



SAFETY DATA SHEET NITOFLOE EPU BASE

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

1.1. Product identifier

Product name NITOFLOE EPU BASE

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

Identified uses Base Component of Two-Part Epoxy PU Protective Coating System

1.3. Details of the supplier of the safety data sheet

Supplier Fosroc Idea Yapi Kimyasallari San. Ve Tic. A.S.
Aydivnevlcr mah. Sanayi cad. Demirtas Plaza No:13 Kat:3 34854
Maltepe ISTANBUL
TURKEY
+90 216 463 6776
enquiryturkey@fosroc.com

1.4. Emergency telephone number

Emergency telephone +90 262 728 15 05

National emergency telephone number 114

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 3 - H226
Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Repr. 1B - H360
Environmental hazards Aquatic Chronic 2 - H411

Classification (67/548/EEC or 1999/45/EC) Repr. Cat. 2;R61. Xi;R36/37/38. R43. R52/53.

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

Environmental The product contains a substance which may cause long-term adverse effects in the environment.

2.2. Label elements

Hazard pictograms



Signal word

Danger

NITOFLOR EPU BASE

Hazard statements	<p>H226 Flammable liquid and vapour.</p> <p>H315 Causes skin irritation.</p> <p>H319 Causes serious eye irritation.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H360 May damage fertility or the unborn child.</p> <p>H411 Toxic to aquatic life with long lasting effects.</p>
Precautionary statements	<p>P202 Do not handle until all safety precautions have been read and understood.</p> <p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P233 Keep container tightly closed.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
Contains	EPOXY RESIN (Type A) (Number average MW ≤ 700), EPICHLOROHYDRIN, POLYMER W/BISPHENOL A, DIBUTYL PHTHALATE
Supplementary precautionary statements	<p>P201 Obtain special instructions before use.</p> <p>P240 Ground and bond container and receiving equipment.</p> <p>P241 Use explosion-proof electrical equipment.</p> <p>P242 Use non-sparking tools.</p> <p>P243 Take action to prevent static discharges.</p> <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>P302+P352 IF ON SKIN: Wash with plenty of water.</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>P308+P313 IF exposed or concerned: Get medical advice/ attention.</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>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P391 Collect spillage.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p>

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

NITOFLOR EPU BASE

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)			10-30%
CAS number: 25068-38-6	EC number: 500-033-5	REACH registration number: 01-2119456619-26-XXXX	
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411			
EPICHLOROHYDRIN, POLYMER W/BISPHENOL A			10-30%
CAS number: 25036-25-3	EC number: 682-390-8		
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317			
XYLENE			10-30%
CAS number: 1330-20-7	EC number: 215-535-7	REACH registration number: 01-2119488216-32-0000	
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315			
DIBUTYL PHTHALATE			1-5%
CAS number: 84-74-2	EC number: 201-557-4		
M factor (Acute) = 10	M factor (Chronic) = 10		
Classification Acute Tox. 3 - H331 Repr. 1B - H360 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			
1-METHOXY-2-PROPANOL			<1%
CAS number: 107-98-2	EC number: 203-539-1		
Classification Flam. Liq. 3 - H226 STOT SE 3 - H336			

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ETHYLBENZENE	<1%
CAS number: 100-41-4	EC number: 202-849-4
Classification Flam. Liq. 2 - H225 Acute Tox. 4 - H332 STOT RE 2 - H373 Asp. Tox. 1 - H304	

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Inhalation	Place unconscious person on their side in the recovery position and ensure breathing can take place. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention if any discomfort continues.
Ingestion	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.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing and rinse skin thoroughly with water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	May be harmful if swallowed.
Skin contact	May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.

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	Use foam, carbon dioxide, dry powder or water fog to extinguish.
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	Not known.
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Hazardous combustion products Carbon dioxide (CO₂). Carbon monoxide (CO).

