

## SAFETY DATA SHEET

### NITODEK FS MEMBRANE RESIN

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

##### 1.1. Product identifier

Product name	NITODEK FS MEMBRANE RESIN
Chemical name	Polyurethane Resin
Product number	1800635UK9, 1800625UK9, 1800620UK9, 1800623UK9

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

Identified uses	Reaction Resin
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##### 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; 0.8.30 to 16.00hrs Fri)
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#### SECTION 2: Hazards identification

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

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

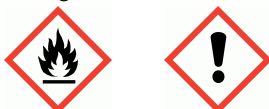
Physical hazards	Flam. Liq. 2 - H225
Health hazards	Skin Irrit. 2 - H315 Skin Sens. 1 - H317 STOT SE 3 - H335
Environmental hazards	Not Classified

**Human health** The product contains a sensitising substance. May cause sensitisation or allergic reactions in sensitive individuals.

**Physicochemical** The product is highly flammable. Vapours may form explosive mixtures with air.

##### 2.2. Label elements

###### Pictogram



## NITODEK FS MEMBRANE RESIN

<b>Signal word</b>	Danger
<b>Hazard statements</b>	H225 Highly flammable liquid and vapour. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.
<b>Precautionary statements</b>	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. 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. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P501 Dispose of contents/ container in accordance with national regulations.
<b>Contains</b>	2-ETHYLHEXYL ACRYLATE, METHYL METHACRYLATE
<b>Supplementary precautionary statements</b>	P240 Ground/ bond container and receiving equipment. P241 Use explosion-proof electrical equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. 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). P332+P313 If skin irritation occurs: Get medical advice/ attention. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. P403+P235 Store in a well-ventilated place. Keep cool. 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>2-ETHYLHEXYL ACRYLATE</b>	<b>25 - 50%</b>
CAS number: 103-11-7	EC number: 203-080-7
<b>Classification</b> Skin Irrit. 2 - H315 Skin Sens. 1 - H317 STOT SE 3 - H335 Aquatic Chronic 3 - H412	<b>Classification (67/548/EEC or 1999/45/EC)</b> R43 Xi;R37/38

## NITODEK FS MEMBRANE RESIN

<b>METHYL METHACRYLATE</b>		<b>10-25%</b>
CAS number: 80-62-6	EC number: 201-297-1	REACH registration number: 01-2119452498-28-0000
<b>Classification</b>		
Flam. Liq. 2 - H225		
Skin Irrit. 2 - H315		
Skin Sens. 1 - H317		
STOT SE 3 - H335		
<b>1,1'-(p-tolylimino)dipropan-2-ol</b>		<b>&lt;1%</b>
CAS number: 38668-48-3	EC number: 254-075-1	
<b>Classification</b>		<b>Classification (67/548/EEC or 1999/45/EC)</b>
Acute Tox. 3 - H301		T;R25. R52/53.
Aquatic Chronic 3 - H412		

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

<b>General information</b>	Get medical attention if any discomfort continues.
<b>Inhalation</b>	Move affected person to fresh air at once. Get medical attention.
<b>Ingestion</b>	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. Do not induce vomiting. Get medical attention.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
<b>Eye contact</b>	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

#### 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. Vapours may cause drowsiness and dizziness.
<b>Ingestion</b>	Gastrointestinal symptoms, including upset stomach. May cause nausea, headache, dizziness and intoxication. Narcotic effect.
<b>Skin contact</b>	Irritating to skin. May cause sensitisation by skin contact.
<b>Eye contact</b>	Irritating to eyes.

#### 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.
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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
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## NITODEK FS MEMBRANE RESIN

**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** Vapours may be ignited by a spark, a hot surface or an ember. The product is highly flammable. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.

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

### 5.3. Advice for firefighters

**Protective actions during firefighting** No specific firefighting precautions known.

**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** Follow precautions for safe handling described in this safety data sheet. Take precautionary measures against static discharges. Provide adequate ventilation.

### 6.2. Environmental precautions

**Environmental precautions** 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. Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. 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** Wear protective clothing as described in Section 8 of this safety data sheet. 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. Keep away from heat, sparks and open flame. Static electricity and formation of sparks must be prevented. Provide adequate ventilation.

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

**Storage precautions** Keep container tightly closed. Keep only in the original container. Keep away from heat, sparks and open flame.

