

1. IDENTIFICATION OF THE SUBSTRATE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name/designation: Caltech METcoat (Base Product).

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

Main use category: Industrial uses.

1.3 Manufacturer/Supplier

Supplier:
Alumasc Building Products Ltd
White House Works, Bold Road, Sutton, St Helens, Merseyside, United Kingdom, WA9 4JG
Tel: +44 (0)1744 648400
e-mail: technical@alumascroofing.com

1.4 Manufacturer/Supplier

Emergency telephone: 01744 648 400 - (Mon-Thurs – 08.30-17.00 Fri – 08.30-16.00)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008:

Flam. Liq. 3, H226 : Skin Irrit. 2, H315 : Eye Irrit. 2, H319 : Skin Sens. 1, H317 : Aquatic Chronic 3, H412.

Ingredients of unknown toxicity:

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 Labelling according to Regulation (EU) 1272/2008

Hazard pictures:



Signal word: Warning.

Hazard statements:
Flammable liquid and vapour.
Causes serious eye irritation.
Causes skin irritation.
May cause an allergic skin reaction.
Harmful to aquatic life with long lasting effects.

Precautionary statements:

General: Not applicable.

Prevention:
P210: Keep away from heat, sparks, open flames and hot surfaces. No smoking.
P280: Wear protective gloves and eye protection:
- nitrile rubber gloves and safety glasses with side shields.
P273: Avoid release to the environment.

Response:
P302: IF ON SKIN:
P352: Wash with plenty of soap and water.
P333: If skin irritation or rash occurs:
P313: Get medical attention.

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:	1,6-Hexanediyl-Bis(2-(2-(1-Ethylpentyl)-3-Oxazolidinyl)Ethyl)Carbamate; Is (1,2,2,6,6-Pent- Amethyl -4-Piperidyl) Sebacate And Methyl 1,2,2,6,6-Pentamethyl- 4-Piperidyl Sebacate.
Supplemental label elements:	Not applicable.

Detergents – Regulation (EC) No. 907/2006 – Annex VIIA:
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:
Not applicable.

2.3 Other hazards

None known.

3. COMPOSITION AND INFORMATION ABOUT THE COMPONENTS

3.1 Mixture

Product/ingredient name	Identifiers	%	Classification Regulation (EC) No. 1272/2008 [CLP]	Type
2-Methoxy-1-Methylethyl Acetate	REACH#: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	≥10 - ≤25	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
1,6-Hexanediyl-Bis(2-(2-(1-Ethylpentyl)-3-Oxazolidinyl)Ethyl) Carbamate	EC: 411-700-4 CAS: 140921-24-0 Index: 616-079-00-5	≥10 - ≤25	Skin Sens. 1, H317	[1]
Xylene (Mixture of Isomers)	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7	≤5	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304	[1] [2]
Oxazolidine,3-Butyl-2-(1-Ethylpentyl)- Polyamine Amide Salt (72243/00/2008.0023, Germany)	EC: 425-660-0 CAS: 165101-57-5 CAS: -	≤3	Skin Corr. 1B, H314 Eye Dam. 1, H318	[1]
Ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≤3	Skin Irrit. 2, H315	[1]
	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≤3	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304	[1] [2]

Bis (1,2,2,6,6-Pentamethyl- 4-Piperidyl) Sebacate	REACH #: 01-2119491304-40 EC: 255-437-1 CAS: 41556-26-7	≤1	Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
Methyl 1,2,2,6,6-Pentamethyl- 4-Piperidyl Sebacate	EC: 280-060-4 CAS: 82919-37-7	≤0,3	Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
2,2,4-Trimethylpentane	EC: 208-759-1 CAS: 540-84-1 Index: 601-009-00-8	≤0,3	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) See Section 16 for the full text of the H statements declared above	[1]

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

Type:

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

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:	Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
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:	Rinse mouth. 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. 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

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 1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate, Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate, methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate. May produce an allergic reaction.

Over exposure signs/symptoms:

Eye contact:	Adverse symptoms may include the following: <ul style="list-style-type: none">- pain or irritation.- watering.- redness.
Inhalation:	No specific data.
Skin contact:	Adverse symptoms may include the following: <ul style="list-style-type: none">- irritation.- redness.
Ingestion:	No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to doctor:

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 treatment:

No specific treatment.

See toxicological information (Section 11).

5. FIRE-FIGHTING 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:

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 harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products:

Decomposition products may include the following materials:

- carbon dioxide.
- carbon monoxide.
- nitrogen oxides.
- metal oxide/oxides.

5.3 Advice for fire-fighters

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.

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 spill material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing 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 spill material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and materials for containment and cleaning up

Small spill:

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble.

Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill:

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach 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 spill 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.

7. HANDLING AND STORAGE

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.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

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	5000 tonne	50000 tonne

7.3 Specific end use(s)

No data available.

