

# COO-VAR®

## PAINTS, PRIMERS AND SPECIALISED COATINGS

### SAFETY DATA SHEET

#### 368/Q253 - SOLAR REFLECTIVE PAINT - ALUMINIUM

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** 368/Q253 - SOLAR REFLECTIVE PAINT - ALUMINIUM

**Product number** 368/Q253/3

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

**Identified uses** Paint.

##### 1.3. Details of the supplier of the safety data sheet

**Supplier** COO-VAR  
Lockwood Street  
Hull  
HU2 0HN  
+44 (0) 1482 328053(T)  
+44 (0) 1482 219266(F)  
info@coo-var.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 328053 Coo-Var (08.30 - 16.30 hrs Mon - Thurs, 08.30 - 15.00 hrs Fri)

**SDS No.** 10760

#### 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 STOT RE 1 - H372

**Environmental hazards** Aquatic Chronic 2 - H411

##### 2.2. Label elements

###### Pictogram



**Signal word**

Danger

**Hazard statements**

H226 Flammable liquid and vapour.  
H336 May cause drowsiness or dizziness.  
H372 Causes damage to organs through prolonged or repeated exposure.  
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>P271 Use only outdoors or in a well-ventilated area.</p> <p>P273 Avoid release to the environment.</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>	EUH066 Repeated exposure may cause skin dryness or cracking.
<b>Contains</b>	Hydrocarbons, C9-C12, 2-25% 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 foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p>

### 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

<b>Hydrocarbons, C9-C12, 2-25% Aromatics</b>		<b>30 - 40%</b>
CAS number: 64742-82-1	EC number: 919-446-0	REACH registration number: 01-2119458049-33-XXXX
<b>Classification</b>		
Flam. Liq. 3 - H226		
STOT SE 3 - H336		
STOT RE 1 - H372		
Asp. Tox. 1 - H304		
Aquatic Chronic 2 - H411		
<b>Bitumen</b>		<b>20 - 30%</b>
CAS number: 64742-93-4		
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>	
Not Classified	-	

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<b>HYDROCARBONS, C9, AROMATICS</b>		<b>1 - 10%</b>
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.	

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

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

**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**

**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**

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### 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

**Usage precautions** 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.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions** 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.

**Storage class** 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.

### 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.

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### SECTION 8: Exposure controls/Personal protection

#### 8.1. Control parameters

##### Occupational exposure limits

##### Hydrocarbons, C9-C12, 2-25% Aromatics

Long-term exposure limit (8-hour TWA): WEL 350 mg/m<sup>3</sup>

##### HYDROCARBONS, C9, AROMATICS

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

WEL = Workplace Exposure Limit

##### Hydrocarbons, C9-C12, 2-25% Aromatics (CAS: 64742-82-1)

<b>DNEL</b>	Consumer - Oral; Long term systemic effects: 26 mg/kg/day Consumer - Dermal; Long term systemic effects: 26 mg/kg/day Consumer - Inhalation; Long term systemic effects: 71 mg/m <sup>3</sup> Consumer - Inhalation; Short term systemic effects: 570 mg/m <sup>3</sup> Industry - Inhalation; Short term systemic effects: 570 mg/m <sup>3</sup> Industry - Inhalation; Long term systemic effects: 330 mg/m <sup>3</sup> Industry - Dermal; Long term systemic effects: 44 mg/kg/day
<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, C9, AROMATICS

<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.

#### 8.2. Exposure controls

##### 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.

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<b>Hand protection</b>	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: 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.
<b>Other skin and body protection</b>	Wear appropriate clothing to prevent reasonably probable skin contact.
<b>Hygiene measures</b>	No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.
<b>Respiratory protection</b>	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

<b>Appearance</b>	Metallic Slightly viscous liquid.
<b>Colour</b>	Silver. / bronze
<b>Odour</b>	Characteristic. Organic solvents.
<b>pH</b>	Not applicable.
<b>Melting point</b>	Not relevant.
<b>Initial boiling point and range</b>	> 153°C
<b>Flash point</b>	> 39°C
<b>Evaporation rate</b>	Not determined.
<b>Upper/lower flammability or explosive limits</b>	Upper flammable/explosive limit: 8% Lower flammable/explosive limit: 0.7%
<b>Vapour pressure</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Relative density</b>	1 - 1.1 @ @ 20 C°C
<b>Solubility(ies)</b>	Insoluble in water.
<b>Partition coefficient</b>	Not determined.
<b>Auto-ignition temperature</b>	> 200°C
<b>Viscosity</b>	>30 seconds 3mm ISO cup method ISO 2431 s @ °C
<b>Oxidising properties</b>	Not determined.