5.3. Advice for firefighters

Protective actions during firefighting Fight fire with normal precautions from a reasonable distance. Avoid breathing fire gases or vapours. Containers close to fire should be removed or cooled with water. Avoid the spillage or runoff entering drains, sewers or watercourses.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions For personal protection, see Section 8.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Contain spillage with sand, earth or other suitable non-combustible material. Take care as floors and other surfaces may become slippery. Collect and place in suitable waste disposal containers and seal securely. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

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 Good personal hygiene procedures should be implemented. Avoid contact with skin, eyes and clothing. Avoid breathing vapour/spray. For professional users only.

7.2. Conditions for safe storage, including any incompatibilities

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

Storage class 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

Occupational exposure limits

XYLENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³

Sk

DIBUTYL PHTHALATE

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³

Short-term exposure limit (15-minute): WEL 10 mg/m³

1-METHOXY-2-PROPANOL

NITOFLOR EPU BASE

Sk

Long-term exposure limit (8-hour TWA): WEL 100 ppm 375 mg/m³Short-term exposure limit (15-minute): WEL 150 ppm 560 mg/m³

ETHYLBENZENE

Long-term exposure limit (8-hour TWA): WEL 100 ppm 441 mg/m³Short-term exposure limit (15-minute): WEL 125 ppm 552 mg/m³

Sk

Sk = Can be absorbed through the skin.

WEL = Workplace Exposure Limit

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) (CAS: 25068-38-6)

DNEL Workers - Inhalation; Short term systemic effects: 12.25 mg/m³
Workers - Inhalation; Long term systemic effects: 12.25 mg/m³

PNEC - Fresh water; 0.006 mg/l

XYLENE (CAS: 1330-20-7)

DNEL Workers - Inhalation; Long term systemic effects: 77 mg/m³
Workers - Inhalation; Short term systemic effects: 289 mg/m³
Workers - Dermal; Long term systemic effects: 180 mg/kg/day

PNEC - Fresh water; 0.327 mg/l
- marine water; 0.327 mg/l
- STP; 6.58 mg/l

DIBUTYL PHTHALATE (CAS: 84-74-2)

DNEL Workers - Inhalation; Long term systemic effects: 0.13 mg/m³
Workers - Dermal; Long term systemic effects: 0.19 mg/kg bw/day

PNEC - Fresh water; 10 µg/l
- marine water; 1 µg/l

1-METHOXY-2-PROPANOL (CAS: 107-98-2)

DNEL Industry - Inhalation; Short term local effects: 553.5 mg/m³
Industry - Dermal; Long term systemic effects: 50.6 mg/kg/day
Industry - Inhalation; Long term systemic effects: 369 mg/m³

PNEC - Fresh water; 10 mg/l
- marine water; 1 mg/l
- Intermittent release; 100 mg/l

ETHYLBENZENE (CAS: 100-41-4)

DNEL Workers - Inhalation; Long term systemic effects: 77 mg/m³
Workers - Dermal; Long term systemic effects: 180 mg/kg bw/day

PNEC - Fresh water; 0.1 mg/l
- marine water; 0.01 mg/l

8.2. Exposure controls

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Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Wear tight-fitting, chemical splash goggles or face shield.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Neoprene. Nitrile rubber.

Other skin and body protection

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

Hygiene measures

When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash contaminated clothing before reuse. Promptly remove any clothing that becomes wet or contaminated.

Respiratory protection

Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140. Check that the respirator fits tightly and the filter is changed regularly. Wear a respirator fitted with the following cartridge: Gas filter, type A2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Pigmented
Odour	Aromatic.
Odour threshold	Not available.
pH	Not determined.
Melting point	Not applicable.
Initial boiling point and range	>100° C
Flash point	35°C Closed cup.
Evaporation rate	Not available.
Evaporation factor	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	Not available.
Other flammability	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	1.62 @ 25°C
Bulk density	Not applicable.

