



## SAFETY DATA SHEET NITOFLOR FC150 BASE

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

#### 1.1. Product identifier

**Product name** NITOFLOR FC150 BASE

**Product number** A1845092 UK9,A1845184 UK9,A1845245 UK9,A1845263 UK9,A1845382 UK9,A1845482 UK9,A1845507 UK9,A1845902 UK9,A1845923 UK9

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

**Identified uses** Base component of two part epoxy 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  
enquiryuk@fosroc.com  
Tel. +44 (0) 1827 262222  
Fax. +44 (0) 1827 262444

#### 1.4. Emergency telephone number

**Emergency telephone** +44 (0) 1827 265 279 (08.30 to 17.00hrs Mon - Thu; 08.30 to 16.00hrs Fri)

### SECTION 2: Hazards identification

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

##### Classification

**Physical hazards** Not Classified

**Health hazards** Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 STOT RE 2 - H373

**Environmental hazards** Aquatic Chronic 2 - H411

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

**Environmental** The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment. See Section 12 for additional information on ecological hazards.

#### 2.2. Label elements

##### Pictogram



**Signal word**

Warning

## NITOFLOR FC150 BASE

<b>Hazard statements</b>	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H373 May cause damage to organs through prolonged or repeated exposure if inhaled. H411 Toxic to aquatic life with long lasting effects.
<b>Precautionary statements</b>	P280 Wear protective gloves/protective clothing/eye protection/face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332+P313 If skin irritation occurs: Get medical advice/attention. P501 Dispose of contents/container in accordance with national regulations.
<b>Supplemental label information</b>	EUH205 Contains epoxy constituents. May produce an allergic reaction.
<b>Contains</b>	SILICA FLOUR (4-50 Micron), EPOXY RESIN (Type A) (Number average MW <= 700 ), EPOXY RESIN (Type F) (Number average MW <= 700 ), ALKYL GLYCIDYL ETHER C12/C14
<b>Supplementary precautionary statements</b>	P260 Do not breathe vapour/spray. P261 Avoid breathing vapour/spray. P264 Wash contaminated skin thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P314 Get medical advice/attention if you feel unwell. P321 Specific treatment (see medical advice on this label). P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse. P391 Collect spillage.

### 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>SILICA FLOUR (4-50 Micron)</b>	<b>30-60%</b>
CAS number: 14808-60-7	
<b>Classification</b> STOT RE 2 - H373	
<b>EPOXY RESIN (Type A) (Number average MW &lt;= 700 )</b>	<b>10-30%</b>
CAS number: 25068-38-6	EC number: 500-033-5
<b>Classification</b> Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	

## NITOFLOR FC150 BASE

<b>EPOXY RESIN (Type F) (Number average MW &lt;= 700 )</b>	<b>10-30%</b>
CAS number: 9003-36-5	
<b>Classification</b> Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	
<b>ALKYL GLYCIDYL ETHER C12/C14</b>	<b>5-10%</b>
CAS number: 68609-97-2                      EC number: 271-846-8	
<b>Classification</b> Skin Irrit. 2 - H315 Skin Sens. 1 - H317	
<b>DI-ISO-DECYL PHTHALATE</b>	<b>1-5%</b>
CAS number: 68515-49-1                      EC number: 271-091-4	
<b>Classification</b> Not Classified	

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>	Get medical attention if any discomfort continues.
<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>	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. Rinse mouth thoroughly with water. Give plenty of water to drink. Keep affected person under observation. Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.
<b>Skin contact</b>	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
<b>Eye contact</b>	Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. 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**

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	May cause respiratory system irritation.
<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Skin contact</b>	Skin irritation. May cause sensitisation or allergic reactions in sensitive individuals.
<b>Eye contact</b>	Irritation of eyes and mucous membranes.

## NITOFLOR FC150 BASE

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

**Notes for the doctor** No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

**Suitable extinguishing media** Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

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

**Specific hazards** No unusual fire or explosion hazards noted.

**Hazardous combustion products** Carbon monoxide (CO). Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

#### 5.3. Advice for firefighters

**Protective actions during firefighting** No specific firefighting precautions known. Control run-off water by containing and keeping it out of sewers and 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** Wear protective clothing as described in Section 8 of this safety data sheet.

