



SAFETY DATA SHEET NITOFLOD DPM BASE

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

1.1. Product identifier

Product name NITOFLOD DPM BASE

Product number 1825200 UK9, 1825202 UK9, 1825210 UK9, 1825212 UK9

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

Identified uses Base component of two-part epoxy primer 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 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 2 - H411

2.2. Label elements

Hazard pictograms



Signal word Warning

Hazard statements H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H411 Toxic to aquatic life with long lasting effects.

NITOFLOR DPM BASE

Precautionary statements	<p>P261 Avoid breathing vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P332+P313 If skin irritation occurs: Get medical advice/ attention.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P391 Collect spillage.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
Contains	BISPHENOL A EPOXY RESIN, ALKYL GLYCIDYL ETHER C12/C14, EPOXY RESIN (Type F) (Number average MW <= 700)
Supplementary precautionary statements	<p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P332+P313 If skin irritation occurs: Get medical advice/ attention.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P391 Collect spillage.</p>

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

BISPHENOL A EPOXY RESIN	60-100%
CAS number: 25068-38-6	EC number: 500-033-5
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	

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NONYLPHENOL			1-5%
CAS number: 84852-15-3	EC number: 284-325-5		
M factor (Acute) = 1	M factor (Chronic) = 1		
Classification Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Repr. 2 - H361 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			
2-METHOXY-1-METHYLETHYL ACETATE			1-5%
CAS number: 108-65-6	EC number: 203-603-9	REACH registration number: 01-2119475791-29	
Classification Flam. Liq. 3 - H226			
ALKYL GLYCIDYL ETHER C12/C14			1-5%
CAS number: 68609-97-2	EC number: 271-846-8	REACH registration number: 01-2119485289-22-XXXX	
Classification Skin Irrit. 2 - H315 Skin Sens. 1 - H317			
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol			<1%
CAS number: 9003-36-5	EC number: 500-006-8		
Classification Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411			

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

Inhalation	Move affected person to fresh air at once. If breathing stops, provide artificial respiration. For breathing difficulties, oxygen may be necessary. Get medical attention. Show this Safety Data Sheet to the medical personnel.
Ingestion	Do Not induce vomiting. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water.
Eye contact	Continue to rinse for at least 15 minutes and get medical attention.

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

NITOFLOR DPM BASE

Skin contact Irritating to skin. May cause sensitisation or allergic reactions in sensitive individuals.

Eye contact Irritating to eyes.

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 Small fires: Dry chemicals, sand, dolomite etc. Larger fires: Water spray, foam, dry powder or carbon dioxide. Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Carbon dioxide (CO₂). Carbon monoxide (CO).

5.3. Advice for firefighters

Protective actions during firefighting Containers close to fire should be removed or cooled with water.

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.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with sand or other inert absorbent.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid contact with skin and eyes.

Advice on general occupational hygiene Persons susceptible to allergic reactions should not handle this product. Wash promptly with soap and water if skin becomes contaminated.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a 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

NITOFLOR DPM BASE

2-METHOXY-1-METHYLETHYL ACETATE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 274 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 548 mg/m³

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through skin.

BISPHENOL A EPOXY RESIN (CAS: 25068-38-6)

DNEL Workers - Inhalation; Long term, Short term systemic effects: 12.25 mg/m³
Workers - Dermal; Long term, Short term systemic effects: 8.33 mg/kg/day

PNEC - Fresh water; 0.006 mg/l
- marine water; 0.0006 mg/l
- Intermittent release; 0.018 mg/l
- Soil; 0.196 mg/kg

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

DNEL Workers - Inhalation; Long term systemic effects: 275 mg/m³
Workers - Dermal; Long term systemic effects: 153.5 mg/kg bw/day
General population - Inhalation; Long term systemic effects: 33 mg/m³
General population - Dermal; Long term systemic effects: 54.8 mg/kg bw/day

PNEC - Aqua, Fresh water; 0.635 mg/l
- Aqua, marine water; 0.0635 mg/l

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

DNEL Workers - Inhalation; Long term systemic effects: 3.6 mg/m³
Workers - Dermal; Long term systemic effects: 1 mg/kg/day

PNEC - Fresh water; 0.0072 mg/l
- marine water; 0.00072 mg/l

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (CAS: 9003-36-5)

DNEL Workers - Inhalation; Long term systemic effects: 29.39 mg/m³
Workers - Dermal; Long term systemic effects: 104.15 mg/kg/day
Workers - Dermal; Short term local effects: 8.3 µg/cm²

PNEC - Fresh water; 0.003 mg/l
- marine water; 0.0003 mg/l
- STP; 10 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective threshold limit value. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Wear chemical splash goggles.