**Storage class** Flammable liquid 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

## NITODEK FS MEMBRANE RESIN

### Occupational exposure limits

#### METHYL METHACRYLATE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 208 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 100 ppm 416 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

#### 2-ETHYLHEXYL ACRYLATE (CAS: 103-11-7)

**DNEL** Workers - Inhalation; Long term local effects: 37.5 mg/m<sup>3</sup>  
Workers - Dermal; Acute local effects: 0.242 mg/cm<sup>2</sup>

**PNEC** - Fresh water; 2.72 µg/l

#### METHYL METHACRYLATE (CAS: 80-62-6)

**DNEL** Workers - Dermal; Long term systemic effects: 13.67 mg/kg bw/day  
Workers - Dermal; Long term local effects: 1.5 mg/cm<sup>2</sup>  
General population - Dermal; Long term systemic effects: 8.2 mg/kg bw/day  
General population - Dermal; Long term local effects: 1.5 mg/cm<sup>2</sup>

**PNEC** - Fresh water; 0.94 mg/l

#### 1,1'-(p-tolylimino)dipropan-2-ol (CAS: 38668-48-3)

**DNEL** Professional - Oral; Long term systemic effects: 2 mg/m<sup>3</sup>

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

#### Eye/face protection

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

#### Hand protection

Only use chemical-protective gloves with CE-labelling of category III.  
Check the permeability prior to each use of the glove.  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. It is recommended that gloves are made of the following material: Nitrile rubber.

#### Other skin and body protection

Wear rubber apron. Wear rubber footwear.

#### Hygiene measures

Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

#### Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Organic vapour filter.

## SECTION 9: Physical and Chemical Properties

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

## NITODEK FS MEMBRANE RESIN

<b>Appearance</b>	Liquid.
<b>Odour</b>	Characteristic odour
<b>Odour threshold</b>	Not determined.
<b>pH</b>	Not applicable.
<b>Melting point</b>	Not determined.
<b>Initial boiling point and range</b>	100 °C
<b>Flash point</b>	10C
<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 determined.
<b>Vapour pressure</b>	38.7 hPa
<b>Vapour density</b>	Not determined.
<b>Bulk density</b>	0.99 g/cm <sup>3</sup>
<b>Solubility(ies)</b>	Partially soluble in water.
<b>Partition coefficient</b>	Not determined.
<b>Auto-ignition temperature</b>	245°C
<b>Decomposition Temperature</b>	Not determined.
<b>Viscosity</b>	800 mPa s @ 20°C
<b>Explosive properties</b>	Explosion limits: Lower: 2.1 Vol % Upper: 12.5 Vol %
<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.
<b><u>9.2. Other information</u></b>	
<b>Other information</b>	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 and when used as recommended.

#### 10.3. Possibility of hazardous reactions

## NITODEK FS MEMBRANE RESIN

**Possibility of hazardous reactions** Exothermic polymerisation.

### 10.4. Conditions to avoid

**Conditions to avoid** Avoid heat, flames and other sources of ignition. Avoid excessive heat for prolonged periods of time.

### 10.5. Incompatible materials

**Materials to avoid** Strong oxidising agents. Acids. Amides. Aldehydes. Other halogenated organics.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

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

**Inhalation** May cause respiratory system irritation. Vapours may cause drowsiness and dizziness.

**Ingestion** Gastrointestinal symptoms, including upset stomach. May cause nausea, headache, dizziness and intoxication. Narcotic effect.

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

**Eye contact** Irritating to eyes.

## SECTION 12: Ecological Information

**Ecotoxicity** Not available.

### 12.1. Toxicity

**Toxicity** No data available.

### 12.2. Persistence and degradability

**Persistence and degradability** No further relevant information available.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** The product does not contain any substances expected to be bioaccumulating. No information available.

**Partition coefficient** Not determined.

### 12.4. Mobility in soil

**Mobility** No data is available on this product.

### 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

## NITODEK FS MEMBRANE RESIN

### 13.1. Waste treatment methods

<b>General information</b>	Do not empty into drains, sewers or water courses.
<b>Disposal methods</b>	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)	1866
UN No. (IMDG)	1866
UN No. (ICAO)	1866
UN No. (ADN)	1866

#### 14.2. UN proper shipping name

Proper shipping name (ADR/RID)	RESIN SOLUTION
Proper shipping name (IMDG)	RESIN SOLUTION
Proper shipping name (ICAO)	RESIN SOLUTION
Proper shipping name (ADN)	RESIN SOLUTION

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

ADR/RID class	3
ADR/RID classification code	F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3
ADN class	3

#### 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

EmS	F-E, S-E
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**NITODEK FS MEMBRANE RESIN**

<b>ADR transport category</b>	2
<b>Emergency Action Code</b>	•3YE
<b>Hazard Identification Number (ADR/RID)</b>	33
<b>Tunnel restriction code</b>	(D/E)

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

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

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

<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. 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>	This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
<b>Issued by</b>	FOSROC UK
<b>Revision date</b>	03/02/2017
<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapour. H301 Toxic if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects.
<b>SDS number</b>	24945

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.