



## SAFETY DATA SHEET NITOPROOF UVR TOPCOAT BASE

This SDS is not mandated under REACH Regulation (EC) No 1907/2006 and is provided for information only.

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

#### 1.1. Product identifier

**Product name** NITOPROOF UVR TOPCOAT BASE

**Product number** 1982500, 1982501, 1982505, 1982506, 1982510, 1982511, 1982520, 1982521, 1982525, 1982526, 1982530, 1982531, 1982535, 1982536, - R UK9

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

**Identified uses** Base component of polyurethane based flooring.

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

**Supplier** FOSROC Limited DO NOT USE

#### 1.4. Emergency telephone number

**Emergency telephone** +44 (0) 1827 265 279 (Monday-Sunday 24 hours a day)

### SECTION 2: Hazards identification

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

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

**Physical hazards** Not Classified

**Health hazards** Not Classified

**Environmental hazards** Not Classified

**Human health** See Section 11 for additional information on health hazards.

**Environmental** The product is not expected to be hazardous to the environment.

#### 2.2. Label elements

**Hazard statements** NC Not Classified

#### 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>2-METHOXY-1-METHYLETHYL ACETATE</b>		<b>1 - 10%</b>
CAS number: 108-65-6	EC number: 203-603-9	REACH registration number: 01-2119475791-29

**Classification**  
Flam. Liq. 3 - H226

## NITOPROOF UVR TOPCOAT BASE

<b>ETHYL ACETATE</b>		<b>0.5 - 1%</b>
CAS number: 141-78-6	EC number: 205-500-4	REACH registration number: 01-2119475103-46
<b>Classification</b>		
Flam. Liq. 2 - H225		
Eye Irrit. 2 - H319		
STOT SE 3 - H336		

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

**Composition comments**      The information in this section has changed since the last version.

### 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.
<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Keep affected person under observation.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
<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. Rinse with water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

**General information**      No specific symptoms noted.

#### 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**      Extinguish with the following media: Foam, carbon dioxide or dry powder. Dry chemicals, sand, dolomite etc.

#### 5.2. Special hazards arising from the substance or mixture

<b>Specific hazards</b>	During fire, gases hazardous to health may be formed. No unusual fire or explosion hazards noted.
<b>Hazardous combustion products</b>	Carbon dioxide (CO <sub>2</sub> ). Carbon monoxide (CO).

#### 5.3. Advice for firefighters

**Protective actions during firefighting**      Move containers from fire area if it can be done without risk. No specific firefighting precautions known. Control run-off water by containing and keeping it out of sewers and watercourses.

### SECTION 6: Accidental release measures

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

## NITOPROOF UVR TOPCOAT BASE

**Personal precautions** For personal protection, see Section 8.

### 6.2. Environmental precautions

**Environmental precautions** Avoid the spillage or runoff entering drains, sewers or watercourses.

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

**Methods for cleaning up** Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. 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. For waste disposal, see Section 13.

### 6.4. Reference to other sections

**Reference to other sections** For waste disposal, see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** For professional users only. Good personal hygiene procedures should be implemented.

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

**Storage precautions** Store in tightly-closed, original container in a dry, cool and well-ventilated place.

**Storage class** Chemical storage.

### 7.3. Specific end use(s)

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

## SECTION 8: Exposure controls/Personal protection

### 8.1. Control parameters

#### Occupational exposure limits

#### **2-METHOXY-1-METHYLETHYL ACETATE**

Long-term exposure limit (8-hour TWA): WEL 50 ppm 274 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 100 ppm 548 mg/m<sup>3</sup>

Sk

#### **ETHYL ACETATE**

Long-term exposure limit (8-hour TWA): WEL 200 ppm

Short-term exposure limit (15-minute): WEL 400 ppm

WEL = Workplace Exposure Limit

Sk = Can be absorbed through skin.

