



SAFETY DATA SHEET NITOFLOSL2000 HARDENER

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

1.1. Product identifier

Product name NITOFLOSL2000 HARDENER

Product number A1871506 AE1

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

Identified uses Hardener component of four part epoxy resin floor finish

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 Flam. Liq. 3 - H226

Health hazards Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 3 - H412

2.2. Label elements

Hazard pictograms



Signal word Danger

Hazard statements H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

NITOFLOR SL2000 HARDENER

Precautionary statements

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.
 Rinse skin with water or shower.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P501 Dispose of contents/ container in accordance with national regulations.

Contains

ISOPHORONEDIAMINE, BENZYL ALCOHOL, PHENOL, METHYLSTYRENATED

Supplementary precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P233 Keep container tightly closed.
 P240 Ground and bond container and receiving equipment.
 P241 Use explosion-proof electrical equipment.
 P242 Use non-sparking tools.
 P243 Take action to prevent static discharges.
 P260 Do not breathe vapour/ spray.
 P261 Avoid breathing vapour/ spray.
 P264 Wash contaminated skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
 P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P310 Immediately call a POISON CENTER/ doctor.
 P321 Specific treatment (see medical advice on this label).
 P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P363 Wash contaminated clothing before reuse.
 P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ISOPHORONEDIAMINE			30-60%
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			

NITOFLOR SL2000 HARDENER

BENZYL ALCOHOL			10-30%
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			

PHENOL, METHYLSTYRENATED			10-30%
CAS number: 68512-30-1	EC number: 270-966-8	REACH registration number: 01-2119555274-38	
Classification Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412			

MINERAL OIL			5-10%
CAS number: 8012-95-1	EC number: 232-384-2		
Classification Asp. Tox. 1 - H304			

XYLENE			5-10%
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			

SALICYLIC ACID			1-5%
CAS number: 69-72-7	EC number: 200-712-3	REACH registration number: 01-2119486984-17-XXXX	
Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318			

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. Never give anything by mouth to an unconscious person. Do not induce vomiting. Keep affected person warm and at rest. Get medical attention immediately.

NITOFLOR SL2000 HARDENER

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.

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

Inhalation	Irritating to respiratory system.
Ingestion	Harmful if swallowed.
Skin contact	Causes burns.
Eye contact	Causes serious eye damage.

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 alcohol-resistant foam, carbon dioxide or dry powder to extinguish.
-------------------------------------	---

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Toxic gases or vapours. Nitrogen compounds Oxides of nitrogen.
--------------------------------------	--

5.3. Advice for firefighters

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	Avoid contact with skin and eyes. 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	Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Absorb in vermiculite, dry sand or earth and place into containers. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Avoid contamination of ponds or watercourses with washing down water.
--------------------------------	--

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	Wear protective clothing as described in Section 8 of this safety data sheet.
--------------------------	---

NITOFLOR SL2000 HARDENER

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

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

ISOPHORONEDIAMINE (CAS: 2855-13-2)

PNEC

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

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

PHENOL, METHYLSTYRENATED (CAS: 68512-30-1)

DNEL

Workers - Dermal; Long term : 16.4 mg/kg bw/day
 Workers - Inhalation; Long term : 57 mg/m³

PNEC

- Fresh water; 14 µg/l
- marine water; 1.4 µg/l
- Intermittent release; 140 µg/l
- STP; 2.4 mg/l
- Sediment; 52.9 mg/kg
- Soil; 10.5 mg/kg dw

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

NITOFLO SL2000 HARDENER

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

SALICYLIC ACID (CAS: 69-72-7)

DNEL	Workers - Inhalation; Long term systemic effects: 5 mg/m ³
	Workers - Dermal; Long term systemic effects: 2.3 mg/kg bw/day
	Workers - Inhalation; Long term local effects: 5 mg/m ³
	General population - Inhalation; Long term systemic effects: 4 mg/m ³

PNEC	- Fresh water; 0.20 mg/l
	- marine water; 0.020 mg/l
	- Sediment (Freshwater); 1.42 mg/kg dw
	- Soil; 0.17 mg/kg dw
	- STP; 16.2 mg/l

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. Neoprene. Butyl rubber.