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Hand protection	Butyl rubber. Neoprene. Nitrile rubber. Polyethylene. Polyvinyl chloride (PVC).
Other skin and body protection	Wear apron or protective clothing in case of contact.
Hygiene measures	Wash at the end of each work shift and before eating, smoking and using the toilet.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Various colours.
Odour	Characteristic.
Odour threshold	Not determined.
pH	pH (concentrated solution): 7
Melting point	Not determined.
Initial boiling point and range	> 200°C @ 1 atm
Flash point	> 150°C
Evaporation rate	Not determined.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not determined.
Vapour pressure	Not determined.
Relative density	Not determined.
Solubility(ies)	Not determined.
Explosive properties	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	No data available.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The reactivity data for this product will be typical of those for the following class of materials: Epoxides.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Avoid strong oxidising agents, caustic soda, bases, ammonia, primary and secondary amines, alcohols and acids.
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10.4. Conditions to avoid

Conditions to avoid	Keep at temperature not exceeding 300°C. Potentially violent decomposition can occur above 350°C: rapid gas generation during decomposition can cause explosive pressure build-up in closed systems.
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10.5. Incompatible materials

Materials to avoid Acids. Bases Oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products No data available.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects This product has low toxicity.

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 11,400.0

ATE oral (mg/kg) 81,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 1,200.0

Skin sensitisation

Skin sensitisation May cause sensitisation by skin contact.

Skin contact The product contains a sensitising substance.

Toxicological information on ingredients.

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >5000 mg/kg, Oral, Rat

SECTION 12: Ecological information

12.1. Toxicity

Toxicity May cause long-term adverse effects in the aquatic environment. Toxic to aquatic organisms.

Ecological information on ingredients.

BISPHENOL A EPOXY RESIN

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 2 mg/l, Oncorhynchus mykiss (Rainbow trout)

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: >1000 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: >1000 mg/l, Daphnia magna

12.2. Persistence and degradability

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

Ecological information on ingredients.

NITOFLOD DPM BASE

BISPHENOL A EPOXY RESIN

Persistence and degradability The product is not readily biodegradable.

Biodegradation - Degradation 12%: 28 days

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Ecological information on ingredients.

BISPHENOL A EPOXY RESIN

Bioaccumulative potential May accumulate in soil and water systems. BCF: 100,

Partition coefficient : log Pow = Approximately 3.8 at 25 C

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Partition coefficient : log Pow = Approximately 3.8 at 25 C

12.4. Mobility in soil

Mobility The product has poor water-solubility.

Ecological information on ingredients.

BISPHENOL A EPOXY RESIN

Mobility 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.

Ecological information on ingredients.

BISPHENOL A EPOXY RESIN

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 Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Note that fully cured material is not considered as hazardous waste.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

NITOFLOR DPM BASE

UN No. (ADN) 3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS BISPHENOL A EPOXY RESIN, EPOXY RESIN (Type F) (Number average MW ≤ 700))

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS BISPHENOL A EPOXY RESIN, EPOXY RESIN (Type F) (Number average MW ≤ 700))

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS BISPHENOL A EPOXY RESIN, EPOXY RESIN (Type F) (Number average MW ≤ 700))

Proper shipping name (ADN) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS BISPHENOL A EPOXY RESIN, EPOXY RESIN (Type F) (Number average MW ≤ 700))

14.3. Transport hazard class(es)

ADR/RID class 9

ADR/RID classification code M6

ADR/RID label 9

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

ICAO packing group III

ADN 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 MARPOL and the IBC Code

NITOFLOR DPM BASE

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

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.