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

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 275 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 153.5 mg/kg bw/day General population - Inhalation; Long term systemic effects: 33 mg/m <sup>3</sup> General population - Dermal; Long term systemic effects: 54.8 mg/kg bw/day
<b>PNEC</b>	- Aqua, Fresh water; 0.635 mg/l - Aqua, marine water; 0.0635 mg/l

#### **ETHYL ACETATE (CAS: 141-78-6)**

## NITOPROOF UVR TOPCOAT BASE

<b>DNEL</b>	Industry - Inhalation; Long term systemic effects, local effects: 734 mg/m <sup>3</sup> Industry - Inhalation; Short term systemic effects, local effects: 1468 mg/m <sup>3</sup> Industry - Dermal; Long term systemic effects: 63 mg/kg/day
<b>PNEC</b>	- marine water; 0.024 mg/l - Fresh water; 0.24 mg/l - Sediment (Marinewater); 0.115 mg/kg - Sediment (Freshwater); 1.15 mg/kg

### ACETYLACETONE (CAS: 123-54-6)

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 84 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 12 mg/kg bw/day General population - Oral; Long term systemic effects: 7 mg/kg bw/day
<b>PNEC</b>	- Fresh water; 0.2 mg/l Aqua - marine water; 0.02 mg/l

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

#### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.

#### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Polyvinyl chloride (PVC). Rubber (natural, latex).

#### Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact. Wear apron or protective clothing in case of contact.

#### Hygiene measures

Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

#### Respiratory protection

No specific recommendations.

## SECTION 9: Physical and chemical properties

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

<b>Appearance</b>	Liquid.
<b>Colour</b>	Various colours.
<b>Odour</b>	Characteristic.
<b>Odour threshold</b>	Not determined.
<b>pH</b>	Not applicable.
<b>Melting point</b>	Not determined.
<b>Initial boiling point and range</b>	Not determined.
<b>Flash point</b>	Not applicable.

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<b>Evaporation rate</b>	Not determined.
<b>Evaporation factor</b>	Not determined.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	Not determined.
<b>Other flammability</b>	Not applicable.
<b>Vapour pressure</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Relative density</b>	~ 1.08 g/cm <sup>3</sup> @ 20 °C
<b>Bulk density</b>	Not applicable.
<b>Solubility(ies)</b>	Insoluble in water.
<b>Partition coefficient</b>	Not determined.
<b>Auto-ignition temperature</b>	Not determined.
<b>Decomposition Temperature</b>	Not determined.
<b>Viscosity</b>	Not determined.
<b>Explosive properties</b>	Not considered to be explosive.
<b>Explosive under the influence of a flame</b>	Not considered to be explosive.
<b>Oxidising properties</b>	Does not meet the criteria for classification as oxidising.

### 9.2. Other information

**Other information** No data available.

## 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.

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** None known.

### 10.4. Conditions to avoid

**Conditions to avoid** Avoid excessive heat for prolonged periods of time.

### 10.5. Incompatible materials

**Materials to avoid** Strong oxidising agents.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Does not decompose when used and stored as recommended.

## SECTION 11: Toxicological information

## NITOPROOF UVR TOPCOAT BASE

### 11.1. Information on toxicological effects

**Toxicological effects**                      This product has low toxicity.

#### Acute toxicity - dermal

**ATE dermal (mg/kg)**                      60,000.0

#### Acute toxicity - inhalation

**ATE inhalation (dusts/mists  
mg/l)**                                      100.0

**General information**                      No specific health hazards known.

**Medical symptoms**                      No specific symptoms noted, but this chemical may still have adverse health impact, either in general or on certain individuals.

