



## SAFETY DATA SHEET

### 405/F158 - METALCOTE PRIMER / UNDERCOAT (All colours except white)

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	405/F158 - METALCOTE PRIMER / UNDERCOAT (All colours except white)
Product number	405/F158/ ALL COLOURS
UFI	UFI: V9YP-X2NA-300A-1ET9

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

Identified uses	Paint.
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##### 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.	10430

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification (EC 1272/2008)

Physical hazards	Flam. Liq. 3 - H226
Health hazards	STOT SE 3 - H336
Environmental hazards	Aquatic Chronic 2 - H411

##### 2.2. Label elements

###### Hazard pictograms



Signal word	Warning
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Hazard statements	H226 Flammable liquid and vapour. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects.
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<b>Precautionary statements</b>	<p>P102 Keep out of reach of children.</p> <p>P101 If medical advice is needed, have product container or label at hand.</p> <p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P261 Avoid breathing vapour/ spray.</p> <p>P273 Avoid release to the environment.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
<b>Supplemental label information</b>	<p>EUH066 Repeated exposure may cause skin dryness or cracking.</p> <p>EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.</p>
<b>Contains</b>	HYDROCARBONS, C9-C11, <2% AROMATICS, HYDROCARBONS, C9, AROMATICS
<b>Supplementary precautionary statements</b>	<p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P370+P378 In case of fire: Use alcohol resistant foam, carbon dioxide or dry powder to extinguish.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p>

### 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

<b>HYDROCARBONS, C9-C11, &lt;2% AROMATICS</b>		<b>30-60%</b>
CAS number: —	EC number: 919-857-5	REACH registration number: 01-2119463258-33-XXXX
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>	
Flam. Liq. 3 - H226	Xn;R65. R10,R66,R67.	
STOT SE 3 - H336		
Asp. Tox. 1 - H304		
<b>Calcium Carbonate</b>		<b>10-30%</b>
CAS number: 1317-65-3	EC number: 215-279-6	
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>	
Not Classified	-	

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<b>TRIZINC BIS(ORTHOPHOSPHATE)</b> <span style="float: right;"><b>5-10%</b></span>		
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	
<b>Classification</b> Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	<b>Classification (67/548/EEC or 1999/45/EC)</b> N;R50/53	
<b>Titanium Dioxide</b> <span style="float: right;"><b>5-10%</b></span>		
CAS number: 13463-67-7	EC number: 236-675-5	REACH registration number: 01-2119489379-17-xxxx
<b>HYDROCARBONS, C9, AROMATICS</b> <span style="float: right;"><b>1-5%</b></span>		
CAS number: —	EC number: 918-668-5	REACH registration number: 01-2119455851-35-xxxx
<b>Classification</b> Flam. Liq. 3 - H226 STOT SE 3 - H335, H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	<b>Classification (67/548/EEC or 1999/45/EC)</b> Xn;R65. Xi;R37. N;R51/53. R10,R66,R67.	
<b>Zinc Oxide</b> <span style="float: right;"><b>&lt;1%</b></span>		
CAS number: 1314-13-2	EC number: 215-222-5	REACH registration number: 01-2119463881-32
<b>Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics</b> <span style="float: right;"><b>&lt;1%</b></span>		
CAS number: —	EC number: 918-481-9	REACH registration number: 01-2119457273-39-XXXX
<b>Classification</b> Asp. Tox. 1 - H304		
<b>2-METHYLPENTANE-2,4-DIOL</b> <span style="float: right;"><b>&lt;1%</b></span>		
CAS number: 107-41-5	EC number: 203-489-0	
<b>Classification</b> Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	<b>Classification (67/548/EEC or 1999/45/EC)</b> Xi;R36/38	