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Solubility(ies)	Immiscible with water.
Partition coefficient	Not available.
Auto-ignition temperature	300°C
Decomposition Temperature	Not available.
Viscosity	700 - 900 P @ 20°C
Explosive properties	Product is not explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	Not known.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Stable at normal ambient temperatures and when used as recommended.
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10.2. Chemical stability

Stability	No particular stability concerns.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Does not decompose when used and stored as recommended.
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition.
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10.5. Incompatible materials

Materials to avoid	Strong oxidising agents. Strong acids. Strong alkalis.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Carbon monoxide (CO). Carbon dioxide (CO ₂).
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - dermal

ATE dermal (mg/kg)	10,813.79
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Acute toxicity - inhalation

ATE inhalation (gases ppm)	44,347.21
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ATE inhalation (vapours mg/l)	81.41
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ATE inhalation (dusts/mists mg/l)	14.78
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Carcinogenicity

Carcinogenicity	May cause cancer.
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Reproductive toxicity

NITOFLOR EPU BASE

Reproductive toxicity - fertility Contains a substance/a group of substances which may damage fertility.

Inhalation Prolonged inhalation of high concentrations may damage respiratory system.

Ingestion May be harmful if swallowed.

Skin contact May cause an allergic skin reaction.

Eye contact Causes serious eye irritation.

Acute and chronic health hazards May damage fertility or the unborn child.

Route of exposure Skin and/or eye contact

Target organs Skin Eyes Gastro-intestinal tract, liver, immune system

Toxicological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,000.0

Species Rat

Notes (oral LD₅₀) NOAEL 750 mg/kg, Oral, Rat

ATE oral (mg/kg) 5,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 20,000.0

Species Rabbit

Notes (dermal LD₅₀) LD₅₀ >1600 mg/kg, Dermal, Rat

ATE dermal (mg/kg) 20,000.0

Skin corrosion/irritation

Animal data Rabbit Moderately irritating.

Skin sensitisation

Skin sensitisation May cause sensitisation by skin contact.

XYLENE

Acute toxicity - dermal

ATE dermal (mg/kg) 1,100.0

Carcinogenicity

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

DIBUTYL PHTHALATE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 8,000.0

NITOFLOR EPU BASE

Species Rat

ATE oral (mg/kg) 8,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 20,860.0

Species Rabbit

ATE dermal (mg/kg) 20,860.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 4.25

Species Rat

ATE inhalation (vapours mg/l) 4.25

Acute and chronic health hazards INGESTION. May cause stomach pain or vomiting. Inhalation May cause respiratory system irritation. SKIN CONTACT. May cause skin irritation/eczema. May cause sensitisation by skin contact. EYE CONTACT. Irritating to eyes.

1-METHOXY-2-PROPANOL

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 11700 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ 13000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC50 10000 ppm, Inhalation, Rat

ETHYLBENZENE

Carcinogenicity

IARC carcinogenicity IARC Group 2B Possibly carcinogenic to humans.

SECTION 12: Ecological information

Ecotoxicity May cause long lasting harmful effects to aquatic life.

12.1. Toxicity

Toxicity The product contains a substance which may cause long-term adverse effects in the environment.

Ecological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Toxicity Ecotoxic to fish/daphnia/algae

Acute aquatic toxicity

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Acute toxicity - fish	LC ₅₀ , 96 hours: 3.6 mg/l, Leuciscus idus (Golden orfe) LC ₅₀ , 96 hours: 2 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 1.8 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 11 mg/l, Scenedesmus capricornutum (fresh water algae)

XYLENE

Toxicity	Not considered toxic to fish.
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DIBUTYL PHTHALATE

Acute aquatic toxicity

LE(C)₅₀	0.01 < L(E)C ₅₀ ≤ 0.1
M factor (Acute)	10
Acute toxicity - fish	LC ₅₀ , 96 hours: 0.85 mg/l, Pimephales promelas (Fat-head Minnow) LC ₅₀ , 96 hours: 1.6 mg/l, Salmo gairdneri
Acute toxicity - aquatic invertebrates	LC ₅₀ , 48 hours: 3.7 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 96 hours: 0.75 mg/l, Selenastrum capricornutum

Chronic aquatic toxicity

M factor (Chronic)	10
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1-METHOXY-2-PROPANOL

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 6812 mg/l, Leuciscus idus (Golden orfe)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: >21000 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability The product contains inorganic substances which are not biodegradable.

Ecological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Persistence and degradability	The product is not readily biodegradable.
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XYLENE

Persistence and degradability	Expected to be not readily biodegradable.
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1-METHOXY-2-PROPANOL

NITOFLOR EPU BASE

Persistence and degradability

The product is biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential Not expected to be bioaccumulative.