#### 6.2. Environmental precautions

**Environmental precautions** Avoid 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.

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

**Methods for cleaning up** Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

#### 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** Provide adequate ventilation. Avoid the formation of mists. Avoid inhalation of vapours/spray and contact with skin and eyes.

#### 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. Keep only in the original container.

**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.

## NITOFLOR FC150 BASE

### SECTION 8: Exposure Controls/personal protection

#### 8.1. Control parameters

##### Occupational exposure limits

##### DI-ISO-DECYL PHTHALATE

Long-term exposure limit (8-hour TWA): WEL 5 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

##### EPOXY RESIN (Type A) (Number average MW <= 700 ) (CAS: 25068-38-6)

<b>DNEL</b>	Workers - Inhalation; Short term systemic effects: 12.25 mg/m <sup>3</sup> Workers - Inhalation; Long term systemic effects: 12.25 mg/m <sup>3</sup>
<b>PNEC</b>	- Fresh water; 0.006 mg/l

##### EPOXY RESIN (Type F) (Number average MW <= 700 ) (CAS: 9003-36-5)

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 29.39 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 104.15 mg/kg/day Workers - Dermal; Short term local effects: 8.3 µg/cm <sup>2</sup>
<b>PNEC</b>	- Fresh water; 0.003 mg/l - Marine water; 0.0003 mg/l - STP; 10 mg/l

##### ALKYL GLYCIDYL ETHER C12/C14 (CAS: 68609-97-2)

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 3.6 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 1 mg/kg/day
<b>PNEC</b>	- Fresh water; 0.0072 mg/l - Marine water; 0.00072 mg/l

#### 8.2. Exposure controls

##### Protective equipment



##### Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

##### 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 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.

##### Other skin and body protection

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

## NITOFLOR FC150 BASE

<b>Hygiene measures</b>	Wash hands 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. Do not eat, drink or smoke when using this product. Do not smoke in work area.
<b>Respiratory protection</b>	No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.

### SECTION 9: Physical and Chemical Properties

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

<b>Appearance</b>	Viscous liquid.
<b>Colour</b>	Various colours.
<b>Odour</b>	Almost odourless.
<b>Odour threshold</b>	Not determined.
<b>pH</b>	Not applicable.
<b>Melting point</b>	Not determined.
<b>Evaporation rate</b>	Not determined.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	Not determined.
<b>Relative density</b>	1.62 @ at 23°C
<b>Bulk density</b>	Not applicable.
<b>Solubility(ies)</b>	Insoluble in water.
<b>Viscosity</b>	1500 P @ at 23°C
<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>	Not determined.
--------------------------	-----------------

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

<b>Reactivity</b>	The following materials may react with the product: Acids. Alkalis. Amines.
-------------------	---

#### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures.
------------------	--

#### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	Under normal conditions of storage and use, no hazardous reactions will occur.
---	--

#### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid excessive heat for prolonged periods of time.
----------------------------	---

## NITOFLOR FC150 BASE

### 10.5. Incompatible materials

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

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** When heated, vapours/gases hazardous to health may be formed.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

**Inhalation** Gas or vapour may irritate the respiratory system.

**Ingestion** May cause discomfort if swallowed.

**Skin contact** Irritating to skin. May cause sensitisation by skin contact.

**Eye contact** Irritating to eyes.

**Route of entry** Skin and/or eye contact

### Toxicological information on ingredients.

#### SILICA FLOUR (4-50 Micron)

##### Carcinogenicity

**IARC carcinogenicity** IARC Group 1 Carcinogenic to humans.

#### EPOXY RESIN (Type A) (Number average MW <= 700 )

##### Acute toxicity - oral

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

**Species** Rat

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

**ATE oral (mg/kg)** 5,000.0

##### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 20,000.0

**Species** Rabbit

**ATE dermal (mg/kg)** 20,000.0

##### Skin corrosion/irritation

**Animal data** (Rabbit)Moderate Irritation

##### Skin sensitisation

**Skin sensitisation** Sensitisation possible through skin contact.

#### EPOXY RESIN (Type F) (Number average MW <= 700 )

##### Acute toxicity - oral

## NITOFLOR FC150 BASE

Notes (oral LD<sub>50</sub>)LD<sub>50</sub> >5000 mg/kg, Oral, Rat

### SECTION 12: Ecological Information

**Ecotoxicity** Dangerous for the environment. May cause long-term adverse effects in the aquatic environment.

#### 12.1. Toxicity

**Toxicity** Toxic to aquatic organisms.

#### Ecological information on ingredients.

##### EPOXY RESIN (Type A) (Number average MW <= 700 )

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 3.6 mg/l, Leuciscus idus (Golden orfe)  
LC<sub>50</sub>, 96 hours: 2 mg/l, Onchorhynchus mykiss (Rainbow trout)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 1.8 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** ErC50, 72 hours: 11 mg/l, Scenedesmus capricornutum (fresh water algae)