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:

Product/ingredient name	Exposure limit values
2-Methoxy-1-Methylethyl Acetate	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 548 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 274 mg/m ³ 8 hours. TWA: 50 ppm 8 hours. EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.
Xylene (Mixture of Isomeres)	STEL: 441 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m ³ 8 hours. TWA: 50 ppm 8 hours. EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.
Ethylbenzene	STEL: 552 mg/m ³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 441 mg/m ³ 8 hours. TWA: 100 ppm 8 hours.

Recommended monitoring procedure:

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
2-Methoxy-1-Methylethyl Acetate	DNEL	Long term Inhalation	275 mg/m ³	Workers	Systemic
	DNEL	Long term dermal	153,5 mg/ m ³	Workers	Systemic
	DNEL	Long term dermal	54,8 mg/m ³	General [Consumers]	Systemic
	DNEL	Long term oral	1,67 mg/m ³	General [Consumers]	Systemic
Xylene (Mixture of Isomeres)	DNEL	Short term inhalation	289 mg/m ³	Workers	Local
	DNEL	Short term inhalation	289 mg/m ³	Workers	Systemic
	DNEL	Long term inhalation	77 mg/m ³	Workers	Systemic
	DNEL	Long term dermal	180 mg/m ³	Workers	Systemic
	DNEL	Short term inhalation	174 mg/m ³	General [Consumers]	Local
	DNEL	Short term Inhalation	174 mg/m ³	General [Consumers]	Systemic
	DNEL	Long term inhalation	14,8 mg/m ³	General [Consumers]	Systemic
	DNEL	Long term dermal	108 mg/m ³	General [Consumers]	Systemic
Ethylbenzene	DNEL	Long term inhalation	77 mg/m ³	Workers	Systemic
	DNEL	Long term dermal	180 mg/kg bw/day	Workers	Systemic
	DNEL	Long term inhalation	15 mg/m ³	General [Consumers]	Systemic
	DNEL	Long term oral	1,6 mg/kg bw/day	General Consumers]	Systemic

PNECs:

Product/ingredient name	Compartment Detail	Value	Method Detail
2-Methoxy-1-Methylethyl Acetate	Fresh water	0,635 mg/l	-
	Fresh water sediment	3,29 mg/kg	-
	Marine water sediment	0,329 mg/kg	-
	Soil	0,29 mg/kg	-
	Sewage treatment plant	100 mg/l	-
Xylene (Mixture of Isomeres)	Fresh water	0,327 mg/l	-
	Marine water	0,327 mg/l	-
	Fresh water sediment	12,46 mg/kg	-
	Marine water sediment	12,46 mg/kg	-
	Soil	2,31 mg/kg	-
Ethylbenzene	Sewage treatment plant	6,58 mg/l	-
	Fresh water	0,1 mg/l	-
	Marine water	0,01 mg/l	-
	Fresh water sediment	13,7 mg/kg	-
	Marine water sediment	1,37 mg/kg	-
	Soil	2,68 mg/kg	-
	Sewage treatment plant	9,6 mg/l	-

8.2 Exposure 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.
Recommended: safety glasses with side-shields.

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 types of gloves: - Recommended: > 8 hours (breakthrough time): nitrile rubber (0.5mm) gloves. 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. Recommended: Personnel should wear antistatic clothing made of natural fibres or of high-temperature-resistant synthetic fibres. (EN 1149-1).
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: organic vapour filter (Type A) (EN 140).

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:

Physical state:	Liquid.
Colour:	White, transparent.
Odour:	Not available.
Odour threshold:	Not available.
pH:	Not applicable.
Melting point / freezing point:	Not available.
Initial boiling point & boiling range:	Not available.
Flash point:	Closed cup: 42°C.
Evaporation rate:	Not available.
Flammability (solid, gas):	Not available.
Upper/lower flammability or exposure limits:	Not available.
Vapour pressure:	Not available.
Vapour density:	Not available.
Relative density:	1,6 to 1,63.
Solubility(ies):	Insoluble in the following materials: cold & hot water.
Partition co-efficient n-octanol/water:	Not available.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	Dynamic (room temperature): 1800 mPa's.
Explosive properties:	Not available.
Oxidising properties:	Not available.

9.2 Other information

No additional information.

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.