Partition coefficient Not available.

Ecological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)

Partition coefficient log Pow: 3.242

1-METHOXY-2-PROPANOL

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility The product is insoluble in water.

Ecological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)

Mobility The product has poor water-solubility.

Adsorption/desorption coefficient Water - Koc: 445 @ °C

XYLENE

Mobility The product is insoluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 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 When handling waste, the safety precautions applying to handling of the product should be considered.

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

SECTION 14: Transport information

14.1. UN number

NITOFLOR EPU BASE

UN No. (ADR/RID)	1263
UN No. (IMDG)	1263
UN No. (ICAO)	1263
UN No. (ADN)	1263

14.2. UN proper shipping name

Proper shipping name (ADR/RID) PAINT

Proper shipping name (IMDG) PAINT (CONTAINS EPOXY RESIN (Type A) (Number average MW ≤ 700), DIBUTYL PHTHALATE)

Proper shipping name (ICAO) PAINT

Proper shipping name (ADN) PAINT

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	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-E, S-E
ADR transport category	3
Emergency Action Code	•3Y
Hazard Identification Number (ADR/RID)	30

NITOFLOR EPU BASE

Tunnel restriction code (D/E)

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

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

National regulations	Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.
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). 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).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative. CAS: Chemical Abstracts Service. DNEL: Derived No Effect Level. EC ₅₀ : 50% of maximal Effective Concentration. GHS: Globally Harmonized System. IATA: International Air Transport Association. IARC: International Agency for Research on Cancer. PNEC: Predicted No Effect Concentration. REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
General information	Only trained personnel should use this material.
Revision comments	This is the first issue.
Revision date	05/05/2020
Revision	1
SDS number	28689

NITOFLOR EPU BASE

Hazard statements in full

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
H360 May damage fertility or the unborn child.
H373 May cause damage to organs (Hearing organs) through prolonged or repeated exposure.
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 NITOFLOE EPU HARDENER

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

1.1. Product identifier

Product name NITOFLOE EPU HARDENER

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

Identified uses Hardener Component of Two-Part Solvent Based Epoxy Coating

1.3. Details of the supplier of the safety data sheet

Supplier Fosroc Idea Yapi Kimyasallari San. Ve Tic. A.S.
Aydivnevlcr mah. Sanayi cad. Demirtas Plaza No:13 Kat:3 34854
Maltepe ISTANBUL
TURKEY
+90 216 463 6776
enquiryturkey@fosroc.com

1.4. Emergency telephone number

Emergency telephone +90 262 728 15 05

National emergency telephone number 114

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 3 - H226

Health hazards Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 - H361 STOT SE 3 - H335

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 toxic 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 EPU HARDENER

Hazard statements	<p>H226 Flammable liquid and vapour.</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H361 Suspected of damaging fertility or the unborn child.</p> <p>H335 May cause respiratory irritation.</p> <p>H411 Toxic to aquatic life with long lasting effects.</p>
Precautionary statements	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P260 Do not breathe vapour/ spray.</p> <p>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
Contains	NONYLPHENOL, O,O'-Bis(2-aminopropyl)polypropyleneglycol, TRIETHYLENETETRAMINE
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>P240 Ground and bond container and receiving equipment.</p> <p>P241 Use explosion-proof electrical equipment.</p> <p>P242 Use non-sparking tools.</p> <p>P243 Take action to prevent static discharges.</p> <p>P261 Avoid breathing vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</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+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</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>P308+P313 IF exposed or concerned: Get medical advice/ attention.</p> <p>P310 Immediately call a POISON CENTER/ doctor.</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>P391 Collect spillage.</p> <p>P403+P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</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

NITOFLOR EPU HARDENER

1-METHOXY-2-PROPANOL			10-30%
CAS number: 107-98-2		EC number: 203-539-1	
Classification Flam. Liq. 3 - H226 STOT SE 3 - H336			

O,O'-Bis(2-aminopropyl)polypropyleneglycol			10-30%
CAS number: 9046-10-0			
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Aquatic Chronic 3 - H412			

