SAFETY DATA SHEET
NITOFLOR FC130 HARDENER

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

1.1. Product identifier

Product name NITOFLOR FC130 HARDENER

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 Idea Yapi Kimyasallari San. Ve Tic. A.S.
Aydinevler 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 Not Classified

Health hazards Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 3 - H412

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

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

2.2. Label elements

Hazard pictograms

Signal word Warning

Hazard statements

H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

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Precautionary statements	P261 Avoid breathing vapour/ spray. 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. P321 Specific treatment (see medical advice on this label). P501 Dispose of contents/ container in accordance with national regulations.
Contains	BISPHENOL A LIQUID RESIN, POLYETHYLENE GLYCOL, Polyoxypropylenediamine
Supplementary precautionary statements	P302+P352 IF ON SKIN: Wash with plenty of water. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse.

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 LIQUID RESIN **5-10%**

CAS number: 25068-38-6

Classification	Classification (67/548/EEC or 1999/45/EC)
Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	Xi;R36/38. N;R51/53. R43.

POLYETHYLENE GLYCOL **1-5%**

CAS number: 25322-68-3

Classification	Classification (67/548/EEC or 1999/45/EC)
STOT SE 3 - H335	-

Polyoxypropylenediamine **<1%**

CAS number: 9046-10-0

No. REACH: Exempt of registration

Classification

Acute Tox. 4 - H302
Skin Corr. 1B - H314
Aquatic Chronic 3 - H412

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m-PHENYLENEBIS(METHYLAMINE) **<1%**

CAS number: 1477-55-0 EC number: 216-032-5 REACH registration number: 01-2119480150-50-XXXX

Classification
Acute Tox. 4 - H302
Acute Tox. 4 - H332
Skin Corr. 1B - H314
Eye Dam. 1 - H318
Skin Sens. 1 - H317
Aquatic Chronic 3 - H412

POLYAMINE AMIDE SALT **<1%**

CAS number: —

Classification
Skin Irrit. 2 - H315

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

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

ISO-BUTANOL **<1%**

CAS number: 78-83-1 EC number: 201-148-0

Classification
Flam. Liq. 3 - H226
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
STOT SE 3 - H335, H336

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Polyacrylate Ethoxylate CAS number: —	**<1%**

Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318	**Classification (67/548/EEC or 1999/45/EC)** Xn;R22. Xi;R41.

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 Keep affected person under observation. Get medical attention if any discomfort continues.

Ingestion Keep affected person under observation. Get medical attention if any discomfort continues.

Skin contact Remove affected person from source of contamination. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves.

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. Get medical attention if any discomfort continues.

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 sensitisation by inhalation.

Ingestion May cause irritation of mouth, throat and digestive tract.

Skin contact May cause an allergic skin reaction.

Eye contact May irritate 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 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.

Hazardous combustion products Carbon dioxide (CO2). Carbon monoxide (CO). Toxic gases or vapours.

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.

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Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Use air-supplied respirator, gloves and protective goggles.

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 Contain and absorb spillage with sand, earth or other non-combustible material. Take care as floors and other surfaces may become slippery. 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. Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep only in the original container in a cool, 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

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

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

ISO-BUTANOL

Long-term exposure limit (8-hour TWA): WEL 50 ppm 154 mg/m³
Short-term exposure limit (15-minute): WEL 75 ppm 231 mg/m³

WEL = Workplace Exposure Limit
Sk = Can be absorbed through the skin.

XYLENE (CAS: 1330-20-7)

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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

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

ISO-BUTANOL (CAS: 78-83-1)

DNEL	Workers - Inhalation; Long term local effects: 310 mg/m³
PNEC	- Fresh water; 0.4 mg/l - marine water; 0.04 mg/l

8.2. Exposure controls

Protective equipment

Appropriate engineering controls	Ensure control measures are regularly inspected and maintained.
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. Polyvinyl chloride (PVC). Nitrile rubber.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact. Wear apron or protective clothing in case of contact.
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 K.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Various colours.
Odour	Amine.

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Odour threshold	Not determined.
pH	Not determined.
Melting point	Not determined.
Initial boiling point and range	>100°C @ 1 atm
Flash point	>110°C
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Other flammability	Not determined.
Vapour pressure	1 kPa @ 20°C
Vapour density	Not determined.
Relative density	1.25 @ 20°C
Bulk density	Not applicable.
Solubility(ies)	Miscible with water.
Partition coefficient	Not applicable.
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	Not available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability	Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Under normal conditions of storage and use, no hazardous reactions will occur.

10.4. Conditions to avoid

Conditions to avoid	Avoid exposure to high temperatures or direct sunlight. Avoid freezing. Temperatures below 5°C

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10.5. Incompatible materials

Materials to avoid Strong acids. Strong alkalis. Strong oxidising agents. Strong reducing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Toxic and corrosive gases or vapours. Carbon monoxide (CO). Carbon dioxide (CO_2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation May cause sensitisation by inhalation.

Ingestion May cause irritation of mouth, throat and digestive tract.

Skin contact May cause an allergic skin reaction.

Eye contact May irritate eyes.

Acute and chronic health hazards No known chronic or acute health risks.

Route of exposure Skin and/or eye contact Ingestion Inhalation

Target organs Skin

Toxicological information on ingredients.

POLYETHYLENE GLYCOL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	47,000.0
Species	Mouse
ATE oral (mg/kg)	47,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	20,000.0
Species	Rabbit
ATE dermal (mg/kg)	20,000.0

Polyoxypropylenediamine

Acute toxicity - oral

ATE oral (mg/kg)	500.0

m-PHENYLENEBIS(METHYLAMINE)

Acute toxicity - oral

Notes (oral LD_{50})	LD_{50} 930 mg/kg, Oral, Rat
ATE oral (mg/kg)	500.0

Acute toxicity - dermal

Notes (dermal LD_{50})	LD_{50} >3100 mg/kg, Dermal, Rabbit

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Acute toxicity - inhalation

Notes (inhalation LC_{50}) LC50 1.34 mg/l, Inhalative, (Mist), Rat (OECD 403)

ATE inhalation (vapours mg/l) 11.0

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.

ETHYLBENZENE

Carcinogenicity

IARC carcinogenicity IARC Group 2B Possibly carcinogenic to humans.

SECTION 12: Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity The product contains a substance which is harmful to aquatic organisms.

Ecological information on ingredients.

XYLENE

Toxicity Not considered toxic to fish.

12.2. Persistence and degradability

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

Ecological information on ingredients.

XYLENE

Persistence and degradability Expected to be not readily biodegradable.

12.3. Bioaccumulative potential

Partition coefficient Not applicable.

12.4. Mobility in soil

Mobility The product is soluble 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.

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12.6. Other adverse effects

Other adverse effects Not 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

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

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

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Abbreviations and acronyms used in the safety data sheet	DNEL: Derived No Effect Level. PNEC: Predicted No Effect Concentration. PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative. 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	16/03/2020
Revision	1
SDS number	28122
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. 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. H373 May cause damage to organs (Hearing organs) through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.