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.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

Product/ingredient name	Result	Species	Dose	Exposure
2-Methoxy-1-Methylethyl Acetate	LC50 inhalation vapour	Rat	4345 mg/l	6 hours
	LD50 dermal	Rabbit	>5 g/kg	-
	LD50 oral	Rat	8532 mg/kg	-
Xylene (Mixture of Isomeres)	LC50 inhalation gas	Rat	5000 ppm	4 hours
	LC50 inhalation gas	Rat	6670 ppm	4 hours
	LD50 dermal	Rabbit	4,2 g/kg	-
	LD50 oral	Rat	4300 mg/kg	-
	TDLo dermal	Rabbit	4300 mg/kg	-
	LD50 oral	Rat	4000 ppm	2 hours
Ethylbenzene	LC50 inhalation vapour	Rat	50000 mg/m ³	2 hours
	LCLo inhalation vapour	Rat	4000 ppm	4 hours
	LD50 oral	Rat	3500 mg/kg	-
Bis(1,2,2,6,6-Pentamethyl-4-Piperidyl) Sebacate	LD50 dermal	Rat	>2000 mg/kg	-
	LD50 oral	Rat	>2000 mg/kg	-
Methyl 1,2,2,6,6-Pentamethyl-4-Piperidyl Sebacate	LD50 dermal	Rat	>2000 mg/kg	-
	LD50 oral	Rat	>2000 mg/kg	-

Conclusion/summary:

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

Acute toxicity estimates:

Not available.

Irritation/corrosion:

Product/ingredient name	Result	Species	Score	Exposure	Observation
Xylene (Mixture of Isomeres)	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate irritant	Rabbit	-	100 Percent	-
Polyamine Amide Salt (72243/00/2008.0023, Germany)	Eyes - Moderate irritant	Rabbit	-	-	-
	Skin - Oedema	Rabbit	2	-	-
Ethylbenzene	Eyes - Cornea opacity	Rabbit	0	-	-
	Eyes - Severe irritant	Rabbit	-	500 milligrams	-
Bis(1,2,2,6,6-Pentamethyl-4-Piperidyl) Sebacate	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams	-
	Skin - Oedema	Rabbit	0	-	-
Methyl 1,2,2,6,6-Pentamethyl	Skin - Oedema	Rabbit	0	-	-

Conclusion/summary:

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

Sensitisation:

Product/ingredient name	Route of exposure	Species	Result
Bis(1,2,2,6,6-Pentamethyl-4-Piperidyl) Sebacate	Skin	Guinea pig	Sensitising
Methyl 1,2,2,6,6-Pentamethyl-4-Piperidyl Sebacate	Skin	Guinea pig	Sensitising

Conclusion/summary:

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

Mutagenicity:

Product/ingredient name	Test	Experiment	Result
Bis(1,2,2,6,6-Pentamethyl-4-Piperidyl) Sebacate	OECD 471	Experiment: In vitro Subject: Bacteria	Negative
Methyl 1,2,2,6,6-Pentamethyl-4-Piperidyl Sebacate	OECD 471	Experiment: In vitro Subject: Bacteria	Negative

Conclusion/summary:

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

Carcinogenicity:

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

Reproductive toxicity:

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

Teratogenicity:

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

Specific target organ toxicity (single exposure):

Product/ingredient name	Category	Route of exposure	Target organs
2-Methoxy-1-Methylethyl Acetate	Category 3	Not applicable	Narcotic effects
Xylene (Mixture of Isomers)	Category 3	Not applicable	Respiratory tract irritation
2,2,4-Trimethylpentane	Category 3	Not applicable	Narcotic effects

Specific target organ toxicity (repeated exposure):

Product/ingredient name	Category	Route of exposure	Target organs
Xylene (Mixture of Isomers) Ethylbenzene	Category 2	Not determined	Not determined
	Category 2	Not determined	Hearing organs

Aspiration hazard:

Product/ingredient name	Result
Xylene (Mixture of Isomers) Ethylbenzene	ASPIRATION HAZARD - Category 1
2,2,4-Trimethylpentane	ASPIRATION HAZARD - Category 1
	ASPIRATION HAZARD - Category 1

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:

Not available.

Conclusion/summary:

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

General: Once sensitised, 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.

Development effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Other information: Not available.