NONYLPHENOL			10-30%
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			

TRIETHYLENETETRAMINE			10-30%
CAS number: 112-24-3		EC number: 203-950-6	
Classification Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412			

HYDROCARBONS, C9, aromatics			5-10%
CAS number: 64742-95-6		EC number: 918-668-5	REACH registration number: 01-2119455851-35-0000
Classification Flam. Liq. 3 - H226 STOT SE 3 - H335, H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411			

NITOFLOR EPU HARDENER

1,2,4-TRIMETHYLBENZENE CAS number: 95-63-6 EC number: 202-436-9	1-5%
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 Aquatic Chronic 2 - H411	
MESITYLENE CAS number: 108-67-8 EC number: 203-604-4	1-5%
Classification Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 Aquatic Chronic 2 - H411	
CUMENE CAS number: 98-82-8 EC number: 202-704-5	<1%
Classification Flam. Liq. 3 - H226 STOT SE 3 - H335 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	
ETHYLENEDIAMINE CAS number: 107-15-3 EC number: 203-468-6	<1%
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Resp. Sens. 1 - H334 Skin Sens. 1 - H317	

NITOFLOR EPU HARDENER

XYLENE			<1%
CAS number: 1330-20-7	EC number: 215-535-7	REACH registration number: 01-2119488216-32-0000	
Classification			
Flam. Liq. 3 - H226			
Acute Tox. 4 - H312			
Acute Tox. 4 - H332			
Skin Irrit. 2 - H315			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Inhalation	Never give anything by mouth to an unconscious person. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink. Give milk instead of water if readily available. Get medical attention immediately. Do not induce vomiting unless under the direction of medical personnel.
Skin contact	After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Get medical attention if symptoms are severe or persist after washing.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	May cause respiratory system irritation.
Ingestion	May be harmful if swallowed.
Skin contact	Causes severe skin burns and eye damage.
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	Use alcohol-resistant foam, carbon dioxide or dry powder to extinguish.
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	Not known.
Hazardous combustion products	Carbon dioxide (CO ₂). Carbon monoxide (CO). Oxides of nitrogen.

NITOFLOR EPU HARDENER

5.3. Advice for firefighters

Protective actions during firefighting

Fight fire with normal precautions from a reasonable distance. Avoid breathing fire gases or vapours. Containers close to fire should be removed or cooled with water. Avoid the spillage or runoff entering drains, sewers or watercourses.

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

For personal protection, see Section 8.

6.2. Environmental precautions

Environmental precautions

Avoid the spillage or runoff entering drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Take care as floors and other surfaces may become slippery. Avoid the spillage or runoff entering drains, sewers or watercourses. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely.

6.4. Reference to other sections

Reference to other sections

Collect and dispose of spillage as indicated in Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Good personal hygiene procedures should be implemented. Avoid inhalation of vapours and spray/mists. Avoid contact with skin and eyes.

Advice on general occupational hygiene

Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

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

Storage class

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

Occupational exposure limits

1-METHOXY-2-PROPANOL

Sk

Long-term exposure limit (8-hour TWA): WEL 100 ppm 375 mg/m³

Short-term exposure limit (15-minute): WEL 150 ppm 560 mg/m³

HYDROCARBONS, C9, aromatics

Long-term exposure limit (8-hour TWA): WEL 100 mg/m³

1,2,4-TRIMETHYLBENZENE

NITOFLOR EPU HARDENER

Long-term exposure limit (8-hour TWA): WEL 25 ppm 125 mg/m³

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

MESITYLENE

Long-term exposure limit (8-hour TWA): WEL 25 ppm 125 mg/m³

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

CUMENE

Long-term exposure limit (8-hour TWA): WEL 25 ppm 125 mg/m³

Short-term exposure limit (15-minute): WEL 50 ppm 250 mg/m³

Sk

ETHYLENEDIAMINE

Long-term exposure limit (8-hour TWA): WEL 10 ppm 25 mg/m³

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

XYLENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³

Sk

Sk = Can be absorbed through the skin.

WEL = Workplace Exposure Limit

Sk = Can be absorbed through skin.

