



SAFETY DATA SHEET

500/503/P101 - MARINE & HIGH PERFORMANCE POLYURETHANE GLOSS COLOURS - BASE

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name	500/503/P101 - MARINE & HIGH PERFORMANCE POLYURETHANE GLOSS COLOURS - BASE
Product number	500/503/P101/COLOURS/BASE
UFI	UFI: WJCP-M25S-A00F-U0S7

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

Identified uses	BASE FOR TWO COMPONENT MARINE TOPCOAT Restricted to professional users.
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1.3. Details of the supplier of the safety data sheet

Supplier	TEAL & MACKRILL LIMITED	TEAL AND MACKRILL EU B.V.
	Lockwood Street	Queens Towers
	Hull	Delflandlaan 1
	HU2 OHN	1062 EA Amsterdam
	UK	The Netherlands
	+441482320194 (T)	+31 (0)208 004828 (T)
	+441482219266 (F)	+441482219266 (F)
	info@teamac.co.uk	info@teamac.co.uk
Contact person	Technical Department -, as above, 08.30 - 16.30 hrs Mon - Thurs, 08.30 - 15.00 hrs Fri	
Manufacturer	TEAL & MACKRILL LIMITED	
	LOCKWOOD STREET	
	HULL	
	HU2 OHN	
	+44(0)1482 320194(T)	
	+44(0)1482 219266(F)	
	info@teamac.co.uk	

1.4. Emergency telephone number

Emergency telephone	+44 (0) 1482 320194 Teamac (08.30 - 16.30 hrs Mon - Thurs, 08.30 - 15.00 hrs Fri)
SDS No.	20988

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Flam. Liq. 3 - H226
Health hazards	Skin Sens. 1 - H317 STOT SE 3 - H336
Environmental hazards	Aquatic Chronic 3 - H412

2.2. Label elements

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Hazard pictograms



Signal word

Warning

Hazard statements

H226 Flammable liquid and vapour.
 H317 May cause an allergic skin reaction.
 H336 May cause drowsiness or dizziness.
 H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P102 Keep out of reach of children.
 P101 If medical advice is needed, have product container or label at hand.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P261 Avoid breathing vapour/ spray.
 P273 Avoid release to the environment.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P501 Dispose of contents/ container in accordance with national regulations.

Supplemental label information

EUH066 Repeated exposure may cause skin dryness or cracking.

Contains

2-METHOXY-1-METHYLETHYL ACETATE, HYDROCARBONS, C9, AROMATICS, Fatty acids, C14-18 and C16-18-unsatd., maleated, MALEIC ANHYDRIDE

Supplementary precautionary statements

P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
 P403+P235 Store in a well-ventilated place. Keep cool.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

2-METHOXY-1-METHYLETHYL ACETATE			10-30%
CAS number: 108-65-6	EC number: 203-603-9	REACH registration number: 01-2119475791-29-xxxx	
Classification			
Flam. Liq. 3 - H226			
STOT SE 3 - H336			
Barium Sulphate			10-30%
CAS number: 7727-43-7	EC number: 231-784-4	REACH registration number: 01-2119491274-35-0001	
Classification		Classification (67/548/EEC or 1999/45/EC)	
Not Classified		-	

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HYDROCARBONS, C9, AROMATICS			<8%
CAS number: —	EC number: 918-668-5	REACH registration number: 01-2119455851-35-xxxx	
Classification Flam. Liq. 3 - H226 STOT SE 3 - H335, H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411			
Silicon dioxide, chemically prepared			1-5%
CAS number: 112945-52-5	EC number: 231-545-4	REACH registration number: 01-2119379499-16-0000	
Classification Not Classified			
XYLENE ISOMER MIXTURE			<4%
CAS number: 1330-20-7	EC number: 215-535-7	REACH registration number: 01-2119488216-32-0000	
Classification 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 Aquatic Chronic 3 - H412			
Fatty acids, C14-18 and C16-18-unsatd., maleated			<0.5%
CAS number: 85711-46-2	EC number: 288-306-2	REACH registration number: 01-2119976378-19-0000	
Classification Skin Irrit. 2 - H315 Skin Sens. 1 - H317			
2-METHOXYPROPYL ACETATE			<0.2%
CAS number: 70657-70-4	EC number: 274-724-2		
Classification Flam. Liq. 3 - H226 Repr. 1B - H360D STOT SE 3 - H335			