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<b>Dipropylene Glycol Methyl Ether</b> <span style="float: right;"><b>&lt;1%</b></span>		
CAS number: 34590-94-8	EC number: 252-104-2	REACH registration number: 01-2119450011-60-XXXX
<b>Classification</b> Not Classified	<b>Classification (67/548/EEC or 1999/45/EC)</b> -	
<b>PHTHALIC ANHYDRIDE</b> <span style="float: right;"><b>&lt;1%</b></span>		
CAS number: 85-44-9	EC number: 201-607-5	REACH registration number: 01-2119457017-41-0000
<b>Classification</b> Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 STOT SE 3 - H335	<b>Classification (67/548/EEC or 1999/45/EC)</b> Xn;R22 R42/43 Xi;R37/38,R41	
<b>2,6-Di-tert-butyl-p-cresol</b> <span style="float: right;"><b>&lt;1%</b></span>		
CAS number: 128-37-0	EC number: 204-881-4	REACH registration number: 01-2119565113-46-xxxx
M factor (Acute) = 1		
<b>Classification</b> Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	<b>Classification (67/548/EEC or 1999/45/EC)</b> N;R50/53.	

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

**Composition comments** The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1% or more of titanium dioxide which is in the form of or incorporated into particles with an aerodynamic diameter of less than or equal to 10um.

#### **SECTION 4: First aid measures**

##### **4.1. Description of first aid measures**

<b>General information</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Never give anything by mouth to an unconscious person.
<b>Inhalation</b>	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. Get medical attention if any discomfort continues. Place unconscious person on their side in the recovery position and ensure breathing can take place.
<b>Ingestion</b>	DO NOT induce vomiting. Get medical attention immediately. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
<b>Skin contact</b>	Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water.
<b>Eye contact</b>	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

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**General information** Get medical attention promptly if symptoms occur after washing.

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

**Notes for the doctor** No specific recommendations.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media** Extinguish with foam, carbon dioxide, dry powder or water fog. 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** Toxic gases or vapours. FLAMMABLE. Solvent vapours may form explosive mixtures with air.

### 5.3. Advice for firefighters

**Protective actions during firefighting** Risk of re-ignition after fire has been extinguished. Cool containers exposed to flames with water until well after the fire is out. Avoid the spillage or runoff entering drains, sewers or watercourses.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Ensure suitable respiratory protection is worn during removal of spillages in confined areas.

### 6.2. Environmental precautions

**Environmental precautions** Do not discharge into drains or watercourses or onto the ground. Contain spillage with sand, earth or other suitable non-combustible material. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Avoid the spillage or runoff entering drains, sewers or watercourses. Absorb in vermiculite, dry sand or earth and place into containers. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

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<b>Usage precautions</b>	Observe any occupational exposure limits for the product or ingredients. Avoid inhalation of vapours and spray/mists. Keep away from heat, sparks and open flame. Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Do not eat, drink or smoke when using the product. The Manual Handling Operations Regulations may apply to the handling of containers of this product. To assist employers, the following method of calculating the weight for any pack size is given. Take the pack size volume in litres and multiply this figure by the specific gravity value given in section 9. This will give the net weight of the coating in kilograms. Allowance will then have to be made for the immediate packaging to give an approximate gross weight.
<b>7.2. Conditions for safe storage, including any incompatibilities</b>	
<b>Storage precautions</b>	Store in closed original container at temperatures between 5°C and 25°C. Keep away from heat, sparks and open flame. Keep container tightly closed. Keep containers upright. Store away from the following materials: Oxidising materials. Alkalis. Acids.
<b>Storage class</b>	Flammable liquid storage. The storage and use of this product is subject to the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR). The requirements are given in the HSE Approved Code of Practice and Guidance, Storage of Dangerous Substances: DSEAR. Up to 250 litres of liquids with a flashpoint above 32C but below 55C may be kept in a workroom provided they are kept in closed containers in a marked, fire-resisting cupboard or bin. Larger quantities must be kept in a separate, marked storeroom conforming to the structural requirements contained in the HSE guidance note Storage of Flammable Liquids in Containers.
<b>7.3. Specific end use(s)</b>	
<b>Specific end use(s)</b>	The identified uses for this product are detailed in Section 1.2.
<b>Usage description</b>	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