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	
2-Methoxy-1-Methylethyl Acetate	Acute EC50 408 to 500 mg/l	Daphnia spec.	48 hours	
	Acute LC50 161 mg/l	Fish	96 hours	
Oxazolidine, 3-Butyl-2-(1-Ethylpentyl)-	Acute LC50 100 to 180 mg/l	Fish	96 hours	
	Acute EC50 1,1 mg/l	Daphnia spec	48 hours	
	Acute IC50 5,6 mg/l	Algae	72 hours	
Polyamine Amide Salt (72243/00/2008.0023, Germany)	Acute LC50 20 mg/l	Fish	96 hours	
	Acute LC50 70 mg/l	Fish	48 hours	
	Acute EC50 3600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours	
Ethylbenzene	Acute EC50 9,46 to 6530 µg/l Fresh water	Crustaceans - Artemia sp. - Nauplii	48 hours	
	Acute EC50 4,4 to 2970 µg/l Fresh water	Daphnia spec. - Daphnia magna - Neonate	48 hours	
	Acute LC50 13,7 to 8780 µg/l Fresh water	Crustaceans - Artemia sp. - Nauplii	48 hours	
	Acute LC50 5200 µg/l Marine water	Crustaceans - Americamysis bahia	48 hours	
	Acute LC50 11 to 9090 µg/l Freshwater	Fish - Pimephales promelas	96 hours	
	Acute LC50 4200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours	
	Chronic NOEC 1000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours	
	Bis(1,2,2,6,6-Pentamethyl-4-Piperidyl) Sebacate	Acute EC50 1,68 mg/l	Aquatic plants - Desmodemus subspicatus	72 hours
		Acute EC50 >100 mg/l	Bacteria	3 hours
		Acute EC50 20 mg/l	Daphnia spec	24 hours
Acute LC50 0,97 mg/l		Fish	96 hours	
Acute LC50 7,9 mg/l		Fish	96 hours	
Chronic NOEC 1 mg/l		Daphnia spec	21 days	
Acute EC50 1,68 mg/l		Aquatic plants - Desmodemus subspicatus	72 hours	
Methyl 1,2,2,6,6-Pentamethyl-4-Piperidyl Sebacate	Acute EC50 >100 mg/l	Bacteria	3 hours	
	Acute EC50 20 mg/l	Daphnia spec	24 hours	
	Acute LC50 0,97 mg/l	Fish	96 hours	
	Acute LC50 7,9 mg/l	Fish	96 hours	
	Chronic NOEC 1 mg/l	Daphnia spec	21 days	

Conclusion:

Harmful to aquatic life with long lasting effects.

12.2 Persistence & degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Xylene (Mixture of Isomers)	-	90 % - Readily - 5 days	-	-
Polyamine Amide Salt (72243/00/2008.0023, Germany)	-	88 % - Readily - 4 days	-	-
Bis(1,2,2,6,6-Pentamethyl-4-Piperidyl) Sebacate	OECD 301F	38 % - Not readily - 28 days	-	-
Methyl 1,2,2,6,6-Pentamethyl-4-Piperidyl Sebacate	OECD 301F	38 % - Not readily - 28 days	-	-

Conclusion/summary:

Based on available data, the classification criteria are not met. This product has not been tested for biodegradation.

Product/ingredient name	Aquatic half-life	Photolysis	
2-Methoxy-1-Methylethyl Acetate	-	-	
Xylene (Mixture of Isomers)	-	-	
Polyamine Amide Salt (72243/00/2008.0023, Germany)	-	-	
Ethylbenzene	-	-	
Bis(1,2,2,6,6-Pentamethyl-4-Piperidyl) Sebacate	-	-	
Methyl 1,2,2,6,6-Pentamethyl-4-Piperidyl Sebacate	-	-	

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
2-Methoxy-1-Methylethyl Acetate	1,2	-	low
Xylene (Mixture of Isomers)	3,12	8.1 to 25.9	low
Ethylbenzene	3,6	-	low
Bis(1,2,2,6,6-Pentamethyl-4-Piperidyl) Sebacate	2.4 to 2.8	-	low
Methyl 1,2,2,6,6-Pentamethyl-4-Piperidyl Sebacate	2.4 to 2.8	-	low
2,2,4-Trimethylpentane	4,08	231	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}):

Not available.

Mobility:

Not available.

12.5 Results of PBT and vPvB assessment

Not applicable.

12.6 Other adverse effects

No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

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. Residues in empty containers should be neutralised with a decontaminant (see section 6).
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.

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:

Method 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 spill material and runoff and contact with soil, waterways, drains and sewers

14. TRANSPORT INFORMATION

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated	Not regulated	UN1263	UN1263
14.2 UN proper shipping name	-	-	Paint	Paint
14.3 Transport hazard class(es)	-	-	3 	3 
14.4 Packing group	-	-	III	III
14.5 Environmental hazards	No	No	No	No
Additional information	Remarks Exempted according to 2.2.3.1.5 (Viscous substance exemption) This class 3 material is not subject to regulation in packagings up to 450 L.	-	Emergency schedules (Ems) F-E + S-E Viscous substance exemption This class 3 material can be considered non hazardous in packagings up to 30 L. Exempted according to 2.3.2.5 (Viscous substance exemption).	Passenger and cargo aircraft Quantity limitation: 60 L Packaging instructions: 355 Cargo aircraft only Quantity limitation: 220 L Packaging instructions: 366 Limited quantities - Passenger aircraft Quantity limitation: 10 L Packaging instructions: Y 344.

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.

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 use mixture: 2004/42/EC - IIA/j: 500g/l (2010). <= 300g/lVOC.

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:

Category: P5c.

National regulations:

Industrial use: 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 (Annexes A, B, C, E):

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 91.

