



SAFETY DATA SHEET

520-P149 - METACLOR UNDERWATER PRIMER - GREY

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 520-P149 - METACLOR UNDERWATER PRIMER - GREY

Product number 520/P149/224

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

Identified uses As an underwater primer on prepared steel, or as a sealer coat over most conventional antifouling systems.

1.3. Details of the supplier of the safety data sheet

Supplier TEAL & MACKRILL LIMITED
LOCKWOOD STREET
HULL
HU2 0HN

+44(0)1482 320194(T)

+44(0)1482 219266(F)

info@teamac.co.uk

Contact person Technical Department -, 08.30 - 16.30 hrs Mon - Thurs, 08.30 - 15.00 hrs Fri, as above

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. 10228

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 Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 STOT RE 2 - H373

Environmental hazards Aquatic Chronic 2 - H411

2.2. Label elements

Pictogram



Signal word

Warning

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Hazard statements	H226 Flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H373 May cause damage to organs through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 Do not breathe vapour/ spray. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. 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	XYLENE ISOMER MIXTURE, HYDROCARBONS, C9, AROMATICS
Supplementary precautionary statements	P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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 substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

XYLENE ISOMER MIXTURE	10-30%
CAS number: 1330-20-7	EC number: 215-535-7
	REACH registration number: 01-2119488216-32-0000
Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 3 - H226	R10 Xn;R20/21 Xi;R38
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	

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TRIZINC BIS(ORTHOPHOSPHATE) 10-30%		
CAS number: 7779-90-0	EC number: 231-944-3	REACH registration number: 01-2119485044-40-0000
M factor (Acute) = 1	M factor (Chronic) = 1	
Classification Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Classification (67/548/EEC or 1999/45/EC) N;R50/53	
HYDROCARBONS, C9, AROMATICS 5-10%		
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	Classification (67/548/EEC or 1999/45/EC) Xn;R65. Xi;R37. N;R51/53. R10,R66,R67.	
HYDROCARBONS, C9-C11, <2% AROMATICS 1-5%		
CAS number: —	EC number: 919-857-5	REACH registration number: 01-2119463258-33-XXXX
Classification Flam. Liq. 3 - H226 STOT SE 3 - H336 Asp. Tox. 1 - H304	Classification (67/548/EEC or 1999/45/EC) Xn;R65. R10,R66,R67.	
2-METHYLPENTANE-2,4-DIOL <1%		
CAS number: 107-41-5	EC number: 203-489-0	
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Classification (67/548/EEC or 1999/45/EC) Xi;R36/38	
ZIRCONIUM SALT, 2-ETHYLHEXANOIC ACID <1%		
CAS number: 22464-99-9	EC number: 245-018-1	REACH registration number: 01-2119979088-21-0002
Classification Repr. 2 - H361d	Classification (67/548/EEC or 1999/45/EC) Repr. Cat. 3;R63.	

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PHTHALIC ANHYDRIDE <1%		
CAS number: 85-44-9	EC number: 201-607-5	REACH registration number: 01-2119457017-41-0000
Classification Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 STOT SE 3 - H335	Classification (67/548/EEC or 1999/45/EC) Xn;R22 R42/43 Xi;R37/38,R41	
2,6-Di-tert-butyl-p-cresol <1%		
CAS number: 128-37-0	EC number: 204-881-4	REACH registration number: 01-2119565113-46-xxxx
M factor (Acute) = 1		
Classification Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Classification (67/548/EEC or 1999/45/EC) N;R50/53.	

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	Prolonged inhalation of high concentrations may damage respiratory system. 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.
Skin contact	Prolonged contact may cause dryness of the skin. Discoloration of the skin.
Eye contact	May cause temporary eye irritation.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. 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.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

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.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

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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

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

TRIZINC BIS(ORTHOPHOSPHATE)

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

HYDROCARBONS, C9, AROMATICS

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

2-METHYLPENTANE-2,4-DIOL

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Long-term exposure limit (8-hour TWA): WEL 25 ppm 123 mg/m³

Short-term exposure limit (15-minute): WEL 25 ppm 123 mg/m³

ZIRCONIUM SALT, 2-ETHYLHEXANOIC ACID

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³

Short-term exposure limit (15-minute): WEL 10 mg/m³

PHTHALIC ANHYDRIDE

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³(Sen)

Short-term exposure limit (15-minute): WEL 12 mg/m³(Sen)