##### **Calcium Carbonate**

Long-term exposure limit (8-hour TWA): WEL 10 mg/m<sup>3</sup> inhalable dust

Long-term exposure limit (8-hour TWA): WEL 4 mg/m<sup>3</sup> respirable dust

##### **TRIZINC BIS(ORTHOPHOSPHATE)**

Long-term exposure limit (8-hour TWA): 10 mg/m<sup>3</sup>

##### **Titanium Dioxide**

Long-term exposure limit (8-hour TWA): WEL 10 mg/m<sup>3</sup> inhalable dust

Long-term exposure limit (8-hour TWA): WEL 4 mg/m<sup>3</sup> respirable dust

##### **HYDROCARBONS, C9, AROMATICS**

Long-term exposure limit (8-hour TWA): WEL 19 ppm 100 mg/m<sup>3</sup> vapour

##### **Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics**

Long-term exposure limit (8-hour TWA): WEL 1000 mg/m<sup>3</sup>

##### **2-METHYLPENTANE-2,4-DIOL**

Long-term exposure limit (8-hour TWA): WEL 25 ppm 123 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 25 ppm 123 mg/m<sup>3</sup>

##### **Dipropylene Glycol Methyl Ether**

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Long-term exposure limit (8-hour TWA): WEL 50 ppm 308 mg/m<sup>3</sup>

Sk

### PHTHALIC ANHYDRIDE

Long-term exposure limit (8-hour TWA): WEL 4 mg/m<sup>3</sup>(Sen)

Short-term exposure limit (15-minute): WEL 12 mg/m<sup>3</sup>(Sen)

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

Long-term exposure limit (8-hour TWA): WEL 10 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

### HYDROCARBONS, C9-C11, <2% AROMATICS

#### DNEL

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

#### 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.

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

#### DNEL

- Inhalation; : 1.0 soluble Zn mg/m<sup>3</sup>  
 Consumer - Oral; Long term systemic effects: 0.83 mg/kg/day  
 - Inhalation; : 5.0 insoluble Zn mg/m<sup>3</sup>  
 Consumer - Inhalation; Long term systemic effects: 2.5 mg/m<sup>3</sup>  
 Professional - Inhalation; Long term systemic effects: 5 mg/m<sup>3</sup>  
 Consumer - Dermal; Long term systemic effects: 83 mg/kg/day  
 Professional - Dermal; Long term systemic effects: 83 mg/kg/day

#### PNEC

- Fresh water; 0.02 Zn mg/l  
 - marine water; 0.006 Zn mg/l  
 - Sediment (Freshwater); 117.8 mg/kg  
 - Sediment (Marinewater); 56.5 Zn mg/kg  
 - Soil; 35.6 Zn mg/kg  
 - STP; 0.1 Zn mg/l

### Titanium Dioxide (CAS: 13463-67-7)

#### DNEL

Industry - Inhalation; Long term local effects: 10 mg/m<sup>3</sup>  
 Consumer - Oral; Long term systemic effects: 700 mg/kg/day

#### PNEC

- Fresh water; 0.184 mg/l  
 - marine water; 0.0184 mg/l  
 - Sediment (Freshwater); >=1000 mg/kg  
 - Sediment (Marinewater); >=100 mg/kg  
 - Soil; 100 mg/kg  
 - STP; 100 mg/kg

### HYDROCARBONS, C9, AROMATICS

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<b>DNEL</b>	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 <sup>3</sup> Industry - Dermal; Long term systemic effects: 25 mg/kg/day Industry - Inhalation; Long term systemic effects: 150 mg/m <sup>3</sup>
<b>PNEC</b>	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, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics**

**Ingredient comments** WEL = Workplace Exposure Limits

**Dipropylene Glycol Methyl Ether (CAS: 34590-94-8)**

<b>DNEL</b>	Industry - Dermal; Long term : 65 mg/kg/day Industry - Inhalation; Long term : 310 mg/m <sup>3</sup> Consumer - Dermal; Long term : 15 mg/kg/day Consumer - Inhalation; Long term : 37.2 mg/m <sup>3</sup> Consumer - Oral; Long term : 1.67 mg/kg/day
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<b>PNEC</b>	Fresh water; 19 mg/l marine water; 1.9 mg/l STP; 4168 mg/l Sediment (Freshwater); 70.2 mg/kg Sediment (Marinewater); 7.02 mg/kg Soil; 2.74 mg/kg Intermittent release; 19 mg/l
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**Calcium bis(2-ethylhexanoate) (CAS: 136-51-6)**