International lists:

National inventory:

Australia:	Not determined.
Canada:	Not determined.
China:	Not determined.
Japan:	Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.
Malaysia:	Not determined.
New Zealand:	Not determined.
Philippines:	Not determined.
Republic of Korea:	Not determined.
Taiwan:	Not determined.
Turkey:	Not determined.
United States:	Not determined.
Thailand:	Not determined.
Vietnam:	Not determined.

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out .

16. OTHER INFORMATION

Abbreviations & 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.

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

Classification	Justification
Flam. Liq. 3, H226	Expert judgment
Skin Irrit. 2, H315	Expert judgment
Eye Irrit. 2, H319	Expert judgment
Skin Sens. 1, H317	Expert judgment
Aquatic Chronic 1, H412	Expert judgment

Full text of H-phrases referred to in Sections 2 & 3:

H225:	Highly flammable liquid and vapour.
H226:	Flammable liquid and vapour.
H304:	May be fatal if swallowed and enters airways.
H312:	Harmful in contact with skin.
H314:	Causes severe skin burns and eyedamage.
H315:	Causes skin irritation.
H317:	May cause an allergic skinreaction.

H318:	Causes serious eye damage.
H319:	Causes serious eye irritation.
H332:	Harmful if inhaled.
H335:	May cause respiratory irritation.
H336:	May cause drowsiness or dizziness.
H373:	May cause damage to organs through prolonged or repeated exposure.
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, H312/	
Acute Tox. 4, H332:	ACUTE TOXICITY (dermal) - Category 4 / 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.
Asp. Tox. 1, H304:	ASPIRATION HAZARD - Category 1.
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.
Skin Corr. 1B, H314:	SKIN CORROSION/IRRITATION - Category 1B.
Skin Irrit. 2, H315:	SKIN CORROSION/IRRITATION - Category 2.
Skin Sens. 1, H317:	SKIN SENSITISATION - Category 1.
Skin Sens. 1A, H317:	SKIN SENSITISATION - Category 1A.
STOT RE 2, H373:	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2.
STOT SE 3, H335:	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3.
STOT SE 3, H336:	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3.

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

1. IDENTIFICATION OF THE SUBSTRATE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name/designation: Caltech METcoat Base Catalyst.

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

Main use category: Industrial uses.

1.3 Manufacturer/Supplier

Supplier:
Alumasc Building Products Ltd
White House Works, Bold Road, Sutton, St Helens, Merseyside, United Kingdom, WA9 4JG
Tel: +44 (0)1744 648400
e-mail: technical@alumascroofing.com

1.4 Manufacturer/Supplier

Emergency telephone: 01744 648 400 - (Mon-Thurs – 08.30-17.00 Fri – 08.30-16.00).

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008:

Flam. Liq. 3, H226 : Acute Tox. 4, H332 : Resp. Sens. 1, H334 : Skin Sens. 1, H317.

Ingredients of unknown toxicity:

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 Labelling according to Regulation (EU) 1272/2008

Hazard pictures:



Signal word: Danger.

Hazard statements:
Flammable liquid and vapour.
Harmful if inhaled.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction .

Precautionary statements:

General: Not applicable.

Prevention:
P210: Keep away from heat, sparks, open flames and hot surfaces. No smoking.
P261: Avoid breathing vapour or spray.
P280: Wear protective gloves and eye protection:
- nitrile rubber gloves and safety glasses with side shield, organic vapour filter Type A).
P285: In case of inadequate ventilation wear respiratory protection:
P271: Use only outdoors or in a well-ventilated area.

Response:
P304: IF INHALED.
P341: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342: If experiencing respiratory symptoms:
P311: Call a doctor .

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:	3-Isocyanatomethyl-3,5,5-Trimethylcyclohexyl Isocyanate, Oligomers and 3-Isocyanatomethyl-3,5,5-Trimethylcyclohexyl Isocyanate.
Supplemental label elements:	Contains isocyanates. May produce an allergic reaction.

Detergents – Regulation (EC) No. 907/2006 – Annex VIIA:
Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles:
Reserved for industrial and professional use.

Special packaging requirements:
Not applicable.

2.3 Other hazards

None known.

3. COMPOSITION AND INFORMATION ABOUT THE COMPONENTS

3.1 Mixture

Product/ingredient name	Identifiers	%	Classification Regulation (EC) No. 1272/2008 [CLP]	Type
3-Isocyanatomethyl-3,5,5-Trimethylcyclohexyl Isocyanate, Oligomers	EC: 500-125-5 CAS: 53880-05-0	≥25 - ≤50	Skin Sens. 1, H317	[1]
2-Methoxy-1-Methylethyl Acetate	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	≥10 - ≤25	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
Xylene (Mixture of Isomers)	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7	≤10	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373	[1] [2]
3-Isocyanatomethyl-3,5,5-Trimethylcyclohexyl Isocyanate	EC: 223-861-6 CAS: 4098-71-9 Index: 615-008-00-5	≤1	Asp. Tox. 1, H304 Acute Tox. 1, H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Chronic 2, H411 See Section 16 for the full text of the H statements declared above.	[1] [2]

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.