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

Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Use an approved air purifying respirator with replaceable filter cartage comply with EN 140 and filter EN 141: Organic Vapour cartridge type A1

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Straw.
Odour	Amine.
Odour threshold	Not applicable.
pH	Not determined.
Melting point	Not applicable.
Initial boiling point and range	140-180°C @
Flash point	52°C

NITOFLOR SL2000 HARDENER

Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	No information available.
Vapour pressure	0.01 kPa @ 20°C
Relative density	0.99 @ 20°C
Bulk density	Not applicable.
Solubility(ies)	Insoluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	>300°C
Viscosity	0.5 Poise @ 25°C
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 information required.
-------------------	--------------------------

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.
------------	---

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	Avoid excessive heat for prolonged periods of time.
---------------------	---

10.5. Incompatible materials

Materials to avoid	Strong oxidising agents.
--------------------	--------------------------

10.6. Hazardous decomposition products

Hazardous decomposition products	Ammonia or amines. Oxides of carbon.
----------------------------------	--------------------------------------

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)	1,223.52
------------------	----------

Acute toxicity - dermal

ATE dermal (mg/kg)	3,022.81
--------------------	----------

NITOFLOR SL2000 HARDENER

Acute toxicity - inhalation

ATE inhalation (gases ppm) 86,538.46

ATE inhalation (vapours mg/l) 32.7

ATE inhalation (dusts/mists mg/l) 28.85

Inhalation May cause respiratory system irritation.

Ingestion Causes burns. May cause chemical burns in mouth and throat. May cause stomach pain or vomiting. May be harmful if swallowed.

Skin contact May cause allergic contact eczema. Product has a defatting effect on skin.

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

Toxicological information on ingredients.

ISOPHORONEDIAMINE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,030.0

Species Rat

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 1,840.0

Species Rabbit

ATE dermal (mg/kg) 1,100.0

BENZYL ALCOHOL

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) 2,000.0

Species Rabbit

ATE dermal (mg/kg) 2,001.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 11.0

Species Rat

NITOFLOR SL2000 HARDENER

ATE inhalation (vapours
mg/l) 11.0

Skin sensitisation

Skin sensitisation Not sensitising.

Carcinogenicity

Carcinogenicity NOAEL 200 mg/kg/day, Oral, Mouse There is no evidence that the product can cause cancer.

Specific target organ toxicity - repeated exposure

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.

PHENOL, METHYLSTYRENATED

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀
mg/kg) 10.0

Species Rat

MINERAL OIL

Acute toxicity - oral

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

Species Rat

ATE oral (mg/kg) 5,000.0

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.

SALICYLIC ACID

Acute toxicity - oral

Acute toxicity oral (LD₅₀
mg/kg) 891.0

Species Rat

ATE oral (mg/kg) 891.0

Acute toxicity - dermal

NITOFLOR SL2000 HARDENER

Notes (dermal LD₅₀) LD₅₀ >2000 mg/kg, Dermal, Rat

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ >0.9 mg/l, Inhalation, Rat

SECTION 12: Ecological information

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

12.1. Toxicity

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

Ecological information on ingredients.

ISOPHORONEDIAMINE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 110 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 23 mg/l, Daphnia magna

Acute toxicity - aquatic plants IC₅₀, 72 hours: 50 mg/l, Algae

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

XYLENE

Toxicity Not considered toxic to fish.

SALICYLIC ACID

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, : 90 mg/l, Leuciscus idus (Golden orfe)
LC₅₀, 96 hours: 1.3 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 24 hours: 105 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability Not determined.

Ecological information on ingredients.

NITOFLOR SL2000 HARDENER

ISOPHORONEDIAMINE

Persistence and degradability The product is not readily biodegradable.

XYLENE

Persistence and degradability Expected to be not readily biodegradable.

12.3. Bioaccumulative potential

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 Kow: 0.99

12.4. Mobility in soil

Mobility The product is immiscible with water and will spread on the water surface.

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.

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

14.1. UN number

UN No. (ADR/RID) 2734

UN No. (IMDG) 2734

UN No. (ICAO) 2734

UN No. (ADN) 2734

14.2. UN proper shipping name

Proper shipping name (ADR/RID) AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. (CONTAINS ISOPHORONEDIAMINE, XYLENE)

NITOFLOR SL2000 HARDENER

Proper shipping name (IMDG) AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. (CONTAINS ISOPHORONEDIAMINE, XYLENE)

Proper shipping name (ICAO) AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. (CONTAINS ISOPHORONEDIAMINE, XYLENE)

Proper shipping name (ADN) AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. (CONTAINS ISOPHORONEDIAMINE, XYLENE)

14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID subsidiary risk	3
ADR/RID classification code	FC
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
No.

14.6. Special precautions for user

IMDG Code segregation group	18. Alkalies
EmS	F-E, S-C
ADR transport category	2
Emergency Action Code	•2W
Hazard Identification Number (ADR/RID)	83
Tunnel restriction code	(D/E)

NITOFLOR SL2000 HARDENER

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

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).

Guidance Workplace Exposure Limits EH40.

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 07/09/2020

Revision 5

Supersedes date 30/10/2018

SDS number 26933

Hazard statements in full

- 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.
- H412 Harmful 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.