#### 9.2. Other information

<b>Volatile organic compound</b>	This product contains a maximum VOC content of < 470 g/litre.
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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

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**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

**Toxicological effects** When bitumen is mixed with diluent, it is believed that the preparation becomes more bio-available. The carcinogenicity of the preparation is strongly dependant on the nature of the solvent used since the polycyclic aromatic content of the bitumen is low.

**Inhalation** Vapour from this product may be hazardous by inhalation. Vapour may irritate respiratory system/lungs.

**Ingestion** Liquid irritates mucous membranes and may cause abdominal pain if swallowed.

**Skin contact** 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.

**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** 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-C12, 2-25% Aromatics

##### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 15,000.0

**Species** Rat

**Notes (oral LD<sub>50</sub>)** Conclusive data but not sufficient for classification.

##### Acute toxicity - dermal

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**Acute toxicity dermal (LD<sub>50</sub>)** 3,400.0 mg/kg)

**Species** Rabbit

**Notes (dermal LD<sub>50</sub>)** Conclusive data but not sufficient for classification.

### Skin corrosion/irritation

**Animal data** Erythema/eschar score: Very slight erythema - barely perceptible (1). Oedema score: Very slight oedema - barely perceptible (1). Not irritating.

**Extreme pH** Not irritating. Not corrosive to skin.

### Serious eye damage/irritation

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

### Respiratory sensitisation

**Respiratory sensitisation** There is evidence that the material can lead to respiratory hypersensitivity.

### Skin sensitisation

**Skin sensitisation** Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. Buehler test - Guinea pig: Not sensitising.

### Germ cell mutagenicity

**Genotoxicity - in vitro** Bacterial reverse mutation test: Negative.

**Genotoxicity - in vivo** Chromosome aberration: Negative.

### Carcinogenicity

**Carcinogenicity** NOAEL 300 mg/kg, Oral, Rat There is no evidence that the product can cause cancer.

### Reproductive toxicity

**Reproductive toxicity - fertility** One-generation study - NOAEL >3000 mg/kg/day, Oral, Rat P This substance has no evidence of toxicity to reproduction.

**Reproductive toxicity - development** Developmental toxicity: - NOAEC: >300 ppm, Inhalation, Rat Read-across data. This substance has no evidence of toxicity to reproduction.

### Specific target organ toxicity - single exposure

**STOT - single exposure** Central nervous system depression including narcotic effects such as drowsiness, narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo.

**Target organs** Central nervous system

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** NOAEL 1056 mg/kg, Oral, Rat

### Aspiration hazard

**Aspiration hazard** Kinematic viscosity <= 20.5 mm<sup>2</sup>/s.

**Inhalation** Vapours may cause drowsiness and dizziness.

**Ingestion** Harmful: may cause lung damage if swallowed. May cause stomach pain or vomiting.



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<b>Skin contact</b>	May cause defatting of the skin, but is not an irritant. Not a skin sensitiser.
<b>Eye contact</b>	No specific health hazards known.
<b>Route of exposure</b>	Skin and/or eye contact. Inhalation
<b>Target organs</b>	Central nervous system

**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

**Species** Rabbit

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

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

**Acute toxicity - inhalation**

**Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l)** 6,193.0

**Species** Rat

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

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

**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.****Hydrocarbons, C9-C12, 2-25% Aromatics**

**Ecotoxicity** Dangerous for the environment if discharged into watercourses.

**12.1. Toxicity****Ecological information on ingredients.**

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### Hydrocarbons, C9-C12, 2-25% Aromatics

<b>Toxicity</b>	Dangerous for the environment if discharged into watercourses Toxic to aquatic organisms
<b><u>Acute aquatic toxicity</u></b>	
<b>Acute toxicity - fish</b>	LC <sub>50</sub> , 96 hours: 10 - 30 mg/l, Oncorhynchus mykiss (Rainbow trout)
<b>Acute toxicity - aquatic invertebrates</b>	EC <sub>50</sub> , 48 hours: 10 - 22 mg/l, Daphnia magna
<b>Acute toxicity - aquatic plants</b>	IC <sub>50</sub> , 72 hours: 4.6 - 10 mg/l, Pseudokirchneriella subcapitata
<b>Acute toxicity - microorganisms</b>	EC <sub>50</sub> , 48 hours: 43.98 mg/l, Activated sludge
<b><u>Chronic aquatic toxicity</u></b>	
<b>Chronic toxicity - fish early life stage</b>	NOEC, 28 days: 0.13 mg/l, Freshwater fish
<b>Chronic toxicity - aquatic invertebrates</b>	NOEC, < 21 days: 0.28 mg/l, Daphnia magna

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<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,

### 12.2. Persistence and degradability

**Persistence and degradability** The product is expected to be slowly biodegradable.

### Ecological information on ingredients.

#### Hydrocarbons, C9-C12, 2-25% Aromatics

<b>Persistence and degradability</b>	The product is readily biodegradable.
<b>Phototransformation</b>	Scientifically unjustified.
<b>Stability (hydrolysis)</b>	Scientifically unjustified.
<b>Biodegradation</b>	- Degradation 75: 28 days

#### HYDROCARBONS, C9, AROMATICS

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

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### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation. The slow rates of biodegradation of bitumen can cause interference with the normal functioning of ecological cycles. Bitumen should therefore be contained and spills avoided.