### Toxicological information on ingredients.

#### 2-METHOXY-1-METHYLETHYL ACETATE

##### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub>  
mg/kg)**                                      8,532.0

**Species**                                      Rat

##### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub>  
mg/kg)**                                      5,000.0

**Species**                                      Rabbit

#### ETHYL ACETATE

##### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub>  
mg/kg)**                                      5,620.0

**Species**                                      Rat

##### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub>  
mg/kg)**                                      18,000.0

**Species**                                      Rabbit

##### Specific target organ toxicity - single exposure

**STOT - single exposure**                      May cause drowsiness or dizziness.

### **SECTION 12: Ecological information**

**Ecotoxicity**                                      The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

#### 12.1. Toxicity

**Toxicity**                                      Not expected to be ecotoxic to fish/daphnia/algae

### Ecological information on ingredients.

## NITOPROOF UVR TOPCOAT BASE

### 2-METHOXY-1-METHYLETHYL ACETATE

#### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 100-180 mg/l, Oncorhynchus mykiss (Rainbow trout)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 500 mg/l, Daphnia magna

### ETHYL ACETATE

#### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 350 - 600 mg/l, Oncorhynchus mykiss (Rainbow trout)

LC<sub>50</sub>, 96 hours: 220 - 250 mg/l, Pimephales promelas (Fat-head Minnow)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 560 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 24 hours: 4300 mg/l, Freshwater algae  
EC<sub>50</sub>, 72 hours: 1800 - 3200 mg/l, Selenastrum capricornutum

### 12.2. Persistence and degradability

**Persistence and degradability** There are no data on the degradability of this product.

### Ecological information on ingredients.

### ETHYL ACETATE

**Biodegradation** - Degradation (%) 79:  
The substance is readily biodegradable.

### 12.3. Bioaccumulative potential

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

**Partition coefficient** Not determined.

### Ecological information on ingredients.

### ETHYL ACETATE

**Bioaccumulative potential** BCF: 30,

### 12.4. Mobility in soil

**Mobility** Insoluble in water. Not considered mobile.

### 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.

### 12.6. Other adverse effects

**Other adverse effects** None known.

## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

**General information** When handling waste, the safety precautions applying to handling of the product should be considered.

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

## NITOPROOF UVR TOPCOAT BASE

### SECTION 14: Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

#### 14.1. UN number

Not applicable.

#### 14.2. UN proper shipping name

Not applicable.

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

No transport warning sign required.

#### 14.4. Packing group

Not applicable.

#### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**

No.

#### 14.6. Special precautions for user

Not applicable.

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

**Transport in bulk according to** Not applicable.

**Annex II of MARPOL 73/78  
and the IBC Code**

### SECTION 15: Regulatory information

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

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

**EU legislation** Commission Regulation (EU) No 453/2010 of 20 May 2010.  
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).  
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).

**Guidance** Workplace Exposure Limits EH40.  
Respiratory protective equipment at work (HSG53).

**Authorisations (Annex XIV  
Regulation 1907/2006)** No specific authorisations are known for this product.

**Restrictions (Annex XVII  
Regulation 1907/2006)** No specific restrictions on use are known for this product.

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### SECTION 16: Other information

**General information** Only trained personnel should use this material. For professional users only.



## NITOPROOF UVR TOPCOAT BASE

<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Revision date</b>	21/11/2019
<b>Revision</b>	3c
<b>Supersedes date</b>	11/11/2019
<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

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.



## SAFETY DATA SHEET NITOPROOF UVR TOPCOAT HARDENER

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

#### 1.1. Product identifier

**Product name** NITOPROOF UVR TOPCOAT HARDENER

**Product number** 1982500 UK9, 1982501 UK9, 1982505 UK9, 1982506 UK9, 1982510 UK9, 1982511 UK9, 1982520 UK9, 1982521 UK9, 1982525 UK9, 1982526 UK9, 1982530 UK9, 1982531 UK9, 1982535 UK9, 1982536 UK9

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

**Identified uses** Hardener component for Polyurethane based floor-coating system.

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

**Supplier** Fosroc Limited  
Drayton Manor Business Park  
Coleshill Road  
Tamworth  
Staffordshire  
B78 3XN  
England  
Tel: +44 (0) 1827 262222  
Fax: +44 (0) 1827 262444  
enquiryuk@fosroc.com