2,6-Di-tert-butyl-p-cresol

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

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

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

DNEL	<p>Consumer - Inhalation; Long term systemic effects: 65.3 mg/m³</p> <p>Consumer - Dermal; Long term systemic effects: 1872 mg/kg/day</p> <p>Consumer - Oral; Long term systemic effects: 12.5 mg/kg/day</p> <p>Industry - Inhalation; Long term systemic effects: 221 mg/m³</p> <p>Industry - Inhalation; Short term : 442 mg/m³</p> <p>Consumer - Inhalation; Short term : 260 mg/m³</p> <p>Industry - Dermal; Long term systemic effects: 3182 mg/kg/day</p>
PNEC	<p>- Fresh water; 0.327 mg/l</p> <p>- marine water; 0.327 mg/l</p> <p>- Intermittent release; 0.327 mg/l</p> <p>- STP; 6.58 mg/l</p> <p>- Sediment (Freshwater); 12.46 mg/kg</p> <p>- Sediment (Marinewater); 12.46 mg/kg</p> <p>- Soil; 2.31 mg/kg</p>

TRIZINC BIS(ORTHOPHOSPHATE) (CAS: 7779-90-0)

DNEL	<p>Consumer - Inhalation; Long term systemic effects: 2.5 mg/m³</p> <p>- Inhalation; : 5.0 insoluble Zn mg/m³</p> <p>Professional - Inhalation; Long term systemic effects: 5 mg/m³</p> <p>- Inhalation; : 1.0 soluble Zn mg/m³</p> <p>Professional - Dermal; Long term systemic effects: 83 mg/kg/day</p> <p>Consumer - Dermal; Long term systemic effects: 83 mg/kg/day</p> <p>Consumer - Oral; Long term systemic effects: 0.83 mg/kg/day</p>
PNEC	<p>- Fresh water; 0.02 Zn mg/l</p> <p>- marine water; 0.006 Zn mg/l</p> <p>- Sediment (Freshwater); 117.8 mg/kg</p> <p>- Sediment (Marinewater); 56.5 Zn mg/kg</p> <p>- Soil; 35.6 Zn mg/kg</p> <p>- STP; 0.1 Zn mg/l</p>

HYDROCARBONS, C9, AROMATICS

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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/m ³ Industry - Dermal; Long term systemic effects: 25 mg/kg/day Industry - Inhalation; Long term systemic effects: 150 mg/m ³
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.

HYDROCARBONS, C9-C11, <2% AROMATICS

DNEL	Consumer - Oral; Long term systemic effects: 300 mg/kg/day Industry - Inhalation; Long term systemic effects: 1500 mg/m ³ Industry - Dermal; Long term systemic effects: 300 mg/kg/day Consumer - Dermal; Long term systemic effects: 300 mg/kg/day Consumer - Inhalation; Long term systemic effects: 900 mg/m ³
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.

2,6-Di-tert-butyl-p-cresol (CAS: 128-37-0)

DNEL	Industry - Dermal; : 0.5 mg/kg/day Industry - Inhalation; : 3.5 mg/kg/day
PNEC	- Fresh water; 0.000199 mg/l - Sediment; 0.0996 mg/l - Soil; 0.04769 mg/l - marine water; 0.0000199 mg/l

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.

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.

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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. Manufacturer's performance data suggest that the optimum glove for use should be: Wear protective gloves made of the following material: Viton rubber (fluoro rubber). Thickness: ≥ 0.7 mm or Polyvinyl alcohol (PVA). Thickness: $\geq 0.2 - 0.3$ mm or Polyethylene. Thickness: ≥ 0.062 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 must be used if the airborne contamination exceeds the recommended occupational exposure limit. In case of inadequate ventilation use suitable respirator. It is recommended to use respiratory equipment with combination filter, type A2/P2.
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	Metallic
Colour	Grey.
Odour	Organic solvents.
Odour threshold	Not determined.
pH	Technically not feasible.
Melting point	Not determined.
Initial boiling point and range	Not determined.
Flash point	25 approx. °C OC (Open cup).
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Upper/lower flammability or explosive limits	: 0.8
Other flammability	Not determined.
Vapour pressure	Not determined.
Vapour density	heavier than air
Relative density	1.28 @ @20°C
Solubility(ies)	Insoluble in water

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Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	4.0 P @ 25°C
Explosive properties	Not determined.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not determined.

9.2. Other information

Volatile organic compound This product contains a maximum VOC content of 530 g/litre.

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No potentially hazardous reactions known.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Materials to avoid No specific material or group of materials is likely to react with the product to produce a hazardous situation.

