



SAFETY DATA SHEET

NITOFLO FC130 HARDENER

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

1.1. Product identifier

Product name NITOFLO FC130 HARDENER

Product number 1837514AE1

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

Identified uses Hardener component of two-part epoxy resin floor coating.

1.3. Details of the supplier of the safety data sheet

Supplier Al Gurg Fosroc LLC
PO Box 657
Dubai
United Arab Emirates
+ 971 4 2858606

1.4. Emergency telephone number

Emergency telephone +97142039699 (08:00 to 16:30) // +971506258232 (16:30 to 08:00)GMT+4

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Aquatic Chronic 3 - H412

2.2. Label elements

Hazard statements EUH208 Contains PENTAETHYLENEHEXAMINE. May produce an allergic reaction.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements P273 Avoid release to the environment.
P501 Dispose of contents/ container in accordance with national regulations.

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

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PENTAETHYLENEHEXAMINE			<1%
CAS number: 4067-16-7	EC number: 223-775-9	REACH registration number: 01-2119485826-22-0000	
M factor (Acute) = 1	M factor (Chronic) = 1		
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			

HYDROCARBONS, C9, aromatics			<1%
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			

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

Inhalation	Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

General information	Get medical attention promptly if symptoms occur after washing.
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Inhalation	May cause discomfort.
Ingestion	May cause discomfort if swallowed.
Skin contact	May cause an allergic skin reaction.
Eye contact	May cause 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 The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Non-flammable and non-explosive

5.3. Advice for firefighters

Protective actions during firefighting Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear personal protective clothing and equipment, 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 Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

Reference to other sections See Section 12 for additional information on ecological hazards.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid eye contact.

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. Protect from frost.

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

HYDROCARBONS, C9, aromatics

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

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ETHYLBENZENE

Long-term exposure limit (8-hour TWA): WEL 100 ppm 441 mg/m³

Short-term exposure limit (15-minute): WEL 125 ppm 552 mg/m³

Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through the skin.

PENTAETHYLENEHEXAMINE (CAS: 4067-16-7)

DNEL	Industry - Inhalation; Short term systemic effects: 8550 mg/m ³
	Industry - Inhalation; Long term systemic effects: 1.59 mg/m ³
	Industry - Dermal; Long term systemic effects: 0.4 mg/kg/day
	Industry - Dermal; Long term local effects: 0.044 mg/cm ²
	Industry - Dermal; Long term systemic effects: 0.91 mg/kg/day
PNEC	- Fresh water, marine water; 0.0025 mg/l
	- STP; 0.025 mg/l

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

DNEL	Professional - Dermal; systemic effects: 25 mg/kg/day
	Professional - Inhalation; systemic effects: 150 mg/m ³
	Consumer - Oral; systemic effects: 11 mg/kg/day
	Consumer - Inhalation; systemic effects: 32 mg/m ³
	Consumer - Dermal; systemic effects: 11 mg/kg/day

ETHYLBENZENE (CAS: 100-41-4)

DNEL	Workers - Inhalation; Long term systemic effects: 77 mg/m ³
	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

Protective equipment



Appropriate engineering controls

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

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Do not smoke in work area. Wash promptly if skin becomes contaminated. Promptly remove non-impervious clothing that becomes contaminated.

Respiratory protection

No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Various colours.
Odour	Amine.
Odour threshold	Not applicable.
pH	Not determined.
Melting point	Not determined.
Initial boiling point and range	>100°C @
Flash point	Not determined.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not determined.
Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not determined.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	1.35 @ 20°C
Bulk density	Not determined.
Solubility(ies)	Soluble in water
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
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	No additional information.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No dangerous reactions known if used as directed.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Hazardous polymerization will not occur.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Hazardous decomposition products Fire creates: Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing.

Ingestion May cause discomfort if swallowed.

Skin contact Liquid may irritate skin.

Eye contact Vapour or spray in the eyes may cause irritation and smarting.

Toxicological information on ingredients.

PENTAETHYLENEHEXAMINE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,591.4

Species Rat

ATE oral (mg/kg) 1,591.4

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 1,720.0

Species Rabbit

ATE dermal (mg/kg) 1,720.0

HYDROCARBONS, C9, aromatics

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 3,592.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 3,160.0

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Species Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation 6.2
(LC₅₀ vapours mg/l)

Species Rat

ATE inhalation (vapours 6.2
mg/l)

ETHYLBENZENE

Carcinogenicity

IARC carcinogenicity IARC Group 2B Possibly carcinogenic to humans.

SECTION 12: Ecological information

Ecotoxicity May cause long-term adverse effects on the aquatic environment, Special attention should be paid to the water body.

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

PENTAETHYLENEHEXAMINE

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 96 hours: 180 mg/l, Poecilia reticulata (Guppy)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 17.5 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 0.7 mg/l, Pseudokirchneriella subcapitata

Chronic aquatic toxicity

M factor (Chronic) 1

HYDROCARBONS, C9, aromatics

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, : 9.2 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, : 3.2 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, : 2.6 mg/l, Pseudokirchneriella subcapitata

12.2. Persistence and degradability

Persistence and degradability This product is not expected to be readily biodegradable.

Ecological information on ingredients.

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HYDROCARBONS, C9, aromatics

Biodegradation

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

12.3. Bioaccumulative potential

Partition coefficient Not determined.

12.4. Mobility in soil

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

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

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

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

Not applicable.

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

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

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

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EU legislation

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

General information	The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	21/10/2019
Revision	3
Supersedes date	06/11/2016
SDS number	24577
Hazard statements in full	H225 Highly flammable liquid and vapour. 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. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. 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. H412 Harmful to aquatic life with long lasting effects. EUH208 Contains PENTAETHYLENEHEXAMINE. May produce an allergic reaction.

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.