



SAFETY DATA SHEET NITOPRIME 31 HARDENER

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

1.1. Product identifier

Product name NITOPRIME 31 HARDENER

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

Identified uses Hardener component of two part epoxy primer 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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317

Environmental hazards Not Classified

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

Environmental The product is not expected to be hazardous to the environment.

2.2. Label elements

Hazard pictograms



Signal word Danger

Hazard statements H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.

Precautionary statements P260 Do not breathe vapour/ spray.
P264 Wash contaminated skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P405 Store locked up.
P501 Dispose of contents/ container in accordance with national regulations.

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Contains BENZYL ALCOHOL, ISOPHORONEDIAMINE, N,N,N',N',N'',N''-hexamethyl-1,3,5-triazine-1,3,5(2H,4H,6H)-tripropanamine

Supplementary precautionary statements P261 Avoid breathing vapour/ spray.
 P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 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.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 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.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

BENZYL ALCOHOL	30-60%
CAS number: 100-51-6	EC number: 202-859-9
	REACH registration number: 01-2119492630-38-xxxx
Classification	
Acute Tox. 4 - H302	
Acute Tox. 4 - H332	
Eye Irrit. 2 - H319	
ISOPHORONEDIAMINE	5-10%
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	
N,N,N',N',N'',N''-hexamethyl-1,3,5-triazine-1,3,5(2H,4H,6H)-tripropanamine	5-10%
CAS number: 15875-13-5	EC number: 240-004-1
Classification	
Acute Tox. 4 - H312	
Skin Irrit. 2 - H315	
Eye Dam. 1 - H318	

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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	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. If person becomes uncomfortable seek hospital and bring these instructions.

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	Low volatility makes inhalation unlikely at ambient temperature.
Ingestion	May cause irritation of mouth, throat and digestive tract.
Skin contact	May cause an allergic skin reaction.
Eye contact	Causes severe skin burns and 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 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 (CO ₂). Carbon monoxide (CO). Nitrous gases (NO _x).

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 chemical protective suit. Use air-supplied respirator, gloves and protective goggles.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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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. Avoid contact with skin and eyes.

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 Corrosive storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

BENZYL ALCOHOL (CAS: 100-51-6)

DNEL	Workers - Inhalation; Short term systemic effects: 110 mg/m ³ Workers - Inhalation; Long term systemic effects: 22 mg/m ³ 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

ISOPHORONEDIAMINE (CAS: 2855-13-2)

PNEC	- marine water; 0.006 mg/l - Fresh water; 0.06 mg/l - Soil; 1.121 mg/kg
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8.2. Exposure controls

Protective equipment



Appropriate engineering controls

No special precautions.

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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. 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	Yellowish.
Odour	Amine.
Odour threshold	Not determined.
pH	pH (concentrated solution): 12
Melting point	Not determined.
Initial boiling point and range	Not determined.
Flash point	109°C Closed cup. Not determined.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not determined.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	g/cm ³ 1.06 @ 20°C/68°F
Bulk density	Not available.
Solubility(ies)	Slightly soluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	300 - 400 mPa s @ 25°C

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Explosive properties Not considered to be explosive.

Explosive under the influence of a flame Not considered to be explosive.

Oxidising properties Not determined.

9.2. Other information

Other information Not available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No test data specifically related to reactivity available for this product or its ingredients.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

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 Not known.

10.5. Incompatible materials

Materials to avoid Avoid contact with the following materials: Strong acids. Strong mineral acids. Acid-reactive materials.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 2,393.62

Acute toxicity - dermal

ATE dermal (mg/kg) 10,464.1

Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l) 9.28

Inhalation Low volatility makes inhalation unlikely at ambient temperature.

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

Skin contact May cause an allergic skin reaction.

Eye contact Causes severe skin burns and eye damage.

Acute and chronic health hazards Causes severe burns.

Route of exposure Skin and/or eye contact Inhalation Ingestion

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Target organs Skin Eyes

Toxicological information on ingredients.

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 dust/mist mg/l) 4.178

Species Rat

ATE inhalation (dusts/mists mg/l) 4.178

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

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

N,N,N',N',N'',N''-hexamethyl-1,3,5-triazine-1,3,5(2H,4H,6H)-tripropanamine

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Acute toxicity - dermal

Acute toxicity dermal (LD₅₀) 1,566.0 mg/kg

Species Rabbit

ATE dermal (mg/kg) 1,566.0

SECTION 12: Ecological information

Ecotoxicity The product is not expected to be hazardous to the environment.

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

BENZYL ALCOHOL

Acute aquatic toxicity

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

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

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

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

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Ecological information on ingredients.

BENZYL ALCOHOL

Persistence and degradability The product is readily biodegradable.

ISOPHORONEDIAMINE

Persistence and degradability The product is not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

Ecological information on ingredients.

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BENZYL ALCOHOL

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

Partition coefficient log Kow: 1.10

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 Slightly 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

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) 2289

UN No. (IMDG) 2289

UN No. (ICAO) 2289

UN No. (ADN) 2289

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ISOPHORONEDIAMINE

Proper shipping name (IMDG) ISOPHORONEDIAMINE

Proper shipping name (ICAO) ISOPHORONEDIAMINE

Proper shipping name (ADN) ISOPHORONEDIAMINE

14.3. Transport hazard class(es)

ADR/RID class 8

ADR/RID classification code C7

ADR/RID label 8

IMDG class 8

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ICAO class/division 8

ADN class 8

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group III

ICAO packing group III

ADN packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS F-A, S-B

ADR transport category 3

Emergency Action Code 2X

Hazard Identification Number (ADR/RID) 80

Tunnel restriction code (E)

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

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

SECTION 15: Regulatory information

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

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	19/03/2019
Revision	1
SDS number	23960
Hazard statements in full	H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H332 Harmful if inhaled. H412 Harmful to aquatic life with long lasting effects.

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