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:	Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
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:	Rinse mouth. 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

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

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. 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.

Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitisation of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Sensitised persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability. Repeated or prolonged contact with irritants may cause dermatitis.

Contains 3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers, 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate. May produce an allergic reaction.

Over exposure signs/symptoms:

Eye contact:	No specific data.
Inhalation:	Adverse symptoms may include the following: <ul style="list-style-type: none">- wheezing and breathing difficulties.- asthma.

Skin contact: Adverse symptoms may include the following:
- irritation.
- redness.

Ingestion: No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to doctor:

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 treatment:

No specific treatment.

See toxicological information (Section 11).

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:

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

Unsuitable extinguishing:

Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture:

Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard.

In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Hazardous thermal decomposition products:

Decomposition products may include the following materials:

- carbon dioxide.
- carbon monoxide.
- nitrogen oxides.

5.3 Advice for fire-fighters

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.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

No action shall be taken involving any personal risk or without suitable training.

Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour 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 spill 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).

6.3 Methods and materials for containment and cleaning up

Small spill:

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble.

Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill:

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach 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 spill 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.

7. HANDLING AND STORAGE

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.

Care should be taken when re-opening partly-used containers. Precautions should be taken to minimise exposure to atmospheric humidity or water. CO₂ will be formed, which, in closed containers, could result in pressurisation. 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.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

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 container tightly closed.

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	5000 tonne	50000 tonne

7.3 Specific end use(s)

No data available.

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:

Product/ingredient name	Exposure limit values
2-Methoxy-1-Methylethyl Acetate	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 548 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 274 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.
Xylene (Mixture of Isomers)	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 441 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.
3-Isocyanatomethyl-3,5,5-Trimethylcyclohexyl Isocyanate	EH40/2005 WELs (United Kingdom (UK), 12/2011). Inhalation sensitizer. STEL: 0,07 mg/m ³ , (as NCO) 15 minutes. TWA: 0,02 mg/m ³ , (as NCO) 8 hours.

Recommended monitoring procedure:

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
2-Methoxy-1-Methylethyl Acetate	DNEL	Long term inhalation	275 mg/m ³	Workers	Systemic
	DNEL	Long term dermal	153,5 mg/m ³	Workers	Systemic
	DNEL	Long term dermal	54,8 mg/m ³	General [Consumers]	Systemic
	DNEL	Long term oral	1,67 mg/m ³	General [Consumers]	Systemic
Xylene (Mixture of Isomeres)	DNEL	Short term inhalation	289 mg/m ³	Workers	Local
	DNEL	Short term inhalation	289 mg/m ³	Workers	Systemic
	DNEL	Long term inhalation	77 mg/m ³	Workers	Systemic
	DNEL	Long term dermal	180 mg/m ³	Workers	Systemic
	DNEL	Short term inhalation	174 mg/m ³	General [Consumers]	Local
	DNEL	Short term inhalation	174 mg/m ³	General [Consumers]	Systemic
	DNEL	Long term	14,8 mg/m ³	General [Consumers]	Systemic
	DNEL	Long term dermal	108 mg/m ³	General [Consumers]	Systemic
	DNEL	Long term dermal	108 mg/m ³	General [Consumers]	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
2-Methoxy-1-Methylethyl Acetate	Fresh water	0,635 mg/l	-
	Fresh water sediment	3,29 mg/kg	-
	Marine water sediment	0,329 mg/kg	-
	Soil	0,29 mg/kg	-
Xylene (Mixture of Isomeres)	Sewage treatment plant	100 mg/l	-
	Fresh water	0,327 mg/l	-
	Marine water	0,327 mg/l	-
	Fresh water sediment	12,46 mg/kg	-
	Marine water sediment	12,46 mg/kg	-
	Soil	2,31 mg/kg	-
	Sewage treatment plant	6,58 mg/l	-

8.2 Exposure controls

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. Air-fed protective respiratory equipment must be worn by the spray operator, even when good ventilation is provided. In other operations, if local exhaust ventilation and good general extraction are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn. (See Occupational exposure controls).

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: safety glasses with side-shields. Recommended: safety glasses with side-shields.

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 types of gloves:
- Recommended: > 8 hours (breakthrough time): nitrile rubber gloves).
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. Recommended: Personnel should wear antistatic clothing made of natural fibres or of high-temperature-resistant synthetic fibres. (EN 1149-1)

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: organic vapour (Type A) and particulate filter (EN 140).