**Partition coefficient** Not determined.

### Ecological information on ingredients.

#### Hydrocarbons, C9-C12, 2-25% Aromatics

**Bioaccumulative potential** Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.

**Partition coefficient** Technically not feasible.

#### HYDROCARBONS, C9, AROMATICS

**Bioaccumulative potential** No data available on bioaccumulation.

**Partition coefficient** Not available.

### 12.4. Mobility in soil

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

### Ecological information on ingredients.

#### Hydrocarbons, C9-C12, 2-25% Aromatics

**Adsorption/desorption coefficient** Scientifically unjustified.

**Henry's law constant** Volatilisation is dependent on Henry's Law constant (HLC) which is not applicable to complex substances.

**Surface tension** 24 - 27 mN/m @ 25°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-C12, 2-25% Aromatics

**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

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

### Ecological information on ingredients.

#### Hydrocarbons, C9-C12, 2-25% Aromatics

**Other adverse effects** This substance may contribute to ozone formation in the near surface atmosphere. However, the photochemical formation of ozone depends on a complex interaction of other atmospheric pollutant sources and environmental conditions. Therefore, the contribution of this substance to ozone formation is outside the scope of this substance assessment and is more appropriately addressed via EU air quality directives.

#### HYDROCARBONS, C9, AROMATICS

**Other adverse effects** None known.

### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

**General information** Avoid the spillage or runoff entering drains, sewers or watercourses.

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

**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** This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, ADR and IMDG.

#### 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

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

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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**

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** The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

**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).  
Commission Regulation (EU) No 2015/830 of 28 May 2015.

**Guidance** Workplace Exposure Limits EH40.  
CHIP for everyone HSG228.  
Safety Data Sheets for Substances and Preparations.  
Approved Classification and Labelling Guide (Sixth edition) L131.  
Dangerous Substances and Explosive Atmospheres Regulations 2002 [L138]

**15.2. Chemical safety assessment**

No chemical safety assessment has been carried out.

**SECTION 16: Other information**

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<b>Abbreviations and acronyms used in the safety data sheet</b>	<p>ATE: Acute Toxicity Estimate.</p> <p>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</p> <p>CAS: Chemical Abstracts Service.</p> <p>DNEL: Derived No Effect Level.</p> <p>GHS: Globally Harmonized System.</p> <p>IATA: International Air Transport Association.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>LC<sub>50</sub>: Lethal Concentration to 50 % of a test population.</p> <p>LD<sub>50</sub>: Lethal Dose to 50% of a test population (Median Lethal Dose).</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>PNEC: Predicted No Effect Concentration.</p> <p>REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.</p> <p>RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.</p> <p>SVHC: Substances of Very High Concern.</p> <p>vPvB: Very Persistent and Very Bioaccumulative.</p> <p>EC<sub>50</sub>: 50% of maximal Effective Concentration.</p>
<b>Classification abbreviations and acronyms</b>	<p>Acute Tox. = Acute toxicity</p> <p>Aquatic Acute = Hazardous to the aquatic environment (acute)</p> <p>Aquatic Chronic = Hazardous to the aquatic environment (chronic)</p> <p>Asp. Tox. = Aspiration hazard</p> <p>Carc. = Carcinogenicity</p> <p>Eye Dam. = Serious eye damage</p> <p>Eye Irrit. = Eye irritation</p> <p>Flam. Liq. = Flammable liquid</p> <p>Lact. = Reproductive toxicity: effects on or via lactation</p> <p>Muta. = Germ cell mutagenicity</p> <p>Repr. = Reproductive toxicity</p> <p>Resp. Sens. = Respiratory sensitisation</p> <p>Skin Corr. = Skin corrosion</p> <p>Skin Irrit. = Skin irritation</p> <p>Skin Sens. = Skin sensitisation</p> <p>STOT RE = Specific target organ toxicity-repeated exposure</p> <p>STOT SE = Specific target organ toxicity-single exposure</p>
<b>Revision comments</b>	<p>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 &amp; 12 for reclassification of solvents.</p>
<b>Issued by</b>	Technical Dept. (P.E.)
<b>Revision date</b>	03/05/2019
<b>Revision</b>	9.0
<b>Supersedes date</b>	07/07/2017
<b>SDS number</b>	10760
<b>SDS status</b>	Approved.

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**Hazard statements in full**

H226 Flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H372 Causes damage to organs through prolonged or repeated exposure.  
H372 Causes damage to organs through prolonged or repeated exposure if inhaled.  
H411 Toxic 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.