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.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

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

Acute toxicity - dermal

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

ATE dermal (mg/kg) 2,969.91

Acute toxicity - inhalation

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

ATE inhalation (vapours mg/l) 40.16

Skin corrosion/irritation

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Animal data	Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
<u>Reproductive toxicity</u>	
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.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
<u>Aspiration hazard</u>	
Aspiration hazard	Based on available data the classification criteria are not met.
<u>General information</u>	
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system. 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.
Skin contact	Prolonged contact may cause dryness of the skin. Discoloration of the skin.
Eye contact	May cause temporary eye 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.
<u>Toxicological information on ingredients.</u>	

XYLENE ISOMER MIXTURE

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Acute toxicity oral (LD₅₀ mg/kg) 3,523.0

Species Rat

ATE oral (mg/kg) 3,523.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 12,126.0

Species Rabbit

ATE dermal (mg/kg) 1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 27.124

Species Rat

ATE inhalation (vapours mg/l) 11.0

Serious eye damage/irritation

Serious eye damage/irritation Severely irritating to skin. Irritation of eyes is assumed. No testing is needed.

Respiratory sensitisation

Respiratory sensitisation Not sensitising.

Skin sensitisation

Skin sensitisation Not sensitising.

Carcinogenicity

Carcinogenicity There is no evidence that the product can cause cancer.

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Reproductive toxicity

Reproductive toxicity - fertility This substance has no evidence of toxicity to reproduction.

Aspiration hazard

Aspiration hazard Kinematic viscosity <= 20.5 mm²/s.

Inhalation Harmful by inhalation.

Ingestion Pneumonia may be the result if vomited material containing solvents reaches the lungs.

Skin contact Harmful in contact with skin.

Target organs Central nervous system Liver

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Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,100.0

Species Rat

ATE oral (mg/kg) 5,100.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not irritating

Skin corrosion/irritation

Animal data Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

Respiratory sensitisation

Respiratory sensitisation Not sensitising.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Does not contain any substances known to be mutagenic.

Carcinogenicity

Carcinogenicity There is no evidence that the product can cause cancer.

Reproductive toxicity

Reproductive toxicity - fertility This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - single exposure

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

Specific target organ toxicity - repeated exposure

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

General information No specific health hazards known.

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

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

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.

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

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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

HYDROCARBONS, C9-C11, <2% AROMATICS

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,100.0

Species Rat

ATE oral (mg/kg) 5,100.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,100.0

Species Rabbit

ATE dermal (mg/kg) 5,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 5,100.0

Species Rat

ATE inhalation (vapours mg/l) 5,100.0

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

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Respiratory sensitisation

Respiratory sensitisation Not sensitising.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Chromosome aberration: Negative. This substance has no evidence of mutagenic properties.

Carcinogenicity

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

Reproductive toxicity

Reproductive toxicity - fertility Fertility: - , Inhalation, Rat This substance has no evidence of toxicity to reproduction.

Reproductive toxicity - development Developmental toxicity: - : , Inhalation, Rat This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not available.

Aspiration hazard

Aspiration hazard Kinematic viscosity <= 20.5 mm²/s.

Inhalation Vapours may cause drowsiness and dizziness. Central nervous system depression.

Ingestion Harmful: danger of serious damage to health by prolonged exposure if swallowed.

Skin contact Product has a defatting effect on skin. May cause allergic contact eczema.

Eye contact No specific health hazards known.

Route of exposure Inhalation Dermal

2-BUTANONE OXIME

Other health effects Carcinogen Category 2.

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,528.0

Species Rat

ATE oral (mg/kg) 2,528.0

Acute toxicity - dermal

ATE dermal (mg/kg) 1,100.0

General information Known or suspected carcinogen for humans.

Skin contact May cause sensitisation by skin contact. Harmful in contact with skin.

SECTION 12: Ecological information

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Ecotoxicity Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

Ecological information on ingredients.

XYLENE ISOMER MIXTURE

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.

XYLENE ISOMER MIXTURE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 2.6 mg/l, Fish
Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 3.62 mg/l, Daphnia magna
Acute toxicity - aquatic plants IC₅₀, 72 hours: 3.2 mg/l, Algae

TRIZINC BIS(ORTHOPHOSPHATE)

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1
M factor (Acute) 1
Acute toxicity - fish LC₅₀, 96 hours: Oncorhynchus mykiss 0.14 - 0.26 Zn²⁺ mg/l, Fish
Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: Daphnia magna 0.04 - 0.86 Zn²⁺ mg/l, Daphnia magna
Acute toxicity - aquatic plants EC₅₀, 72 hours: 0.136 - 0.15 Zn²⁺ mg/l, Selenastrum capricornutum
 IC₅₀, 72 hours: Desmodemus subspicatus <0.3 mg/l, Algae