##### EPOXY RESIN (Type F) (Number average MW <= 700 )

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: >1000 mg/l, Onchorhynchus mykiss (Rainbow trout)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: >1000 mg/l, Daphnia magna

#### 12.2. Persistence and degradability

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

#### Ecological information on ingredients.

##### EPOXY RESIN (Type A) (Number average MW <= 700 )

**Persistence and degradability** The product is not readily biodegradable.

#### 12.3. Bioaccumulative potential

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

#### Ecological information on ingredients.

##### EPOXY RESIN (Type A) (Number average MW <= 700 )

**Partition coefficient** log Pow: 3.242

##### EPOXY RESIN (Type F) (Number average MW <= 700 )

**Partition coefficient** : log Pow = Approximately 3.8 at 25 C

#### 12.4. Mobility in soil

**Mobility** Not applicable.

#### Ecological information on ingredients.



## NITOFLOR FC150 BASE

### EPOXY RESIN (Type A) (Number average MW <= 700 )

**Mobility** Potential for mobility is low.

**Adsorption/desorption coefficient** Soil - Koc: 445 @ °C

#### 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.

### EPOXY RESIN (Type A) (Number average MW <= 700 )

**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.

### **SECTION 14: Transport information**

#### 14.1. UN number

**UN No. (ADR/RID)** 3082

**UN No. (IMDG)** 3082

**UN No. (ICAO)** 3082

**UN No. (ADN)** 3082

#### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A & F BLEND)

**Proper shipping name (IMDG)** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A & F BLEND)

**Proper shipping name (ICAO)** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A & F BLEND)

**Proper shipping name (ADN)** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A & F BLEND)

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

**ADR/RID class** 9

**ADR/RID classification code** M6

**ADR/RID label** 9

## NITOFLOR FC150 BASE

IMDG class	9
ICAO class/division	9
ADN class	9

### Transport labels



### 14.4. Packing group

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

### 14.5. Environmental hazards

#### Environmentally hazardous substance/marine pollutant



### 14.6. Special precautions for user

EmS	F-A, S-F
ADR transport category	3
Emergency Action Code	•3Z
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(E)

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 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

<b>National regulations</b>	The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).
<b>EU legislation</b>	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 453/2010 of 20 May 2010.

## NITOFLOR FC150 BASE

**Guidance** Workplace Exposure Limits EH40.  
Approved Classification and Labelling Guide (Sixth edition) L131.  
Safety Data Sheets for Substances and Preparations.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### SECTION 16: Other information

<b>General information</b>	For professional users only. The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.
<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Revision date</b>	08/12/2015
<b>Revision</b>	2
<b>Supersedes date</b>	21/11/2012
<b>SDS number</b>	12434
<b>Hazard statements in full</b>	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H373 May cause damage to organs through prolonged or repeated exposure if inhaled. H373 May cause damage to organs (Lungs) through prolonged or repeated exposure if inhaled. H411 Toxic to aquatic life with long lasting effects.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.



## SAFETY DATA SHEET NITOFLOR FC150 HARDENER

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

#### 1.1. Product identifier

**Product name** NITOFLOR FC150 HARDENER  
**Product number** A1845205 UK9

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

**Identified uses** Hardener component of two part epoxy 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  
enquiryuk@fosroc.com  
Tel. +44 (0) 1827 262222  
Fax. +44 (0) 1827 262444

#### 1.4. Emergency telephone number

**Emergency telephone** +44 (0) 1827 265 279 (08.30 to 17.00hrs Mon - Thu; 08.30 to 16.00hrs Fri)

### SECTION 2: Hazards identification

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

##### Classification

**Physical hazards** Not Classified  
**Health hazards** Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317  
**Environmental hazards** Aquatic Chronic 3 - H412