<b>DNEL</b>	Workers - Dermal; Long term systemic effects: 5.67 mg/kg Workers - Inhalation; Long term systemic effects: 39.98 mg/m <sup>3</sup> General population - Oral; Long term systemic effects: 2.83 mg/kg General population - Dermal; Long term systemic effects: 2.83 mg/kg General population - Inhalation; Long term systemic effects: 9.86 mg/m <sup>3</sup>
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<b>PNEC</b>	STP; 71.7 mg/l Soil; 1.06 mg/kg Intermittent release; 0.493 mg/l Fresh water; 0.36 mg/l marine water; 0.036 mg/l Sediment (Freshwater); 6.37 mg/kg Sediment (Marinewater); 0.637 mg/kg
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**2,6-Di-tert-butyl-p-cresol (CAS: 128-37-0)**

<b>DNEL</b>	Industry - Dermal; : 0.5 mg/kg/day Industry - Inhalation; : 3.5 mg/kg/day
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<b>PNEC</b>	- Fresh water; 0.000199 mg/l - Sediment; 0.0996 mg/l - marine water; 0.0000199 mg/l - Soil; 0.04769 mg/l
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**8.2. Exposure controls**



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### Protective equipment



#### Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

#### Eye/face protection

Wear chemical splash goggles.

#### 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: Nitrile rubber. Thickness:  $\geq 0.31$  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

Wear appropriate clothing to prevent reasonably probable skin contact.

#### Hygiene measures

No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

#### 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.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid.
Colour	Various colours
Odour	Organic solvents.
Odour threshold	Not determined.
pH	Technically not feasible.
Melting point	Not determined.
Initial boiling point and range	Not determined.
Flash point	~ 38°C Closed cup.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not determined.
Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not determined.
Vapour pressure	Not determined.
Vapour density	Not determined.

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<b>Relative density</b>	1.38 - 1.55 dependant on colour @ @ 20°C
<b>Solubility(ies)</b>	Not determined.
<b>Partition coefficient</b>	Not determined.
<b>Auto-ignition temperature</b>	Not determined.
<b>Decomposition Temperature</b>	Not determined.
<b>Viscosity</b>	3.5 (Rotothinner) P @ 25°C
<b>Explosive properties</b>	Not determined.
<b>Explosive under the influence of a flame</b>	Not considered to be explosive.
<b>Oxidising properties</b>	Not determined.

### 9.2. Other information

#### SECTION 10: Stability and reactivity

##### 10.1. Reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

##### 10.2. Chemical stability

**Stability** Stable at normal ambient temperatures and when used as recommended.

##### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** Not determined.

##### 10.4. Conditions to avoid

**Conditions to avoid** Avoid heat, flames and other sources of ignition. Avoid contact with the following materials: Acids. Oxidising agents.

##### 10.5. Incompatible materials

**Materials to avoid** Strong alkalis. Strong acids. Strong oxidising agents.

##### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

#### SECTION 11: Toxicological information

##### 11.1. Information on toxicological effects

<b>Inhalation</b>	Vapour from this product may be hazardous by inhalation. Vapour may irritate respiratory system/lungs.
<b>Ingestion</b>	Liquid irritates mucous membranes and may cause abdominal pain if swallowed.
<b>Skin contact</b>	Product has a defatting effect on skin. Repeated exposure may cause skin dryness or cracking. May cause allergic contact eczema. Prolonged or repeated exposure may cause severe irritation.
<b>Eye contact</b>	May cause temporary eye irritation.
<b>Acute and chronic health hazards</b>	This product has low toxicity. Only large quantities are likely to have adverse effects on human health.

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**Route of exposure** Inhalation Skin absorption. Ingestion. Skin and/or eye contact.

**Medical considerations** Skin disorders and allergies. Avoid vomiting and stomach flushing because of the risk of aspiration.