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1-(Dimethylaminoethyl)-4-methylpiperazine		<1%
CAS number: 104-19-8		
Classification Acute Tox. 4 - H302 Acute Tox. 3 - H311 Skin Corr. 1A - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412		
MALEIC ANHYDRIDE		<0.0035%
CAS number: 108-31-6		EC number: 203-571-6
Classification Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Resp. Sens. 1 - H334 Skin Sens. 1A - H317 STOT RE 1 - H372		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.
Ingestion	Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
Skin contact	Rinse with water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

4.2. Most important symptoms and effects, both acute and delayed

General information	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
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Inhalation	A single exposure may cause the following adverse effects: Dryness of mouth and throat. Coughing, chest tightness, feeling of chest pressure. Overexposure to organic solvents may depress the central nervous system, causing dizziness and intoxication and, at very high concentrations, unconsciousness and death. Congestion of the lungs may occur, producing severe shortness of breath. During application and drying, solvent vapours will be emitted. Vapours in high concentrations are narcotic.
Ingestion	A single exposure may cause the following adverse effects: Irritation. Nausea, vomiting. Symptoms following overexposure may include the following: Unconsciousness. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin contact	A single exposure may cause the following adverse effects: Redness. Irritation. Discoloration of the skin.
Eye contact	A single exposure may cause the following adverse effects: Redness. Irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up. Contains Hydrocarbons. The product is immiscible with water and will spread on the water surface.
Hazardous combustion products	Hydrocarbons. Carbon monoxide (CO). Carbon dioxide (CO ₂).

5.3. Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material. Provide adequate ventilation.
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6.2. Environmental precautions

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Environmental precautions Immiscible with water. Aquatic toxicity is unlikely to occur. However, large or frequent spills may have hazardous effects on the environment. Absorb spillage with non-combustible, absorbent material.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Small Spillages: Collect spillage. Large Spillages: Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store away from incompatible materials (see Section 10). Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Bund storage facilities to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent.

Storage class Unspecified storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

Usage description Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

2-METHOXY-1-METHYLETHYL ACETATE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 274 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 548 mg/m³

Sk

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Barium Sulphate

Long-term exposure limit (8-hour TWA): 10 mg/m³ inhalable dust

Long-term exposure limit (8-hour TWA): 4 mg/m³ respirable dust

HYDROCARBONS, C9, AROMATICS

Long-term exposure limit (8-hour TWA): WEL 19 ppm 100 mg/m³ vapour

Silicon dioxide, chemically prepared

Long-term exposure limit (8-hour TWA): WEL 2.4 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): WEL 6 mg/m³ inhalable dust

XYLENE ISOMER MIXTURE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³

Sk

MALEIC ANHYDRIDE

Long-term exposure limit (8-hour TWA): WEL 1 mg/m³

Short-term exposure limit (15-minute): WEL 3 mg/m³

Sen

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through the skin.

Sen = Capable of causing occupational asthma.

2-METHOXY-1-METHYLETHYL ACETATE (CAS: 108-65-6)

DNEL

Workers - Inhalation; Long term systemic effects: 275 mg/m³

Workers - Dermal; Long term systemic effects: 796 mg/kg/day

Consumer - Inhalation; Long term systemic effects: 33 mg/m³

Consumer - Dermal; Long term systemic effects: 320 mg/kg/day

Consumer - Oral; Long term systemic effects: 36 mg/kg/day

PNEC

- marine water; 0.0635 mg/l

- Soil; 0.29 mg/kg

- Fresh water; 0.635 mg/l

- STP; 100 mg/l

- Sediment; 3.29 mg/kg

- Intermittent release; 6.35 mg/l

- Sediment (Marinewater); 0.329 mg/kg

HYDROCARBONS, C9, AROMATICS

DNEL

Consumer - Oral; Long term systemic effects: 11 mg/kg/day

Consumer - Dermal; Long term systemic effects: 11 mg/kg/day

Consumer - Inhalation; Long term systemic effects: 32 mg/m³

Industry - Dermal; Long term systemic effects: 25 mg/kg/day

Industry - Inhalation; Long term systemic effects: 150 mg/m³

PNEC

No PNEC available. Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for the risk assessment of this complex substance.