#### 1.4. Emergency telephone number

**Emergency telephone** +44 (0) 1827 265 279 (Monday-Sunday 24 hours a day)

### SECTION 2: Hazards identification

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

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

**Physical hazards** Not Classified

**Health hazards** Acute Tox. 4 - H332 Resp. Sens. 1 - H334 Skin Sens. 1 - H317

**Environmental hazards** Not Classified

**Human health** Contains non-volatile isocyanate. Heating may generate vapours which irritate the respiratory system. May cause respiratory allergy.

#### 2.2. Label elements

##### Hazard pictograms



**Signal word** Danger

## NITOPROOF UVR TOPCOAT HARDENER

<b>Hazard statements</b>	H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H317 May cause an allergic skin reaction.
<b>Precautionary statements</b>	P261 Avoid breathing vapour/ spray. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P501 Dispose of contents/ container in accordance with national regulations.
<b>Supplemental label information</b>	EUH204 Contains isocyanates. May produce an allergic reaction.
<b>Contains</b>	ALIPHATIC POLYISOCYANATE , HEXAMETHYLENE-DI-ISOCYANATE
<b>Supplementary precautionary statements</b>	P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P284 [In case of inadequate ventilation] wear respiratory protection. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor. P362+P364 Take off contaminated clothing and wash it before reuse. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.

### 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>ALIPHATIC POLYISOCYANATE</b>	<b>90 - 100%</b>
CAS number: 28182-81-2	EC number: 500-060-2
<b>Classification</b>	
Acute Tox. 4 - H332	
Skin Sens. 1 - H317	
<b>HEXAMETHYLENE-DI-ISOCYANATE</b>	<b>0.5 - 1%</b>
CAS number: 822-06-0	EC number: 212-485-8
	REACH registration number: 01-2119457571-37-0000
<b>Classification</b>	
Acute Tox. 3 - H331	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Resp. Sens. 1 - H334	
Skin Sens. 1 - H317	
STOT SE 3 - H335	

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**                      Immediately remove contaminated clothing. Contaminated clothing and shoes must be discarded.

## NITOPROOF UVR TOPCOAT HARDENER

<b>Inhalation</b>	Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
<b>Skin contact</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water or use an approved skin cleanser. Preferably, use a cleanser based on polyethylene glycol. Get medical attention promptly if symptoms occur after washing.
<b>Eye contact</b>	Remove any contact lenses and open eyelids wide apart. Rinse with water. Continue to rinse for at least 15 minutes and get medical attention.

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

<b>General information</b>	Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Treat symptomatically. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	Upper respiratory irritation. May cause sensitisation by inhalation.
<b>Skin contact</b>	Skin irritation. May cause sensitisation by skin contact.

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

<b>Notes for the doctor</b>	Treat symptomatically.
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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Extinguish with foam, carbon dioxide or dry powder. Larger fires: Water spray.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.

### 5.2. Special hazards arising from the substance or mixture

<b>Specific hazards</b>	Containers can burst violently or explode when heated, due to excessive pressure build-up.
<b>Hazardous combustion products</b>	Fire or high temperatures create: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ). Oxides of nitrogen. Isocyanate vapours. Hydrogen cyanide (HCN).

### 5.3. Advice for firefighters

<b>Protective actions during firefighting</b>	Control run-off water by containing and keeping it out of sewers and watercourses.
<b>Special protective equipment for firefighters</b>	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

<b>Personal precautions</b>	Wear protective clothing as described in Section 8 of this safety data sheet. Use suitable respiratory protection if ventilation is inadequate. In case of spills, beware of slippery floors and surfaces.
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### 6.2. Environmental precautions

<b>Environmental precautions</b>	Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
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### 6.3. Methods and material for containment and cleaning up

## NITOPROOF UVR TOPCOAT HARDENER

**Methods for cleaning up** Stop leak if possible without risk. DO NOT touch spilled material! Clean-up personnel should use respiratory and/or liquid contact protection. Provide ventilation and confine spill. Do not allow runoff to sewer. Absorb in vermiculite, dry sand or earth and place into containers. Inform Authorities if large amounts are involved. Do not seal the containers. Keep damp and in the open air for at least seven days.