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:

Physical state:	Liquid.
Colour:	Transparent.
Odour:	Not available.
Odour threshold:	Not available.
pH:	Not applicable.
Melting point / freezing point:	Not available.
Initial boiling point & boiling range:	Not available.
Flash point:	Closed cup: 42°C.
Evaporation rate:	Not available.
Flammability (solid, gas):	Not available.
Upper/lower flammability or exposure limits:	Not available.

Vapour pressure:	Not available.
Vapour density:	Not available.
Relative density:	1,03 to 1,04.
Solubility(ies):	Insoluble in the following materials: cold & hot water.
Partition co-efficient n-octanol/water:	Not available.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	Dynamic (room temperature): 1800 mPa's.
Explosive properties:	Not available.
Oxidising properties:	Not available

9.2 Other information

No additional information.

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

-

10.4 Conditions to avoid

In a fire, hazardous decomposition products may be produced.

10.5 Incompatible materials

Keep away from: oxidising agents, strong alkalis, strong acids, amines, alcohols, water. Uncontrolled exothermic reactions occur with amines and alcohols.

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.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

Product/ingredient name	Result	Species	Dose	Exposure
3-Isocyanatomethyl-3,5,5-Trimethylcyclohexyl Isocyanate, Oligomers	LC50 inhalation dusts and mists	Rat	>5,01 mg/l	4 hours
	LD50 oral	Rat	>5000 mg/kg	-
2-Methoxy-1-Methylethyl Acetate	LC50 inhalation vapour	Rat	4345 mg/l	6 hours
	LD50 dermal	Rabbit	>5 g/kg	-
Xylene (Mixture of Isomeres)	LD50 oral	Rat	8532 mg/kg	-
	LC50 inhalation gas	Rat	5000 ppm	4 hours
	LC50 inhalation gas	Rat	6670 ppm	4 hours
	LD50 dermal	Rabbit	4,2 g/kg	-
	LD50 oral	Rat	4300 mg/kg	-
	TDL0 dermal	Rabbit	4300 mg/kg	-

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3-Isocyanatomethyl-3,5,5-Trimethylcyclohexyl Isocyanate	LC50 inhalation dusts and mists	Rat	0,031 mg/l	4 hours
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Conclusion/summary:

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

Acute toxicity estimates:

Route	ATE value
Inhalation (dusts and mists)	1,5 mg/l

Irritation/corrosion:

Product/ingredient name	Result	Species	Score	Exposure	Observation
3-Isocyanatomethyl-3,5,5-Trimethylcyclohexyl Isocyanate, Oligomers Xylene (Mixture of Isomeres)	Skin - Oedema	Rabbit	0	-	-
	Eyes - Cornea opacity	Rabbit	1	-	-
	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate irritant Eyes - Moderate irritant	Rabbit Rabbit	- -	100 Percent -	- -

Conclusion/summary:

Skin: Based on available data, the classification criteria are not met.
Eyes: Based on available data, the classification criteria are not met.
Respiratory: Harmful by inhalation.

Sensitisation:

Product/ingredient name	Route of exposure	Species	Result
3-Isocyanatomethyl- 3,5,5-Trimethylcyclohexyl Isocyanate, Oligomers	skin	Rabbit	Sensitising

Conclusion/summary:

Skin: May cause an allergic skin reaction.
Respiratory: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Mutagenicity:

Product/ingredient name	Test	Experiment	Result
3-Isocyanatomethyl-3,5,5-Trimethylcyclohexyl Isocyanate, Oligomers	OECD 471	Experiment: In vitro Subject: Bacteria	Negative
	OECD 473	Experiment: In vitro Subject: Mammalian-Animal	Negative

Conclusion/summary:

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

Carcinogenicity:

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

Reproductive toxicity:

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

Teratogenicity:

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

Specific target organ toxicity (single exposure):

Product/ingredient name	Category	Route of exposure	Target organs
2-Methoxy-1-Methylethyl Acetate	Category 3	Not applicable	Narcotic effects
Xylene (Mixture of Isomeres)	Category 3	Not applicable	Respiratory tract irritation
3-Isocyanatomethyl-3,5,5-Trimethylcyclohexyl Isocyanate	Category 3	Not applicable	Respiratory tract irritation

Specific target organ toxicity (repeated exposure):

Product/ingredient name	Category	Route of exposure	Target organs
Xylene (Mixture of Isomeres)	Category 2	Not determined	Not determined

Aspiration hazard:

Product/ingredient name	Result
Xylene (Mixture of Isomeres)	ASPIRATION HAZARD - Category 1

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:

Not available.

Conclusion/summary:

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

General: Once sensitised, 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.

Development effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Other information: Not available.

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 not classified as hazardous to the environment, but contains substance(s) hazardous to the environment. See section 3 for details.