1-METHOXY-2-PROPANOL (CAS: 107-98-2)

DNEL

Industry - Inhalation; Short term local effects: 553.5 mg/m³

Industry - Dermal; Long term systemic effects: 50.6 mg/kg/day

Industry - Inhalation; Long term systemic effects: 369 mg/m³

PNEC

- Fresh water; 10 mg/l

- marine water; 1 mg/l

- Intermittent release; 100 mg/l

O,O'-Bis(2-aminopropyl)polypropyleneglycol (CAS: 9046-10-0)

DNEL

Industry/Professional, Workers - ; Long term systemic effects: 2.5 mg/kg bw/day

PNEC

- Fresh water; 0.015 mg/l

HYDROCARBONS, C9, aromatics (CAS: 64742-95-6)

DNEL

Professional - Dermal; systemic effects: 25 mg/kg/day

Professional - Inhalation; systemic effects: 150 mg/m³

Consumer - Oral; systemic effects: 11 mg/kg/day

Consumer - Inhalation; systemic effects: 32 mg/m³

Consumer - Dermal; systemic effects: 11 mg/kg/day

XYLENE (CAS: 1330-20-7)

DNEL

Workers - Inhalation; Long term systemic effects: 77 mg/m³

Workers - Inhalation; Short term systemic effects: 289 mg/m³

Workers - Dermal; Long term systemic effects: 180 mg/kg/day

PNEC

- Fresh water; 0.327 mg/l

- marine water; 0.327 mg/l

- STP; 6.58 mg/l

8.2. Exposure controls

NITOFLOR EPU HARDENER

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. All handling should only take place in well-ventilated areas.

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

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Nitrile rubber. Polyvinyl chloride (PVC).

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

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

Respiratory protection

Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140. Check that the respirator fits tightly and the filter is changed regularly. Wear a respirator fitted with the following cartridge: Gas filter, type A2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Amber.
Odour	Aromatic.
Odour threshold	Not available.
pH	Not determined.
Melting point	Not applicable.
Initial boiling point and range	>100°C
Flash point	25°C Closed cup.
Evaporation rate	Not available.
Evaporation factor	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	Not available.
Other flammability	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	1.034 @ 20°C
Bulk density	Not applicable.

NITOFLOR EPU HARDENER

Solubility(ies)	Insoluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	300°C
Decomposition Temperature	Not determined.
Viscosity	Not determined.
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	Not known.
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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: Amines.
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10.2. Chemical stability

Stability	Stable under the prescribed storage conditions.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Will not polymerise.
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition.
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10.5. Incompatible materials

Materials to avoid	Flammable/combustible materials.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Ammonia or amines.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects	No information available.
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Acute toxicity - oral

ATE oral (mg/kg)	3,244.06
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Acute toxicity - dermal

ATE dermal (mg/kg)	3,186.04
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Acute toxicity - inhalation

ATE inhalation (gases ppm)	30,589.58
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ATE inhalation (vapours mg/l)	74.77
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NITOFLOR EPU HARDENER

ATE inhalation (dusts/mists
mg/l) 10.2

General information	Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.
Inhalation	May cause respiratory irritation.
Ingestion	May be harmful if swallowed.
Skin contact	Causes severe skin burns and eye damage. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Acute and chronic health hazards	Suspected of damaging fertility or the unborn child.
Route of exposure	Inhalation Ingestion Skin and/or eye contact
Target organs	Skin Eyes Respiratory tract

Toxicological information on ingredients.

O,O'-Bis(2-aminopropyl)polypropyleneglycol

Acute toxicity - oral

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

ATE dermal (mg/kg) 1,100.0

NONYLPHENOL

Acute toxicity - oral

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

Species Rat

ATE oral (mg/kg) 1,620.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀
mg/kg) 2,031.0

Species Rat

TRIETHYLENETETRAMINE

Acute toxicity - oral

Acute toxicity oral (LD₅₀
mg/kg) 2,500.0

Species Rat

ATE oral (mg/kg) 2,500.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀
mg/kg) 550.0

NITOFLOR EPU HARDENER

Species	Rabbit
ATE dermal (mg/kg)	1,100.0

HYDROCARBONS, C9, aromatics

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg)	3,592.0
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Species	Rat
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Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg)	3,160.0
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Species	Rabbit
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Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l)	6.2
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Species	Rat
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ATE inhalation (vapours mg/l)	6.2
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XYLENE

Acute toxicity - dermal

ATE dermal (mg/kg)	1,100.0
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Carcinogenicity

IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
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SECTION 12: Ecological information

Ecotoxicity	Toxic to aquatic life with long lasting effects.
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12.1. Toxicity

Toxicity	The product contains a substance which may cause long-term adverse effects in the environment.
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Ecological information on ingredients.