##### Environmental

The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

#### 2.2. Label elements

##### Pictogram



##### Signal word

Danger

## NITOFLOR FC150 HARDENER

<b>Hazard statements</b>	H302+H332 Harmful if swallowed or if inhaled. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H412 Harmful to aquatic life with long lasting effects.
<b>Precautionary statements</b>	P261 Avoid breathing vapour/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/container in accordance with national regulations.
<b>Contains</b>	BENZYL ALCOHOL, ISOPHORONEDIAMINE, m-PHENYLENEBIS( METHYLAMINE), 1,3-BENZENEDIMETHANAMINE POLYMER WITH BISPHENOL-A-EPICHLORHYDRIN MW<700
<b>Supplementary precautionary statements</b>	P260 Do not breathe vapour/spray. P264 Wash contaminated skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 Call a POISON CENTER/doctor if you feel unwell. P321 Specific treatment (see medical advice on this label). P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse. P363 Wash contaminated clothing before reuse. 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>BENZYL ALCOHOL</b>		<b>25 - 50%</b>
CAS number: 100-51-6	EC number: 202-859-9	REACH registration number: 01-2119492630-38-xxxx
<b>Classification</b>		
Acute Tox. 4 - H302		
Acute Tox. 4 - H332		

**NITOFLOR FC150 HARDENER**

<b>ISOPHORONEDIAMINE</b>	<b>10 - 25%</b>
CAS number: 2855-13-2	EC number: 220-666-8
	REACH registration number: 01-2119514687-32-xxxx
<b>Classification</b>	
Acute Tox. 4 - H302	
Acute Tox. 4 - H312	
Skin Corr. 1B - H314	
Skin Sens. 1 - H317	
Aquatic Chronic 3 - H412	
<b>m-PHENYLENEBIS( METHYLAMINE)</b>	<b>10 - 25%</b>
CAS number: 1477-55-0	
<b>Classification</b>	
Acute Tox. 4 - H302	
Acute Tox. 4 - H332	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
Aquatic Chronic 3 - H412	
<b>SALICYLIC ACID</b>	<b>2.5 - 10%</b>
CAS number: 69-72-7	
<b>Classification</b>	
Acute Tox. 4 - H302	
Eye Dam. 1 - H318	
<b>1,3-BENZENEDIMETHANAMINE POLYMER WITH BISPHENOL-A-EPICHLORHYDRIN MW&lt;700</b>	<b>2.5 - 10%</b>
CAS number: 113930-69-1	
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>
Skin Corr. 1A - H314	Xn;R22. C;R35. R43.
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
Aquatic Chronic 2 - H411	

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

###### General information

Immediately remove contaminated clothing.

###### Inhalation

Get medical attention. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

## NITOFLOR FC150 HARDENER

<b>Ingestion</b>	Do not induce vomiting. Never give anything by mouth to an unconscious person. Do not induce vomiting. Remove affected person from source of contamination. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. 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. Wash skin thoroughly with soap and water. 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>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	May cause damage to mucous membranes in nose, throat, lungs and bronchial system.
<b>Ingestion</b>	May cause chemical burns in mouth and throat.
<b>Skin contact</b>	Chemical burns.
<b>Eye contact</b>	Corneal damage.

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

<b>Notes for the doctor</b>	No specific recommendations. If in doubt, get medical attention promptly.
-----------------------------	---

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Extinguish with foam, carbon dioxide, dry powder or water fog.
<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>	Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ). Nitrous gases (NO <sub>x</sub> ). No unusual fire or explosion hazards noted.
<b>Hazardous combustion products</b>	Heating may generate the following products: Toxic and corrosive gases or vapours.

### 5.3. Advice for firefighters

<b>Protective actions during firefighting</b>	No specific firefighting precautions known.
<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.
-----------------------------	---

### 6.2. Environmental precautions

<b>Environmental precautions</b>	Avoid or minimise the creation of any environmental contamination.
----------------------------------	--

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

## NITOFLOR FC150 HARDENER

**Methods for cleaning up** Provide adequate ventilation. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Stop leak if possible without risk. DO NOT touch spilled material! Absorb in vermiculite, dry sand or earth and place into containers. Avoid the spillage or runoff entering drains, sewers or watercourses.

### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. Collect and dispose of spillage as indicated in Section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** 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.