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.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	13/11/2019
Revision	2a
Supersedes date	25/05/2017
SDS number	12091
Hazard statements in full	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.

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

NITOFLOD DPM BASE (Red, yellow)

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

1.1. Product identifier

Product name NITOFLOD DPM BASE (Red, yellow)

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

Identified uses Base component of two-part epoxy primer 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; 0.8.30 to 16.00hrs Fri)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

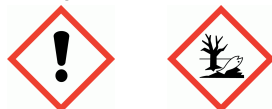
Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 2 - H411

Classification (67/548/EEC or 1999/45/EC) Repr. Cat. 3; R62, R63. Xi; R36/38. R43. N; R51/53.

2.2. Label elements

Pictogram



Signal word Warning

Hazard statements H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H411 Toxic to aquatic life with long lasting effects.

NITOFLOR DPM BASE (Red, yellow)

Precautionary statements

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.
 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.
 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.
 P337+P313 If eye irritation persists: Get medical advice/ attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P391 Collect spillage.
 P501 Dispose of contents/ container in accordance with national regulations.

Contains

BISPHENOL A EPOXY RESIN, ALKYL GLYCIDYL ETHER C12/C14, EPOXY RESIN (Type F) (Number average MW ≤ 700)

Supplementary precautionary statements

P264 Wash contaminated skin thoroughly after handling.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 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.
 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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

BISPHENOL A EPOXY RESIN		60-100%
CAS number: 25068-38-6 EC number: 500-033-5		
Classification	Classification (67/548/EEC or 1999/45/EC)	
Skin Irrit. 2 - H315	R43 Xi;R36/38 N;R51/53	
Eye Irrit. 2 - H319		
Skin Sens. 1 - H317		
Aquatic Chronic 2 - H411		
ALKYL GLYCIDYL ETHER C12/C14		1-5%
CAS number: 68609-97-2 EC number: 271-846-8		
Classification	Classification (67/548/EEC or 1999/45/EC)	
Skin Irrit. 2 - H315	Xi;R38. R43.	
Skin Sens. 1 - H317		

NITOFLOR DPM BASE (Red, yellow)

2-Methoxy-1-Methylethyl Acetate		1-5%
CAS number: 108-65-6		EC number: 203-603-9
Classification		
Flam. Liq. 3 - H226		
EPOXY RESIN (Type F) (Number average MW ≤ 700)		<1%
CAS number: 9003-36-5		
Classification		Classification (67/548/EEC or 1999/45/EC)
Skin Irrit. 2 - H315		R43 Xi;R36/38 N;R51/53
Skin Sens. 1 - H317		
Aquatic Chronic 2 - H411		

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

Inhalation	Move affected person to fresh air at once. If breathing stops, provide artificial respiration. For breathing difficulties, oxygen may be necessary. Get medical attention. Show this Safety Data Sheet to the medical personnel.
Ingestion	Do Not induce vomiting. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water.
Eye contact	Continue to rinse for at least 15 minutes and get medical attention.

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

Skin contact	Irritating to skin. May cause sensitisation or allergic reactions in sensitive individuals.
Eye contact	Irritating to eyes.

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

Notes for the doctor	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Small fires: Dry chemicals, sand, dolomite etc. Larger fires: Water spray, foam, dry powder or carbon dioxide. Do not use water jet as an extinguisher, as this will spread the fire.
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5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Carbon dioxide (CO ₂). Carbon monoxide (CO).
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5.3. Advice for firefighters

Protective actions during firefighting	Containers close to fire should be removed or cooled with water.
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

NITOFLORED PM BASE (Red, yellow)

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.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with sand or other inert absorbent.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid contact with skin and eyes.

Advice on general occupational hygiene Persons susceptible to allergic reactions should not handle this product. Wash promptly with soap and water if skin becomes contaminated.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a 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/m³

Short-term exposure limit (15-minute): WEL 100 ppm 548 mg/m³

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through skin.