O,O'-Bis(2-aminopropyl)polypropyleneglycol

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: >100 mg/l, Fish
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Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 15 mg/l, Daphnia magna
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Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: 135 mg/l, Algae
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NONYLPHENOL

Acute aquatic toxicity

NITOFLOR EPU HARDENER

LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 96 hours: 0.128 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 0.0848 mg/l, Daphnia magna
<u>Chronic aquatic toxicity</u>	
M factor (Chronic)	1

TRIETHYLENETETRAMINE

<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hours: 330 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 31.1 mg/L, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 20 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	EC ₅₀ , 16 hour: 680 mg/l, Bacteria

HYDROCARBONS, C9, aromatics

<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , : 9.2 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC ₅₀ , : 3.2 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , : 2.6 mg/l, Pseudokirchneriella subcapitata

XYLENE

Toxicity	Not considered toxic to fish.
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12.2. Persistence and degradability

Persistence and degradability The product is not biodegradable.

Ecological information on ingredients.

HYDROCARBONS, C9, aromatics

Biodegradation	Water - Degradation (%) 78: 28 days The substance is readily biodegradable.
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XYLENE

Persistence and degradability	Expected to be not readily biodegradable.
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12.3. Bioaccumulative potential

Bioaccumulative potential Bioaccumulation is unlikely.

NITOFLOR EPU HARDENER

Partition coefficient Not determined.

12.4. Mobility in soil

Mobility The product is insoluble in water.

Ecological information on ingredients.

XYLENE

Mobility The product is insoluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

O,O'-Bis(2-aminopropyl)polypropyleneglycol

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

TRIETHYLENETETRAMINE

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

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

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	3470
UN No. (IMDG)	3470
UN No. (ICAO)	3470
UN No. (ADN)	3470

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	PAINT RELATED MATERIAL, CORROSIVE, FLAMMABLE
Proper shipping name (IMDG)	PAINT RELATED MATERIAL, CORROSIVE, FLAMMABLE (CONTAINS NONYLPHENOL, SOLVENT NAPHTHA)
Proper shipping name (ICAO)	PAINT RELATED MATERIAL, CORROSIVE, FLAMMABLE
Proper shipping name (ADN)	PAINT RELATED MATERIAL, CORROSIVE, FLAMMABLE

NITOFLOR EPU HARDENER

14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID subsidiary risk	3
ADR/RID classification code	CF1
ADR/RID label	8
IMDG class	8
IMDG subsidiary risk	3
ICAO class/division	8
ICAO subsidiary risk	3
ADN class	8
ADN subsidiary risk	3

Transport labels



14.4. Packing group

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

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS	F-E, S-C
ADR transport category	2
Emergency Action Code	•3W
Hazard Identification Number (ADR/RID)	83
Tunnel restriction code	(D/E)

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

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

NITOFLOR EPU HARDENER

National regulations	Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.
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). 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).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	<p>PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative. CAS: Chemical Abstracts Service. EC₅₀: 50% of maximal Effective Concentration. GHS: Globally Harmonized System. IATA: International Air Transport Association. IARC: International Agency for Research on Cancer. DNEL: Derived No Effect Level. PNEC: Predicted No Effect Concentration. REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.</p>
General information	Only trained personnel should use this material.
Revision comments	This is the first issue.
Revision date	05/05/2020
Revision	1
SDS number	28690
Hazard statements in full	<p>H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. 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. H336 May cause drowsiness or dizziness. H361 Suspected of damaging fertility or 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. H412 Harmful to aquatic life with long lasting effects.</p>

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.