Product/ingredient name	Result	Species	Exposure
2-Methoxy-1-Methylethyl Acetate	Acute EC50 408 to 500 mg/l	Daphnia spec	48 hours
	Acute LC50 161 mg/l	Fish	96 hours
	Acute LC50 100 to 180 mg/l	Fish	96 hours

Conclusion/summary:

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

12.2 Persistence & degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Xylene (Mixture of Isomeres)	-	90 % - Readily - 5 days	-	-

Conclusion/summary:

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

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
2-Methoxy-1-Methylethyl Acetate	-	-	Readily
Xylene (Mixture of Isomeres)	-	-	Readily
3-Isocyanatomethyl-3,5,5-Trimethylcyclohexyl Isocyanate	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
2-Methoxy-1-Methylethyl Acetate	1,2	-	Low
Xylene (Mixture of Isomeres)	3,12	8.1 to 25.9	Low
3-Isocyanatomethyl-3,5,5-Trimethylcyclohexyl Isocyanate	0,99	-	Low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}):

Not available.

Mobility:

Not available.

12.5 Results of PBT and vPvB assessment

Not applicable.

12.6 Other adverse effects

No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

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. Residues in empty containers should be neutralised with a decontaminant (see section 6).
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.

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:

Method 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 spill material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated	Not regulated	UN1263	UN1263
14.2 UN proper shipping name	-	-	Paint	Paint
14.3 Transport hazard class(es)	-	-	3 	3 
14.4 Packing group	-	-	III	III
14.5 Environmental hazards	No	No	No	No
Additional information	Remarks Exempted according to 2.2.3.1.5 (Viscous substance exemption) This class 3 material is not subject to regulation in packagings up to 450 L.	-	Emergency schedules (EmS) F-E + S-E Viscous substance exemption This class 3 material can be considered non hazardous in packagings up to 30 L. Exempted according to 2.3.2.5 (Viscous substance exemption).	Passenger and cargo aircraft Quantity limitation: 60 L Packaging instructions: 355 Cargo aircraft only quantity limitation: 220 L Packaging instructions: 366 Limited quantities - Passenger aircraft Quantity limitation: 10 L Packaging instructions: Y 344.

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.

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 use mixture: 2004/42/EC - II A/j: 500g/l (2010). <= 300g/lVOC.

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:

Category: P5c.

National regulations:

Industrial use: 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 (Annexes A, B, C, E):

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 91.

International lists:

National inventory:

Australia:	All components are listed or exempted.
Canada:	All components are listed or exempted.
China:	All components are listed or exempted.
Japan:	Japan inventory (ENCS): At least one component is not listed. Japan inventory (ISHL): Not determined.
Malaysia:	Not determined.
New Zealand:	All components are listed or exempted.
Philippines:	All components are listed or exempted.
Republic of Korea:	All components are listed or exempted.
Taiwan:	All components are listed or exempted.
Turkey:	Not determined.
United States:	All components are listed or exempted.
Thailand:	Not determined.
Vietnam:	Not determined.

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out .

16. OTHER INFORMATION

Abbreviations & 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 Hazardstatement.
PBT:	Persistent, Bioaccumulative and Toxic.
PNEC:	Predicted No Effect Concentration.
RRN:	REACH Registration Number.
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. 3, H226	Expert judgment
Acute Tox. 4, H332	Expert judgment
Resp. Sens. 1, H334	Expert judgment
Skin Sens. 1, H317	Expert judgment

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

H226:	Flammable liquid and vapour.
H304:	May be fatal if swallowed and enters airways.
H312:	Harmful in contact with skin.
H315:	Causes skin irritation.
H317:	May cause an allergic skin reaction.
H319:	Causes serious eye irritation.
H330:	Fatal if inhaled.
H332:	Harmful if inhaled.
H334:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335:	May cause respiratory irritation.
H336:	May cause drowsiness or dizziness.
H373:	May cause damage to organs through prolonged or repeated exposure.
H411:	Toxic to aquatic life with long lasting effects.

Full text of classifications (CLP/GHS):

Acute Tox. 1, H330:	ACUTE TOXICITY (inhalation) - Category 1.
Acute Tox. 4, H312:	ACUTE TOXICITY (dermal) - Category 4.
Acute Tox. 4, H332:	ACUTE TOXICITY (inhalation) - Category 4.
Aquatic Chronic 2, H411:	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2.
Asp. Tox. 1, H304:	ASPIRATION HAZARD - Category 1.
Eye Irrit. 2, H319:	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2.
Flam. Liq. 3, H226:	FLAMMABLE LIQUIDS - Category 3.
Resp. Sens. 1, H334:	RESPIRATORY SENSITISATION - Category 1.
Skin Irrit. 2, H315:	SKIN CORROSION/IRRITATION - Category 2.
Skin Sens. 1, H317:	SKIN SENSITISATION - Category 1.
STOT RE 2, H373:	SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE - Category 2.
STOT SE 3, H335:	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3.
STOT SE 3, H336:	SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE (Narcotic effects) - Category 3.

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