BISPHENOL A EPOXY RESIN (CAS: 25068-38-6)

DNEL Workers - Inhalation; Long term, Short term systemic effects: 12.25 mg/m³
Workers - Dermal; Long term, Short term systemic effects: 8.33 mg/kg/day

PNEC - Fresh water; 0.006 mg/l
- Marine water; 0.0006 mg/l
- Intermittent release; 0.018 mg/l
- Soil; 0.196 mg/kg

2-Methoxy-1-Methylethyl Acetate (CAS: 108-65-6)

DNEL Workers - Inhalation; Long term systemic effects: 275 mg/m³
Workers - Dermal; Long term systemic effects: 153.5 mg/kg bw/day
General population - Inhalation; Long term systemic effects: 33 mg/m³
General population - Dermal; Long term systemic effects: 54.8 mg/kg bw/day

PNEC - Aqua, Fresh water; 0.635 mg/l
- Aqua, Marine water; 0.0635 mg/l

NITOFLOR DPM BASE (Red, yellow)

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

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

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

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

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective threshold limit value. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Wear chemical splash goggles.

Hand protection

Butyl rubber. Neoprene. Nitrile rubber. Polyethylene. Polyvinyl chloride (PVC).

Other skin and body protection

Wear apron or protective clothing in case of contact.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Various colours.
Odour	Characteristic.
Odour threshold	Not determined.
pH	pH (concentrated solution): 7
Melting point	Not determined.
Initial boiling point and range	> 200°C @ 1 atm
Flash point	> 150°C
Evaporation rate	Not determined.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not determined.

NITOFLO R DPM BASE (Red, yellow)

Vapour pressure	Not determined.
Relative density	Not determined.
Solubility(ies)	Not determined.
Explosive properties	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	No data available.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The reactivity data for this product will be typical of those for the following class of materials: Epoxides.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Avoid strong oxidising agents, caustic soda, bases, ammonia, primary and secondary amines, alcohols and acids.
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10.4. Conditions to avoid

Conditions to avoid	Keep at temperature not exceeding 300°C. Potentially violent decomposition can occur above 350°C: rapid gas generation during decomposition can cause explosive pressure build-up in closed systems.
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10.5. Incompatible materials

Materials to avoid	Acids. Bases Oxidising agents.
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10.6. Hazardous decomposition products

Hazardous decomposition products	No data available.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects	This product has low toxicity.
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Acute toxicity - oral

Acute toxicity oral (LD ₅₀ mg/kg)	11,400.0
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ATE oral (mg/kg)	81,000.0
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Acute toxicity - dermal

Acute toxicity dermal (LD ₅₀ mg/kg)	1,200.0
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Skin sensitisation

Skin sensitisation	May cause sensitisation by skin contact.
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Skin contact	The product contains a sensitising substance.
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NITOFLORED PM BASE (Red, yellow)

Toxicological information on ingredients.

EPOXY RESIN (Type F) (Number average MW ≤ 700)

Acute toxicity - oral

Notes (oral LD₅₀)

LD₅₀ >5000 mg/kg, Oral, Rat

SECTION 12: Ecological Information

12.1. Toxicity

Toxicity May cause long-term adverse effects in the aquatic environment. Toxic to aquatic organisms.

Ecological information on ingredients.

BISPHENOL A EPOXY RESIN

Acute toxicity - fish

LC₅₀, 96 hours: 2 mg/l, Onchorhynchus mykiss (Rainbow trout)

EPOXY RESIN (Type F) (Number average MW ≤ 700)

Acute toxicity - fish

LC₅₀, 96 hours: >1000 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: >1000 mg/l, Daphnia magna

12.2. Persistence and degradability

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

Ecological information on ingredients.

BISPHENOL A EPOXY RESIN

Persistence and degradability

The product is not readily biodegradable.

Biodegradation

- Degradation 12%: 28 days

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Ecological information on ingredients.

BISPHENOL A EPOXY RESIN

Bioaccumulative potential

May accumulate in soil and water systems. BCF: 100,

Partition coefficient

: log Pow = Approximately 3.8 at 25 C

EPOXY RESIN (Type F) (Number average MW ≤ 700)

Partition coefficient

: log Pow = Approximately 3.8 at 25 C

12.4. Mobility in soil

Mobility The product has poor water-solubility.

Ecological information on ingredients.

BISPHENOL A EPOXY RESIN

Mobility

Not considered mobile.