### 6.4. Reference to other sections

**Reference to other sections** For waste disposal, see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Avoid contact with skin and eyes. Avoid inhalation of vapours. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using this product. Contaminated clothing and shoes must be discarded.

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

**Storage precautions** Store in tightly-closed, original container in a dry, cool and well-ventilated place.

**Storage class** Chemical storage.

### 7.3. Specific end use(s)

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

## SECTION 8: Exposure controls/Personal protection

### 8.1. Control parameters

#### Occupational exposure limits

#### HEXAMETHYLENE-DI-ISOCYANATE

Long-term exposure limit (8-hour TWA): WEL 0.02 mg/m<sup>3</sup>(Sen)

Short-term exposure limit (15-minute): WEL 0.07 mg/m<sup>3</sup>(Sen)

as NCO

WEL = Workplace Exposure Limit

#### ALIPHATIC POLYISOCYANATE (CAS: 28182-81-2)

**DNEL** Workers - Inhalation; Long term local effects: 0.5 mg/m<sup>3</sup>  
Workers - Inhalation; Short term local effects: 1 mg/m<sup>3</sup>

**PNEC** Aqua - Fresh water; 0.127 mg/l  
Aqua - marine water; 0.0127 mg/l

#### HEXAMETHYLENE-DI-ISOCYANATE (CAS: 822-06-0)

**DNEL** Workers - Inhalation; Short term systemic effects: 0.07 mg/m<sup>3</sup>  
Workers - Inhalation; Long term systemic effects: 0.035 mg/m<sup>3</sup>  
Workers - Inhalation; Long term local effects: 0.035 mg/m<sup>3</sup>

**PNEC** - Fresh water; >0.0774 mg/l  
- marine water; >0.00774 mg/l  
- Sediment (Freshwater); >0.01334 mg/kg  
- Sediment (Marinewater); >0.001334 mg/kg  
- Soil; >0.0026 mg/kg  
- STP; 8.42 mg/l

## NITOPROOF UVR TOPCOAT HARDENER

### 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 tight-fitting, chemical splash goggles or face shield.

#### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Wear protective gloves made of the following material: Butyl rubber. Nitrile rubber. Viton rubber (fluoro rubber).

#### Other skin and body protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

#### Hygiene measures

Provide eyewash station and safety shower. Discard contaminated shoes and clothing. Do not smoke in work area. Do not eat, drink or smoke when using this product. Wash promptly with soap and water if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.

#### Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. When spraying, wear a suitable supplied-air respirator. For short periods, a combination of charcoal filter and particulate filter is recommended.

## SECTION 9: Physical and chemical properties

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

Appearance	Liquid.
Colour	Yellowish.
Odour	Slight.
Odour threshold	Not determined.
pH	Not applicable.
Melting point	Not determined.
Initial boiling point and range	Not determined.
Flash point	Not determined.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not determined.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	1.12 at 20°C
Bulk density	Not applicable.

## NITOPROOF UVR TOPCOAT HARDENER

<b>Solubility(ies)</b>	Immiscible with water.
<b>Partition coefficient</b>	Not determined.
<b>Auto-ignition temperature</b>	Not determined.
<b>Decomposition Temperature</b>	Not determined.
<b>Viscosity</b>	Not determined.
<b>Explosive properties</b>	Not considered to be explosive.
<b>Explosive under the influence of a flame</b>	Not considered to be explosive.
<b>Oxidising properties</b>	Does not meet the criteria for classification as oxidising.