### Toxicological information on ingredients.

#### HYDROCARBONS, C9-C11, <2% AROMATICS

##### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 5,100.0

**Species** Rat

**ATE oral (mg/kg)** 5,100.0

##### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 5,100.0

**Species** Rabbit

**ATE dermal (mg/kg)** 5,100.0

##### Acute toxicity - inhalation

**Acute toxicity inhalation (LC<sub>50</sub> 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.

##### 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.

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**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 mm<sup>2</sup>/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

**TRIZINC BIS(ORTHOPHOSPHATE)****Acute toxicity - oral**

**Acute toxicity oral (LD<sub>50</sub> mg/kg)**      5,100.0

**Species**      Rat

**ATE oral (mg/kg)**      5,100.0

**Acute toxicity - inhalation**

**Notes (inhalation LC<sub>50</sub>)**      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**

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**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.

**Titanium Dioxide****Acute toxicity - oral**

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 5,100.0

**Species** Rat

**ATE oral (mg/kg)** 5,100.0

**Acute toxicity - inhalation**

**Acute toxicity inhalation (LC<sub>50</sub> dust/mist mg/l)** 6.82

**Species** Rat

**ATE inhalation (dusts/mists mg/l)** 6.82

**Skin corrosion/irritation**

**Animal data** Not irritating.

**Serious eye damage/irritation**

**Serious eye damage/irritation** Not irritating.

**Skin sensitisation**

**Skin sensitisation** Not sensitising.

**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.

**HYDROCARBONS, C9, AROMATICS****Acute toxicity - oral**

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 3,492.0

**Species** Rat

**Notes (oral LD<sub>50</sub>)** Based on available data the classification criteria are not met.

**ATE oral (mg/kg)** 3,492.0

**Acute toxicity - dermal**

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 3,160.0

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<b>Species</b>	Rabbit
<b>Notes (dermal LD<sub>50</sub>)</b>	Based on available data the classification criteria are not met.
<b>ATE dermal (mg/kg)</b>	3,160.0
<b><u>Acute toxicity - inhalation</u></b>	
<b>Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l)</b>	6,193.0
<b>Species</b>	Rat
<b>Notes (inhalation LC<sub>50</sub>)</b>	Based on available data the classification criteria are not met.
<b>ATE inhalation (vapours mg/l)</b>	6,193.0
<b><u>Skin corrosion/irritation</u></b>	
<b>Animal data</b>	Repeated exposure may cause skin dryness or cracking.
<b><u>Serious eye damage/irritation</u></b>	
<b>Serious eye damage/irritation</b>	Based on available data the classification criteria are not met.
<b><u>Respiratory sensitisation</u></b>	
<b>Respiratory sensitisation</b>	Based on available data the classification criteria are not met.
<b><u>Skin sensitisation</u></b>	
<b>Skin sensitisation</b>	Based on available data the classification criteria are not met.
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Based on available data the classification criteria are not met.
<b><u>Carcinogenicity</u></b>	
<b>Carcinogenicity</b>	Based on available data the classification criteria are not met.
<b>IARC carcinogenicity</b>	None of the ingredients are listed or exempt.
<b><u>Reproductive toxicity</u></b>	
<b>Reproductive toxicity - fertility</b>	Based on available data the classification criteria are not met.
<b>Reproductive toxicity - development</b>	Based on available data the classification criteria are not met.
<b><u>Specific target organ toxicity - single exposure</u></b>	
<b>STOT - single exposure</b>	STOT SE 3 - H335, H336 May cause respiratory irritation. May cause drowsiness or dizziness.
<b>Target organs</b>	Respiratory system, lungs Central nervous system
<b><u>Specific target organ toxicity - repeated exposure</u></b>	
<b>STOT - repeated exposure</b>	Not classified as a specific target organ toxicant after repeated exposure.
<b><u>Aspiration hazard</u></b>	
<b>Aspiration hazard</b>	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.