NITOFLOR DPM BASE (Red, yellow)

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.

BISPHENOL A EPOXY RESIN

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 Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Note that fully cured material is not considered as hazardous waste.

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. (CONTAINS BISPHENOL A EPOXY RESIN, EPOXY RESIN (Type F) (Number average MW <= 700))
Proper shipping name (IMDG)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS BISPHENOL A EPOXY RESIN, EPOXY RESIN (Type F) (Number average MW <= 700))
Proper shipping name (ICAO)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS BISPHENOL A EPOXY RESIN, EPOXY RESIN (Type F) (Number average MW <= 700))
Proper shipping name (ADN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS BISPHENOL A EPOXY RESIN, EPOXY RESIN (Type F) (Number average MW <= 700))

14.3. Transport hazard class(es)

ADR/RID class	9
ADR/RID classification code	M6
ADR/RID label	9
IMDG class	9
ICAO class/division	9
ADN class	9

NITOFLOR DPM BASE (Red, yellow)

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 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

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.

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.
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NITOFLOR DPM BASE (Red, yellow)

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	03/08/2015
Revision	2
Risk phrases in full	R22 Harmful if swallowed. R34 Causes burns. R36/38 Irritating to eyes and skin. R38 Irritating to skin. R43 May cause sensitisation by skin contact. R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R62 Possible risk of impaired fertility. R63 Possible risk of harm to the unborn child.
Hazard statements in full	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.
SDS number	12091

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 NITOFLOD DPM HARDENER

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

1.1. Product identifier

Product name NITOFLOD DPM HARDENER

Product number 1825200UK9, 1825202UK9, 1825210UK9, 1825212UK9

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
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 - H302 Acute Tox. 4 - H332 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 - H361f

Environmental hazards Not Classified

Human health Corrosive to skin and eyes. May cause skin sensitisation or allergic reactions in sensitive individuals. Harmful by inhalation.

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

Hazard pictograms



Signal word

Danger

NITOFLOR DPM HARDENER

Hazard statements	<p>H314 Causes severe skin burns and eye damage.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H361f Suspected of damaging fertility.</p> <p>H302+H332 Harmful if swallowed or if inhaled.</p>
Precautionary statements	<p>P261 Avoid breathing vapour/ spray.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
Contains	BENZYL ALCOHOL, ISOPHORONEDIAMINE, Bisphenol A, 3-AMINOPROPYLDIMETHYLAMINE
Supplementary precautionary statements	<p>P201 Obtain special instructions before use.</p> <p>P202 Do not handle until all safety precautions have been read and understood.</p> <p>P260 Do not breathe vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.</p> <p>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P308+P313 IF exposed or concerned: Get medical advice/ attention.</p> <p>P312 Call a POISON CENTRE/doctor if you feel unwell.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P363 Wash contaminated clothing before reuse.</p> <p>P405 Store locked up.</p>

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

BENZYL ALCOHOL			30-60%
CAS number: 100-51-6	EC number: 202-859-9	REACH registration number: 01-2119492630-38	
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H332 Eye Irrit. 2 - H319			

NITOFLOD DPM HARDENER

ISOPHORONEDIAMINE			1-5%
CAS number: 2855-13-2	EC number: 220-666-8	REACH registration number: 01-2119514687-32-xxxx	
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412			

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL			1-5%
CAS number: 90-72-2	EC number: 202-013-9	REACH registration number: 01-2119560597-27	
Classification Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319			

3-AMINOPROPYLDIMETHYLAMINE			1-5%
CAS number: 109-55-7	EC number: 203-680-9		
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317			

Bisphenol A			1-5%
CAS number: 80-05-7	EC number: 201-245-8	REACH registration number: 01-2119457856-23	
Substance of very high concern (SVHC).			
Classification Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 1B - H360F STOT SE 3 - H335			

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

Composition comments

This product contains a substance at a concentration of ≥ 0.1 % w/w which is included in the candidate list according to Article 59 (1, 10) of REACH Regulation EC No. 1907/2006:

SECTION 4: First aid measures

4.1. Description of first aid measures

NITOFLOD DPM HARDENER

Inhalation	Move affected person to fresh air at once. Rinse nose and mouth with water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Keep affected person warm and at rest. Get medical attention immediately.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention immediately.
Skin contact	Remove affected person from source of contamination. Rinse immediately with plenty of water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.
Protection of first aiders	No specific requirements are anticipated under normal conditions of use.