### 9.2. Other information

<b>Other information</b>	No data available.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

<b>Reactivity</b>	The following materials may react with the product: Water, forming CO <sub>2</sub> ; in closed containers, risk of bursting owing to pressure increase.
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### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
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### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	Exothermic reaction with amines and alcohols; reacts slowly with water forming CO <sub>2</sub> , in closed containers risk of bursting owing to increase of pressure.
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### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid excessive heat for prolonged periods of time.
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### 10.5. Incompatible materials

<b>Materials to avoid</b>	Water, moisture. Strong oxidising agents.
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### 10.6. Hazardous decomposition products

<b>Hazardous decomposition products</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen.
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - inhalation

<b>ATE inhalation (vapours mg/l)</b>	600.0
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<b>ATE inhalation (dusts/mists mg/l)</b>	1.51
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<b>Inhalation</b>	May cause respiratory system irritation.
<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Skin contact</b>	Irritating to skin. May cause sensitisation by skin contact.
<b>Eye contact</b>	Irritating to eyes.

## NITOPROOF UVR TOPCOAT HARDENER

### Toxicological information on ingredients.

#### ALIPHATIC POLYISOCYANATE

##### Acute toxicity - oral

Notes (oral LD<sub>50</sub>) LD<sub>50</sub> >2500 mg/kg bw, Oral, Rat

##### Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) LD<sub>50</sub> >2000 mg/kg bw, Dermal, Rat

##### Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l) 1.5

#### HEXAMETHYLENE-DI-ISOCYANATE

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 960.0

Species Rat

##### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l) 0.124

Species Rat

ATE inhalation (vapours mg/l) 3.0

### SECTION 12: Ecological information

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

#### 12.1. Toxicity

##### Ecological information on ingredients.

#### ALIPHATIC POLYISOCYANATE

##### Acute aquatic toxicity

Acute toxicity - aquatic plants EC<sub>50</sub>, 72 hours: >1000 mg/l, *Desmodesmus subspicatus*

Acute toxicity - microorganisms EC<sub>50</sub>, 3 hour: 3828 mg/l, Activated sludge

#### 12.2. Persistence and degradability

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

##### Ecological information on ingredients.

#### HEXAMETHYLENE-DI-ISOCYANATE

Stability (hydrolysis) - Half-life : 0.23 hour @ 23°C

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential** Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.



## NITOPROOF UVR TOPCOAT HARDENER

**Partition coefficient** Not determined.

### Ecological information on ingredients.

#### HEXAMETHYLENE-DI-ISOCYANATE

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

### 12.4. Mobility in soil

**Mobility** The product is insoluble in water.

### 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.

### 12.6. Other adverse effects

**Other adverse effects** None known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** Waste is classified as hazardous waste.

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

**Waste class** For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

## SECTION 14: Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

### 14.1. UN number

Not applicable.

### 14.2. UN proper shipping name

Not applicable.

### 14.3. Transport hazard class(es)

No transport warning sign required.

### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**  
No.

### 14.6. Special precautions for user

Not applicable.

### 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.

## NITOPROOF UVR TOPCOAT HARDENER

### SECTION 15: Regulatory information

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

<b>National regulations</b>	Control of Substances Hazardous to Health Regulations 2002 (as amended).
<b>EU legislation</b>	Commission Regulation (EU) No 453/2010 of 20 May 2010. 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). 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).
<b>Guidance</b>	Workplace Exposure Limits EH40. Approved Classification and Labelling Guide (Sixth edition) L131. Isocyanates: Health hazards and precautionary measures EH16. Respiratory protective equipment at work (HSG53).

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### SECTION 16: Other information

<b>General information</b>	Only trained personnel should use this material. For professional users only.
<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Revision date</b>	21/11/2019
<b>Revision</b>	3b
<b>Supersedes date</b>	26/05/2017
<b>SDS number</b>	12808
<b>Hazard statements in full</b>	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H331 Toxic if inhaled. H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation.

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.