XYLENE ISOMER MIXTURE (CAS: 1330-20-7)

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DNEL	Industry - Inhalation; Short term : 442 mg/m ³ Consumer - Inhalation; Long term systemic effects: 65.3 mg/m ³ Consumer - Dermal; Long term systemic effects: 1872 mg/kg/day Industry - Inhalation; Long term systemic effects: 221 mg/m ³ Consumer - Oral; Long term systemic effects: 12.5 mg/kg/day Industry - Dermal; Long term systemic effects: 3182 mg/kg/day Consumer - Inhalation; Short term : 260 mg/m ³
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PNEC	- Fresh water; 0.327 mg/l - marine water; 0.327 mg/l - Intermittent release; 0.327 mg/l - STP; 6.58 mg/l - Sediment (Freshwater); 12.46 mg/kg - Sediment (Marinewater); 12.46 mg/kg - Soil; 2.31 mg/kg
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bis(2-DIMETHYLAMINOETHYL)(METHYL)AMINE (CAS: 3030-47-5)

DNEL	Workers - Dermal; Long term systemic effects: 0.15 mg/m ³ Workers - Inhalation; Long term systemic effects: 0.529 mg/m ³
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PNEC	- Soil; 0.0472 mg/kg - Intermittent release; 0.549 mg/l - STP; 100 mg/l - Fresh water; 0.0549 mg/l - marine water; 0.00549 mg/l - Sediment (Freshwater); 0.0398 mg/kg - Sediment (Marinewater); 0.0398 mg/kg
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MALEIC ANHYDRIDE (CAS: 108-31-6)

DNEL	Workers - Inhalation; Short term systemic effects: 0.8 mg/m ³ Workers - Inhalation; Long term systemic effects: 0.4 mg/m ³
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PNEC	- Fresh water; 0.1 mg/l - marine water; 0.01 mg/l - Intermittent release; 0.428 mg/l - Soil; 0.042 mg/kg - Sediment (Freshwater); 0.334 mg/kg - Sediment (Marinewater); 0.0334 mg/kg - STP; 44.6 mg/l
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8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Personal, workplace environment 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. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure.

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Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.
Hand protection	To protect hands from chemicals, gloves should comply with European Standards EN388 and 374. As a general principle, exposure should be managed by means other than the provision of protective gloves. Manufacturers' performance data suggest that the optimum glove for use should be: Wear protective gloves made of the following material: Polyvinyl alcohol (PVA). Thickness: 0.2 - 0.3 mm Permeation breakthrough time according to EN374 - class: (1-6) e.g. minimum 480 mins. Caution: The performance of gloves under actual working conditions can be significantly affected by many factors and the information provided according to EN374 may not accord with what is achieved in practice. We recommend that expert professional advice is sought that takes into account of the work processes and working environment applicable for each task where gloves are to be worn.
Other skin and body protection	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
Hygiene measures	Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.
Environmental exposure controls	Keep container tightly sealed when not in use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid. Coloured liquid.
Colour	Various colours
Odour	Characteristic. Organic solvents.
Odour threshold	Not determined.
pH	Technically not feasible.
Melting point	Not determined.
Initial boiling point and range	Not determined.
Flash point	35°C Closed cup.
Evaporation rate	Not determined.
Evaporation factor	Not determined.

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Upper/lower flammability or explosive limits	: 0.8
Other flammability	Not determined.
Vapour pressure	400 Pa @ °C
Vapour density	heavier than air
Relative density	1.05 - 1.07 @ @ 20 °C
Solubility(ies)	Insoluble in water
Partition coefficient	Not determined.
Auto-ignition temperature	314 °C (Methoxy Propanol Acetate)°C
Decomposition Temperature	Not determined.
Viscosity	2.1 (Cone and Plate) P @ 25°C Kinematic viscosity > 20.5 mm ² /s.
Explosive properties	Not determined.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not determined.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	See the other subsections of this section for further details.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No potentially hazardous reactions known.
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat. Containers can burst violently or explode when heated, due to excessive pressure build-up.
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10.5. Incompatible materials

Materials to avoid	Oxidising agents. Acids - oxidising.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - dermal

ATE dermal (mg/kg)	68,927.04
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Acute toxicity - inhalation

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ATE inhalation (vapours mg/l) 761.31

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	A single exposure may cause the following adverse effects: Dryness of mouth and throat. Coughing, chest tightness, feeling of chest pressure. Overexposure to organic solvents may depress the central nervous system, causing dizziness and intoxication and, at very high concentrations, unconsciousness and death. Congestion of the lungs may occur, producing severe shortness of breath. During application and drying, solvent vapours will be emitted. Vapours in high concentrations are narcotic.
Ingestion	A single exposure may cause the following adverse effects: Irritation. Nausea, vomiting. Symptoms following overexposure may include the following: Unconsciousness. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin contact	A single exposure may cause the following adverse effects: Redness. Irritation. Discoloration of the skin.
Eye contact	A single exposure may cause the following adverse effects: Redness. Irritation.
Acute and chronic health hazards	This product has low toxicity. Only large quantities are likely to have adverse effects on human health.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	No specific target organs known.
Medical considerations	Skin disorders and allergies. Avoid vomiting and stomach flushing because of the risk of aspiration.

