not readily
phenol	-	-	-
2,4,6-tris (dimethylaminomethyl)	-	-	Not readily
phenol	-	-	-
3-aminopropyldimethylamine	-	-	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)	0,219	-	low
phenol	-	-	-
2,4,6-tris (dimethylaminomethyl)	0,219	-	low
phenol	-	-	-
3-aminopropyldimethylamine	-0,352	-	low
3-aminopropyltriethoxysilane	1,7	3,4	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Volatile.

12.5 Results of PBT and vPvB assessment

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

12.6 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.

Disposal considerations : Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

SECTION 13: Disposal considerations

European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

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.

Disposal considerations : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.

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	UN3469	UN3469	UN3469	UN3469
14.2 UN proper shipping name	PAINT-RELATED PRODUCTS, FLAMMABLE, CORROSIVE	PAINT-RELATED PRODUCTS, FLAMMABLE, CORROSIVE	PAINT-RELATED PRODUCTS, FLAMMABLE, CORROSIVE Marine pollutant [Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine]	PAINT-RELATED PRODUCTS, 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.

SECTION 14: Transport information

Additional information	Remarks (≤ 1L:) Limited Quantity - ADR/IMDG 3.4 ADR Tunnel Code: (D/E)	-	Emergency schedules (EmS) F-E, S-C Marine pollutant Remarks (≤ 1L:) Limited Quantity - ADR/IMDG 3.4	Passenger and Cargo Aircraft Quantity limitation:1L Packaging instructions:352 Cargo Aircraft Only Quantity limitation:5L Packaging instructions:363 Limited Quantities - Passenger Aircraft Quantity limitation:0.5L -Instructions for transportation:Y340
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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.

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 : 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.

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 10 g/l VOC.

Europe inventory : All components are listed or exempted.

Black List Chemicals (76/464/EEC) :

Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

SECTION 15: Regulatory information

Category

P5c
E1

National regulations

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

References

: EH40/2005 Workplace exposure limits
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2016/918

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

CN code : 3208 90

International lists

National inventory

- Australia** : At least one component is not listed.
- Canada** : Not determined.
- China** : Not determined.
- Japan** : **Japan inventory (ENCS)**: At least one component is not listed.
Japan inventory (ISHL): At least one component is not listed.
- Malaysia** : Not determined
- 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** : Not determined.
- Turkey** : Not determined.
- United States** : All components are listed or exempted.
- Thailand** : Not determined.
- Viet Nam** : Not determined.

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

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

Classification	Justification
Flam. Liq. 2, H225 Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	Expert judgment On basis of test data Expert judgment Expert judgment Expert judgment Expert judgment Expert judgment

Full text of H-phrases referred to in sections 2 and 3

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H272	May intensify fire; oxidiser.
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.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4
Acute Tox. 4, H312	ACUTE TOXICITY (dermal) - Category 4
Acute Tox. 4, H332	ACUTE TOXICITY (inhalation) - Category 4
Aquatic Acute 1, H400	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1, H410	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 3, H412	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Eye Dam. 1, H318	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2, H225	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 3
Ox. Sol. 3, H272	OXIDISING SOLIDS - Category 3
Skin Corr. 1B, H314	SKIN CORROSION/IRRITATION - Category 1B
Skin Corr. 1C, H314	SKIN CORROSION/IRRITATION - Category 1C
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1, H317	SKIN SENSITISATION - Category 1
Skin Sens. 1B, H317	SKIN SENSITISATION - Category 1B

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SECTION 16: Other information

Date of issue/ Date of revision : 15/07/2020

Date of previous issue : 20/11/2019

Version : 2.02

Notice to reader

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 product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.