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

General information	The product contains a sensitising substance. No specific symptoms noted.
Inhalation	Harmful by inhalation.
Ingestion	May cause chemical burns in mouth and throat.
Skin contact	Irritating to skin. Prolonged contact may cause burns. May cause sensitisation by skin contact.
Eye contact	May cause serious eye damage.

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

Notes for the doctor	Treat symptomatically.
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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 dioxide (CO ₂). Carbon monoxide (CO). Oxides of nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours. Provide adequate ventilation. Wear protective gloves, eye and face protection.
For emergency responders	Ensure adequate ventilation/exhaust extraction.

6.2. Environmental precautions

Environmental precautions	Avoid the spillage or runoff entering drains, sewers or watercourses. Avoid release to the environment.
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NITOFLOD DPM HARDENER

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Avoid contamination of ponds or watercourses with washing down water.

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. Avoid contact with skin and eyes. Avoid inhalation of vapours and spray/mists.

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

Occupational exposure limits

Bisphenol A

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

WEL = Workplace Exposure Limit

BENZYL ALCOHOL (CAS: 100-51-6)

DNEL Workers - Inhalation; Short term systemic effects: 110 mg/m³
 Workers - Inhalation; Long term systemic effects: 22 mg/m³
 Workers - Dermal; Short term systemic effects: 40 mg/kg bw/day
 Workers - Dermal; Long term systemic effects: 8 mg/kg bw/day

PNEC - Fresh water; 1 mg/l
 - marine water; 0.1 mg/l
 - STP; 39 mg/l

3-AMINOPROPYLDIMETHYLAMINE (CAS: 109-55-7)

DNEL Workers - Inhalation; Long term systemic effects: 4.9 mg/m³
 Workers - Inhalation; Short term systemic effects: 9.8 mg/m³

PNEC - Fresh water; 0.034 mg/l
 - marine water; 0.0034 mg/l
 - STP; 69.5 mg/l

ISOPHORONEDIAMINE (CAS: 2855-13-2)

NITOFLOR DPM HARDENER

PNEC

- marine water; 0.006 mg/l
- Fresh water; 0.06 mg/l
- Soil; 1.121 mg/kg

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

Wear protective gloves made of the following material: Nitrile rubber. Viton rubber (fluoro rubber). Polyvinylidene chloride/polyethylene (PVDC/PE).

Other skin and body protection

Wear appropriate clothing to prevent skin contamination. Provide eyewash station.

Hygiene measures

Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes wet or contaminated.

Respiratory protection

No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Organic vapour filter.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Yellowish.
Odour	Amine.
Odour threshold	Not determined.
pH	Not determined.
Melting point	Not determined.
Evaporation rate	Not determined.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not determined.
Vapour pressure	Not determined.
Vapour density	Not determined.
Solubility(ies)	Soluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Explosive properties	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

NITOFLOR DPM HARDENER

9.2. Other information

Other information Not available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Stable at normal ambient temperatures.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid The following materials may react violently with the product: Strong oxidising agents.

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 Ammonia or amines.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 4,078.55

Acute toxicity - dermal

ATE dermal (mg/kg) 110,000.0

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 36.67

Inhalation May cause respiratory system irritation. May cause sensitisation by inhalation. May cause respiratory allergy.

Ingestion Causes burns. May cause chemical burns in mouth and throat. May cause stomach pain or vomiting.

Skin contact May cause allergic contact eczema. Product has a defatting effect on skin. May cause allergic contact eczema. May cause sensitisation by skin contact. Causes burns. Harmful in contact with skin.

Eye contact Severe irritation, burning and tearing. Causes burns.

Toxicological information on ingredients.