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<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	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.
<b>Ingestion</b>	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.
<b>Skin contact</b>	Repeated exposure may cause skin dryness or cracking. Discoloration of the skin.
<b>Eye contact</b>	May cause temporary eye irritation.
<b>Route of exposure</b>	Ingestion Inhalation Skin and/or eye contact
<b>Target organs</b>	Central nervous system Respiratory system, lungs

**PHTHALIC ANHYDRIDE****Acute toxicity - oral**

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 1,530.0

**Species** Rat

**ATE oral (mg/kg)** 1,530.0

**Acute toxicity - dermal**

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 3,160.0

**Species** Rabbit

**ATE dermal (mg/kg)** 3,160.0

**Serious eye damage/irritation**

**Serious eye damage/irritation** Moderately irritating.

**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.

**12.1. Toxicity****Ecological information on ingredients.****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<sub>50</sub>, 48 hours: >1000 mg/l, Daphnia magna

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<b>Acute toxicity - aquatic plants</b>	EC <sub>50</sub> , > 72 hours: 1000 mg/l, Freshwater algae Substance did not cause acute toxicity to the freshwater green algae
<b>Acute toxicity - microorganisms</b>	EC <sub>50</sub> , >: 100 mg/l, Activated sludge
<b><u>Chronic aquatic toxicity</u></b>	
<b>Chronic toxicity - fish early life stage</b>	NOEC, 28 days: 0.131 mg/l, Oncorhynchus mykiss (Rainbow trout)
<b>Chronic toxicity - aquatic invertebrates</b>	NOEC, 28 days: 0.23 mg/l, Daphnia magna

**TRIZINC BIS(ORTHOPHOSPHATE)****Acute aquatic toxicity**

<b>LE(C)<sub>50</sub></b>	0.1 < L(E)C <sub>50</sub> ≤ 1
<b>M factor (Acute)</b>	1
<b>Acute toxicity - fish</b>	LC <sub>50</sub> , 96 hours: Oncorhynchus mykiss 0.14 - 0.26 Zn <sup>2+</sup> mg/l, Fish
<b>Acute toxicity - aquatic invertebrates</b>	EC <sub>50</sub> , 48 hours: Daphnia magna 0.04 - 0.86 Zn <sup>2+</sup> mg/l, Daphnia magna
<b>Acute toxicity - aquatic plants</b>	EC <sub>50</sub> , 72 hours: 0.136 - 0.15 Zn <sup>2+</sup> mg/l, Selenastrum capricornutum IC <sub>50</sub> , 72 hours: Desmodesmus subspicatus <0.3 mg/l, Algae

**Chronic aquatic toxicity**

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

**HYDROCARBONS, C9, AROMATICS**

<b>Toxicity</b>	Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.
<b><u>Acute aquatic toxicity</u></b>	
<b>Acute toxicity - fish</b>	LC <sub>50</sub> , 96 hours: 9.2 mg/l, Oncorhynchus mykiss (Rainbow trout)
<b>Acute toxicity - aquatic invertebrates</b>	EC <sub>50</sub> , 48 hours: 3.2 mg/l, Daphnia magna
<b>Acute toxicity - microorganisms</b>	EC <sub>50</sub> , 48 hours: 2.9 mg/l,
<b><u>Chronic aquatic toxicity</u></b>	
<b>Chronic toxicity - fish early life stage</b>	NOEC, 28 days: 1.23 mg/l, Oncorhynchus mykiss (Rainbow trout)
<b>Chronic toxicity - aquatic invertebrates</b>	NOEC, 21 : 2.14 mg/l, Daphnia magna

**PHTHALIC ANHYDRIDE****Acute aquatic toxicity**



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<b>Acute toxicity - aquatic invertebrates</b>	NOEC, 21 days: 16 mg/l, Daphnia magna EC <sub>50</sub> , 48 hours: >640 mg/l, Daphnia magna
<b>Acute toxicity - aquatic plants</b>	NOEC, 72 hours: 32 mg/l, Algae NOEC, 72 hours: >100 mg/l, Algae
<b>Acute toxicity - microorganisms</b>	EC <sub>50</sub> , 3 hours: >1000 mg/l, Activated sludge

### 12.2. Persistence and degradability

**Persistence and degradability** The product is not expected to be biodegradable.

### Ecological information on ingredients.

#### HYDROCARBONS, C9-C11, <2% AROMATICS

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

#### HYDROCARBONS, C9, AROMATICS

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

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** The product contains potentially bioaccumulating substances.