### 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. Keep only in the original container.

**Storage class** Corrosive 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

**Ingredient comments** No exposure limits known for ingredient(s).

#### BENZYL ALCOHOL (CAS: 100-51-6)

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 90 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 9.5 mg/kg bw/day Workers - Dermal; systemic effects: 47 mg/kg bw/day
<b>PNEC</b>	- Fresh water; 1 mg/l - Marine water; 0.1 mg/l

#### ISOPHORONEDIAMINE (CAS: 2855-13-2)

<b>PNEC</b>	The product of hydrolysis (methanol) is readily biodegradable. Silicone content is not biodegradable. - Fresh water; 0.06 mg/l - Marine water; 0.006 mg/l
-------------	--

#### SALICYLIC ACID (CAS: 69-72-7)

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 5 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 2.3 mg/kg bw/day Workers - Inhalation; Long term local effects: 5 mg/m <sup>3</sup> General population - Inhalation; Long term systemic effects: 4 mg/m <sup>3</sup>
-------------	---



## NITOFLOR FC150 HARDENER

### PNEC

- Fresh water; 0.20 mg/l
- Marine water; 0.020 mg/l
- Sediment (Freshwater); 1.42 mg/kg dw
- Soil; 0.17 mg/kg dw
- STP; 16.2 mg/l

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

#### Eye/face protection

The following protection should be worn: Wear tight-fitting, chemical splash goggles or face shield.

#### Hand protection

Use protective gloves. Viton rubber (fluoro rubber). Nitrile rubber.

#### Other skin and body protection

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

#### Hygiene measures

Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

#### Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. 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	Liquid.
Colour	Yellow.
Odour	Amine.
Odour threshold	Not determined.
Melting point	Not determined.
Initial boiling point and range	>200°C @ 101 kPa
Flash point	>100°C
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.2 % Upper flammable/explosive limit: 13 %
Vapour pressure	0.01 kPa @ 20°C
Vapour density	Not determined.
Relative density	1.06 @ 23°C

## NITOFLOR FC150 HARDENER

<b>Bulk density</b>	Not applicable.
<b>Solubility(ies)</b>	Immiscible with water.
<b>Partition coefficient</b>	Not determined.
<b>Auto-ignition temperature</b>	380°C
<b>Decomposition Temperature</b>	Not determined.
<b>Viscosity</b>	200 mPa s @ 25°C
<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>	Not available.
--------------------------	----------------

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

<b>Reactivity</b>	The following materials may react with the product: Acids. Alkalis. Oxidising materials.
-------------------	--

### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures.
------------------	--

### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	The following materials may react with the product: Acids. Alkalis. Oxidising materials. Will not polymerise.
---	---

### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Not known.
----------------------------	------------

### 10.5. Incompatible materials

<b>Materials to avoid</b>	Strong oxidising agents.
---------------------------	--------------------------

### 10.6. Hazardous decomposition products

<b>Hazardous decomposition products</b>	Heating may generate the following products: Toxic and corrosive gases or vapours.
---	--

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

<b>ATE oral (mg/kg)</b>	521.03
-------------------------	--------

#### Acute toxicity - dermal

<b>ATE dermal (mg/kg)</b>	4,782.61
---------------------------	----------

#### Acute toxicity - inhalation

<b>ATE inhalation (gases ppm)</b>	9,000.0
-----------------------------------	---------

<b>ATE inhalation (vapours mg/l)</b>	15.49
--------------------------------------	-------

<b>ATE inhalation (dusts/mists mg/l)</b>	3.0
--	-----

## NITOFLOR FC150 HARDENER

<b>Inhalation</b>	Harmful by inhalation. May cause damage to mucous membranes in nose, throat, lungs and bronchial system.
<b>Ingestion</b>	Harmful if swallowed. May cause chemical burns in mouth, oesophagus and stomach.
<b>Skin contact</b>	Causes burns. Harmful in contact with skin. May cause sensitisation by skin contact.
<b>Eye contact</b>	Causes burns.
<b>Target organs</b>	Skin Eyes Respiratory system, lungs

### Toxicological information on ingredients.

#### BENZYL ALCOHOL

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub>) 1,620.0  
mg/kg)

Species Rat

ATE oral (mg/kg) 500.0

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub>) 2,000.0  
mg/kg)

Species Rabbit

#### ISOPHORONEDIAMINE

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub>) 1.03  
mg/kg)

Species Rat

ATE oral (mg/kg) 500.0

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub>) 1,840.0  
mg/kg)