BENZYL ALCOHOL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,620.0

NITOFLOR DPM HARDENER

Species	Rat
ATE oral (mg/kg)	1,620.0
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	2,000.0
Species	Rabbit
ATE dermal (mg/kg)	2,001.0
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ vapours mg/l)	11.0
Species	Rat
ATE inhalation (vapours mg/l)	11.0
<u>Skin sensitisation</u>	
Skin sensitisation	Not sensitising.
<u>Carcinogenicity</u>	
Carcinogenicity	NOAEL 200 mg/kg/day, Oral, Mouse There is no evidence that the product can cause cancer.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	NOAEL 400 mg/kg, Oral, Rat
Inhalation	May cause coughing and difficulties in breathing.
Ingestion	May cause burns in mucous membranes, throat, oesophagus and stomach.
Skin contact	Prolonged and frequent contact may cause redness and irritation.
Eye contact	Severe irritation, burning and tearing.

ISOPHORONEDIAMINE

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	1,030.0
Species	Rat
ATE oral (mg/kg)	500.0
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	1,840.0
Species	Rabbit
ATE dermal (mg/kg)	1,100.0

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

NITOFLOD DPM HARDENER

Acute toxicity - oral

ATE oral (mg/kg) 500.0

3-AMINOPROPYLDIMETHYLAMINE

Acute toxicity - oral

Acute toxicity oral (LD₅₀
mg/kg) 410.0

Species Rat

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

ATE dermal (mg/kg) 1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation
(LC₅₀ vapours mg/l) 4.31

Species Rat

ATE inhalation (vapours
mg/l) 4.31

Bisphenol A

Acute toxicity - inhalation

Acute toxicity inhalation
(LC₅₀ vapours mg/l) 5.0

ATE inhalation (vapours
mg/l) 5.0

SECTION 12: Ecological information

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

12.1. Toxicity

Ecological information on ingredients.

BENZYL ALCOHOL

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 460 mg/l, Pimephales promelas (Fat-head Minnow)
LC₅₀, 96 hours: 10 mg/l, Lepomis macrochirus (Bluegill)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 230 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 770 mg/l, Pseudokirchneriella subcapitata
NOEC, 72 hours: 310 mg/l, Pseudokirchneriella subcapitata

Acute toxicity - microorganisms LC₅₀, 49 hours: 2100 mg/l, Activated sludge

ISOPHORONEDIAMINE

NITOFLOD DPM HARDENER

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 110 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 23 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: 50 mg/l, Algae

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 175 mg/l, Cyprinus carpio (Common carp)
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3-AMINOPROPYLDIMETHYLAMINE

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 122 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 59.5 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: 53.5 mg/l, Algae

12.2. Persistence and degradability

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

Ecological information on ingredients.

ISOPHORONEDIAMINE

Persistence and degradability	The product is not readily biodegradable.
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12.3. Bioaccumulative potential

Bioaccumulative potential	No data available on bioaccumulation.
Partition coefficient	Not determined.

Ecological information on ingredients.

ISOPHORONEDIAMINE

Bioaccumulative potential	The product does not contain any substances expected to be bioaccumulating.
Partition coefficient	log K _{ow} : 0.99

12.4. Mobility in soil

Mobility	The product contains substances which are water-soluble and may spread in water systems.
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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.
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12.6. Other adverse effects

Other adverse effects	None known.
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SECTION 13: Disposal considerations

NITOFLOR DPM HARDENER

13.1. Waste treatment methods

General information	The generation of waste should be minimised or avoided wherever possible. 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.

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 3-AMINOPROPYLDIMETHYLAMINE, ISOPHORONEDIAMINE)
Proper shipping name (IMDG)	AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 3-AMINOPROPYLDIMETHYLAMINE, ISOPHORONEDIAMINE)
Proper shipping name (ICAO)	AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 3-AMINOPROPYLDIMETHYLAMINE, ISOPHORONEDIAMINE)
Proper shipping name (ADN)	AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 3-AMINOPROPYLDIMETHYLAMINE, ISOPHORONEDIAMINE)

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	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

NITOFLOR DPM HARDENER

14.6. Special precautions for user

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 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

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. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG228. Approved Classification and Labelling Guide (Sixth edition) L131.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	14/11/2019
Revision	4b
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NITOFLOR DPM HARDENER

Hazard statements in full

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H360F May damage fertility.
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.