Toxicological information on ingredients.

2-METHOXY-1-METHYLETHYL ACETATE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 8,532.0

Species Rat

ATE oral (mg/kg) 8,532.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,000.0

Species Rabbit

ATE dermal (mg/kg) 5,000.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 35.7

Species Rat

ATE inhalation (vapours mg/l) 35.7

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Skin corrosion/irritation

Animal data Not irritating.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties.

Specific target organ toxicity - single exposure

STOT - single exposure Emits vapours if heated. Vapours/aerosol spray may irritate the respiratory system.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Emits vapours, especially if heated.

HYDROCARBONS, C9, AROMATICS

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 3,492.0

Species Rat

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

ATE oral (mg/kg) 3,492.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 3,160.0

Species Rabbit

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

ATE dermal (mg/kg) 3,160.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 6,193.0

Species Rat

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

ATE inhalation (vapours mg/l) 6,193.0

Skin corrosion/irritation

Animal data Repeated exposure may cause skin dryness or cracking.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

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Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Carcinogenicity

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

IARC carcinogenicity None of the ingredients are listed or exempt.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity - development Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure STOT SE 3 - H335, H336 May cause respiratory irritation. May cause drowsiness or dizziness.

Target organs Respiratory system, lungs Central nervous system

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Asp. Tox. 1 - H304 May be fatal if swallowed and enters airways. Pneumonia may be the result if vomited material containing solvents reaches the lungs.

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation A single exposure may cause the following adverse effects: Irritation of nose, throat and airway. Difficulty in breathing. Coughing. Vapours may cause headache, fatigue, dizziness and nausea. Central nervous system depression. During application and drying, solvent vapours will be emitted. Vapours in high concentrations are narcotic.

Ingestion Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation. Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

Skin contact Repeated exposure may cause skin dryness or cracking. Discoloration of the skin.

Eye contact May cause temporary eye irritation.

Route of exposure Ingestion Inhalation Skin and/or eye contact

Target organs Central nervous system Respiratory system, lungs

1-(Dimethylaminoethyl)-4-methylpiperazine

Acute toxicity - oral

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Acute toxicity oral (LD₅₀ mg/kg) 677.0

Species Rat

ATE oral (mg/kg) 677.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 448.0

Species Rabbit

ATE dermal (mg/kg) 448.0

MALEIC ANHYDRIDE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,090.0

Species Rat

ATE oral (mg/kg) 1,090.0

SECTION 12: Ecological information

Ecotoxicity The product contains substances which are toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

Ecological information on ingredients.

2-METHOXY-1-METHYLETHYL ACETATE

Ecotoxicity The product is not expected to be hazardous to the environment.

12.1. Toxicity

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

Ecological information on ingredients.

2-METHOXY-1-METHYLETHYL ACETATE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, > 96 hours: 134 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: > 500 mg/l, Daphnia magna
EC₅₀, 21 days: > 100 mg/l, Daphnia magna
NOEC, 21 days: > 100 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, > 72 hours: 1000 mg/l, Scenedesmus subspicatus
NOEC, 72 hours: > 1000 mg/l, Selenastrum capricornutum

HYDROCARBONS, C9, AROMATICS

Toxicity Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 9.2 mg/l, Oncorhynchus mykiss (Rainbow trout)

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Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 3.2 mg/l, Daphnia magna

Acute toxicity - microorganisms EC₅₀, 48 hours: 2.9 mg/l,

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOEC, 28 days: 1.23 mg/l, Oncorhynchus mykiss (Rainbow trout)

Chronic toxicity - aquatic invertebrates NOEC, 21 : 2.14 mg/l, Daphnia magna

1-(Dimethylaminoethyl)-4-methylpiperazine

Acute aquatic toxicity

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 39 mg/l, Daphnia magna

Acute toxicity - aquatic plants IC₅₀, 72 hours: 20 mg/l, Algae

MALEIC ANHYDRIDE

Acute aquatic toxicity

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 42.81 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Ecological information on ingredients.

2-METHOXY-1-METHYLETHYL ACETATE

Persistence and degradability The product is readily biodegradable.