Species Rabbit

ATE dermal (mg/kg) 1,100.0

#### m-PHENYLENEBIS( METHYLAMINE)

##### Acute toxicity - oral

Notes (oral LD<sub>50</sub>) LD<sub>50</sub> 930 mg/kg, Oral, Rat

ATE oral (mg/kg) 500.0

##### Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) LD<sub>50</sub> >3100 mg/kg, Dermal, Rabbit

##### Acute toxicity - inhalation

**NITOFLOR FC150 HARDENER**

**Notes (inhalation LC<sub>50</sub>)** LC<sub>50</sub> 1.34 mg/l, Inhalative, (Mist), Rat (OECD 403)

**ATE inhalation (vapours mg/l)** 11.0

**SALICYLIC ACID****Acute toxicity - oral**

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 891.0

**Species** Rat

**ATE oral (mg/kg)** 891.0

**Acute toxicity - dermal**

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

**Acute toxicity - inhalation**

**Notes (inhalation LC<sub>50</sub>)** LC<sub>50</sub> >0.9 mg/l, Inhalation, Rat

**SECTION 12: Ecological Information**

**Ecotoxicity** The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

**12.1. Toxicity**

**Toxicity** Ecotoxic to fish/daphnia/algae

**Ecological information on ingredients.****BENZYL ALCOHOL**

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 460 mg/l, Pimephales promelas (Fat-head Minnow)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 230 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 72 hours: 770 mg/l, Pseudokirchneriella subcapitata

**ISOPHORONEDIAMINE**

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 110 mg/l, Fish

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 23 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** IC<sub>50</sub>, 72 hours: 50 mg/l, Algae

**SALICYLIC ACID**

**Acute toxicity - fish** LC<sub>50</sub>, : 90 mg/l, Leuciscus idus (Golden orfe)  
LC<sub>50</sub>, 96 hours: 1.3 mg/l, Pimephales promelas (Fat-head Minnow)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 24 hours: 105 mg/l, Daphnia magna

## NITOFLOR FC150 HARDENER

### 12.2. Persistence and degradability

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

### 12.3. Bioaccumulative potential

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

**Partition coefficient** Not determined.

### 12.4. Mobility in soil

**Mobility** The product is immiscible with water and will sediment in water systems.

### 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.

### SALICYLIC ACID

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

### 12.6. Other adverse effects

**Other adverse effects** None known.

## 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. Note that fully cured material is not considered 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 material and any included combustible absorbent and containers should be suitable for incineration at an approved facility.

## SECTION 14: Transport information

### 14.1. UN number

**UN No. (ADR/RID)** 2735

**UN No. (IMDG)** 2735

**UN No. (ICAO)** 2735

**UN No. (ADN)** 2735

### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS ISOPHORONEDIAMINE, m-PHENYLENEBIS( METHYLAMINE))

**Proper shipping name (IMDG)** AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS ISOPHORONEDIAMINE, m-PHENYLENEBIS( METHYLAMINE))

**Proper shipping name (ICAO)** AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS ISOPHORONEDIAMINE, m-PHENYLENEBIS( METHYLAMINE))

**Proper shipping name (ADN)** AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS ISOPHORONEDIAMINE, m-PHENYLENEBIS( METHYLAMINE))

## NITOFLOR FC150 HARDENER

### 14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID classification code	C7
ADR/RID label	8
IMDG class	8
ICAO class/division	8
ADN class	8

#### Transport labels



### 14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ADN packing group	II
ICAO packing group	II

### 14.5. Environmental hazards

#### Environmentally hazardous substance/marine pollutant

No.

### 14.6. Special precautions for user

IMDG Code segregation group	18. Alkalis
EmS	F-A, S-B
ADR transport category	2
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

Not applicable.

## SECTION 15: Regulatory information

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

National regulations	Control of Substances Hazardous to Health Regulations 2002 (as amended).
EU legislation	Regulation (EC) No 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).

## NITOFLOR FC150 HARDENER

**Guidance** Workplace Exposure Limits EH40.  
Approved Classification and Labelling Guide (Sixth edition) L131.  
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>	07/12/2015
<b>Revision</b>	2
<b>Supersedes date</b>	21/11/2012
<b>SDS number</b>	12435
<b>Hazard statements in full</b>	H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H332 Harmful if inhaled. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.