**Partition coefficient** Not determined.

### Ecological information on ingredients.

#### HYDROCARBONS, C9-C11, <2% AROMATICS

<b>Bioaccumulative potential</b>	The product contains potentially bioaccumulating substances.
<b>Partition coefficient</b>	log Pow: 5 - 6.7

#### TRIZINC BIS(ORTHOPHOSPHATE)

**Bioaccumulative potential** The product is not bioaccumulating.

#### HYDROCARBONS, C9, AROMATICS

<b>Bioaccumulative potential</b>	No data available on bioaccumulation.
<b>Partition coefficient</b>	Not available.

#### PHTHALIC ANHYDRIDE

<b>Bioaccumulative potential</b>	BCF: 3.4,
<b>Partition coefficient</b>	log Pow: 1.6

### 12.4. Mobility in soil

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**Mobility** The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

### Ecological information on ingredients.

#### 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

#### 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.

#### 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.

#### 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.

### 12.6. Other adverse effects

**Other adverse effects** The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

### Ecological information on ingredients.

#### HYDROCARBONS, C9-C11, <2% AROMATICS

**Other adverse effects** Not known.

#### TRIZINC BIS(ORTHOPHOSPHATE)

**Other adverse effects** Not available.

#### HYDROCARBONS, C9, AROMATICS

**Other adverse effects** None known.

## SECTION 13: Disposal considerations

## 405/F158 - METALCOTE PRIMER / UNDERCOAT (All colours except white)

### 13.1. Waste treatment methods

<b>General information</b>	Avoid the spillage or runoff entering drains, sewers or watercourses.
<b>Disposal methods</b>	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
<b>Waste class</b>	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** This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, ADR and IMDG.

#### 14.1. UN number

UN No. (ADR/RID)	0
UN No. (IMDG)	1263
UN No. (ICAO)	1263

#### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** PAINT, Contains Zinc Phosphate, Class 9, Packing Group III, MARINE POLLUTANT, and Low Aromatic White Spirit, Class 3, Packing Group III (38 °C)

**Proper shipping name (IMDG)** PAINT

**Proper shipping name (ICAO)** PAINT

**Proper shipping name (ADN)** PAINT

#### 14.3. Transport hazard class(es)

ADR/RID class	1263
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

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 Annex II of MARPOL 73/78 and the IBC Code Not applicable.

## 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).  
 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).

**Guidance** Safety Data Sheets for Substances and Preparations.

### 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.  
 LC<sub>50</sub>: Lethal Concentration to 50 % of a test population.  
 LD<sub>50</sub>: Lethal Dose to 50% of a test population (Median Lethal Dose).  
 EC<sub>50</sub>: 50% of maximal Effective Concentration.  
 PBT: Persistent, Bioaccumulative and Toxic substance.  
 vPvB: Very Persistent and Very Bioaccumulative.

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<b>Classification abbreviations and acronyms</b>	Acute Tox. = Acute toxicity Aquatic Acute = Hazardous to the aquatic environment (acute) Aquatic Chronic = Hazardous to the aquatic environment (chronic) Asp. Tox. = Aspiration hazard Flam. Liq. = Flammable liquid STOT RE = Specific target organ toxicity-repeated exposure STOT SE = Specific target organ toxicity-single exposure
<b>Training advice</b>	Read and follow manufacturer's recommendations.
<b>Revision comments</b>	Issued in accordance with Annex II to REACH, as amended by Commission Regulation (EU) No. 2015/830 Classification of Titanium Dioxide updated in line with the 14th ATP to CLP.
<b>Issued by</b>	Technical Dept. (N.O.)
<b>Revision date</b>	05/08/2021
<b>Revision</b>	11.0
<b>Supersedes date</b>	16/12/2020
<b>SDS number</b>	10430
<b>SDS status</b>	Approved.
<b>Hazard statements in full</b>	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. 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.
<b>Signature</b>	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.