Biodegradation - Degradation 100% (DOC): 28 days

HYDROCARBONS, C9, AROMATICS

Persistence and degradability The degradability of the product is not known.

Biodegradation - 78%: 28 days

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

Ecological information on ingredients.

2-METHOXY-1-METHYLETHYL ACETATE

Partition coefficient log Kow: 1.2 log Pow: 0.43

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HYDROCARBONS, C9, AROMATICS

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

12.4. Mobility in soil

Mobility The product is insoluble in water. Volatile liquid. The product contains organic solvents which will evaporate easily from all surfaces.

Ecological information on ingredients.

HYDROCARBONS, C9, AROMATICS

Mobility No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

2-METHOXY-1-METHYLETHYL ACETATE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

HYDROCARBONS, C9, AROMATICS

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects None known.

Ecological information on ingredients.

HYDROCARBONS, C9, AROMATICS

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal methods Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible.

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Waste class	When this coating, in its liquid state, as supplied, becomes a waste, it is categorised as hazardous waste, with code 08 01 11* (SOLVENT BASED LIQUID WASTE). Part-used containers, not drained and/or rigorously scraped out and containing dried residues of the supplied coating, are categorised as hazardous waste, with code 08 01 11* (SOLVENT BASED LIQUID WASTE). If mixed with other wastes, the above waste code may not be applicable. Used containers, drained and/or rigorously scraped out and containing dry residues of the supplied coating, are categorised as non-hazardous waste, with code 15 01 02 (plastic packaging) or 15 01 04 (metal packaging).
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SECTION 14: Transport information

General	For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.
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14.1. UN number

UN No. (ADR/RID)	1263
UN No. (IMDG)	1263
UN No. (ICAO)	1263

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	PAINT - Contains Hydrocarbons, C9, Aromatics, Class 3, PGIII, FP = 35 °C (MARINE POLLUTANT)
Proper shipping name (IMDG)	PAINT - Contains Hydrocarbons, C9, Aromatics, Class 3, PGIII, FP = 35 °C (MARINE POLLUTANT)
Proper shipping name (ICAO)	PAINT - Contains Hydrocarbons, C9, Aromatics, Class 3, PGIII, FP = 35 °C (MARINE POLLUTANT)

14.3. Transport hazard class(es)

ADR/RID class	3
IMDG class	3
ICAO class/division	3

Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

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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.

EmS F-E, S-E

Tunnel restriction code (D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations Control of Substances Hazardous to Health Regulations 2002 (as amended).

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Commission Regulation (EU) No 2015/830 of 28 May 2015.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

None of the ingredients are listed or exempt.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
IATA: International Air Transport Association.
ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
CAS: Chemical Abstracts Service.
ATE: Acute Toxicity Estimate.
LC₅₀: Lethal Concentration to 50 % of a test population.
LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
EC₅₀: 50% of maximal Effective Concentration.
PBT: Persistent, Bioaccumulative and Toxic substance.
vPvB: Very Persistent and Very Bioaccumulative.

Training advice Read and follow manufacturer's recommendations.

Revision comments Issued in new format for Reach compliance in accordance with EC 1272/2008 Issued in accordance with Annex II to REACH, as amended by Commission Regulation (EU) No. 2015/830 Change to EU supplier and manufacturer

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Issued by	Technical Dept. (N.O.)
Revision date	21/10/2021
Revision	10.0
Supersedes date	03/02/2021
SDS number	20988
SDS status	Approved.
Hazard statements in full	<p>H226 Flammable liquid and vapour.</p> <p>H302 Harmful if swallowed.</p> <p>H304 May be fatal if swallowed and enters airways.</p> <p>H311 Toxic in contact with skin.</p> <p>H312 Harmful in contact with skin.</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H315 Causes skin irritation.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H318 Causes serious eye damage.</p> <p>H319 Causes serious eye irritation.</p> <p>H332 Harmful if inhaled.</p> <p>H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.</p> <p>H335 May cause respiratory irritation.</p> <p>H336 May cause drowsiness or dizziness.</p> <p>H360D May damage the unborn child.</p> <p>H372 Causes damage to organs through prolonged or repeated exposure.</p> <p>H373 May cause damage to organs (Respiratory system, lungs) through prolonged or repeated exposure if inhaled.</p> <p>H411 Toxic to aquatic life with long lasting effects.</p> <p>H412 Harmful to aquatic life with long lasting effects.</p>
Signature	Initials_____

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.