Chronic aquatic toxicity

NOEC 0.01 < NOEC ≤ 0.1
Degradability Non-rapidly degradable
M factor (Chronic) 1

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)
Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 3.2 mg/l, Daphnia magna
Acute toxicity - microorganisms EC₅₀, 48 hours: 2.9 mg/l,

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HYDROCARBONS, C9-C11, <2% AROMATICS

Acute aquatic toxicity

Acute toxicity - fish	LC50, > 96 hours: 1000 mg/l, Oncorhynchus mykiss (Rainbow trout) Substance did not cause acute toxicity to fish
Acute toxicity - aquatic invertebrates	Substance did not cause acute toxicity to the freshwater invertebrates EC ₅₀ , 48 hours: >1000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , > 72 hours: 1000 mg/l, Freshwater algae Substance did not cause acute toxicity to the freshwater green algae
Acute toxicity - microorganisms	EC ₅₀ , >: 100 mg/l, Activated sludge

Chronic aquatic toxicity

Chronic toxicity - fish early life stage	NOEC, 28 days: 0.131 mg/l, Oncorhynchus mykiss (Rainbow trout)
Chronic toxicity - aquatic invertebrates	NOEC, 28 days: 0.23 mg/l, Daphnia magna

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Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: >100 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 201 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: 11.8 mg/l, Algae

12.2. Persistence and degradability

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

Ecological information on ingredients.

XYLENE ISOMER MIXTURE

Persistence and degradability	The product is readily biodegradable.
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HYDROCARBONS, C9, AROMATICS

Persistence and degradability	The degradability of the product is not known.
Biodegradation	- 78%: 28 days

HYDROCARBONS, C9-C11, <2% AROMATICS

Persistence and degradability	The product is readily biodegradable.
Phototransformation	Oxidises rapidly by photo-chemical reactions in air
Biodegradation	- 80 Degradation (%): 28 days Test - 301F Ready Biodegradability - Manometric Respiratory Test

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12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

Ecological information on ingredients.

XYLENE ISOMER MIXTURE

Partition coefficient log Kow: 3.12 - 3.2

TRIZINC BIS(ORTHOPHOSPHATE)

Bioaccumulative potential The product is not bioaccumulating.

HYDROCARBONS, C9, AROMATICS

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

HYDROCARBONS, C9-C11, <2% AROMATICS

Bioaccumulative potential The product contains potentially bioaccumulating substances.

Partition coefficient log Pow: 5 - 6.7

2-BUTANONE OXIME

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Pow: 0.63

12.4. Mobility in soil

Mobility 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.

HYDROCARBONS, C9-C11, <2% AROMATICS

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces. Readily absorbed into soil.

Adsorption/desorption coefficient Not available.

Surface tension 24.5 mN/m @ 20°C

2-BUTANONE OXIME

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

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

Ecological information on ingredients.

XYLENE ISOMER MIXTURE

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

TRIZINC BIS(ORTHOPHOSPHATE)

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.

HYDROCARBONS, C9-C11, <2% 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.

TRIZINC BIS(ORTHOPHOSPHATE)

Other adverse effects Not available.

HYDROCARBONS, C9, AROMATICS

Other adverse effects None known.

HYDROCARBONS, C9-C11, <2% AROMATICS

Other adverse effects Not known.

2-BUTANONE OXIME

Other adverse effects Not determined.

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.

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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.
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).

SECTION 14: Transport information

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

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)	Contains Xylene Isomer Mixture, Class 3, PGIII, (28 °C), and Hydrocarbons, C9, Aromatics and Trizinc bis(orthophosphate), MARINE POLLUTANTS
Proper shipping name (IMDG)	Contains Xylene Isomer Mixture, Class 3, PGIII, (28 °C), and Hydrocarbons, C9, Aromatics and Trizinc bis(orthophosphate), MARINE POLLUTANTS
Proper shipping name (ICAO)	Contains Xylene Isomer Mixture, Class 3, PGIII, (28 °C), and Hydrocarbons, C9, Aromatics and Trizinc bis(orthophosphate), MARINE POLLUTANTS

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

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Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

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

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.

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Training advice	Read and follow manufacturer's recommendations. Only trained personnel should use this material.
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 Revision to sections 2, 8, 11 & 12 for reclassification of solvents.
Issued by	Technical Dept. (P.E.)
Revision date	20/09/2018
Revision	13.1
Supersedes date	12/07/2018
SDS number	10228
SDS status	Approved.
Hazard statements in full	H226 Flammable liquid and vapour. H302 Harmful if swallowed. 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. H318 Causes serious eye damage. H319 Causes serious eye irritation. 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. H361d Suspected of damaging the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H373 May cause damage to organs (Respiratory system, lungs) through prolonged or repeated exposure if inhaled. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.
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.