



SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION OF THE COMPANY/UNDERTAKING

Product Name: **NITOFLOR TF5000 HARDENER**
Application: Hardener component of three part epoxy resin floor finish.
Company: Fosroc Indonesia
Address: Jl. Akasia II Blok A8 No. 1 Delta Silicon Industrial Park
Lippo Cikarang 17550, Indonesia
Telephone: 62 21 - 897 2103 Fax: 62 21 - 897 2107

2. COMPOSITION/INFORMATION ON INGREDIENTS

Composition: Isophorone diamine, benzyl alcohol, salicylic acid.

Hazardous Ingredient (s)	Symbol	Risk Phrases	Other Information	%
Isophorone diamine	C	R21/22, 34, 43	Cas No: 2855-13-2	>50
Benzyl alcohol	Xn	R20/22	Cas No: 100-51-6	>25<50
salicylic acid	Xn	R22, 36	Cas No: 69-72-7	<2.5

All constituents of this product are listed in EINECS (European Inventory of Existing Commercial Chemical Substances) or ELINCS (European List of New Chemical Substances) or are exempt.

Refer to Section 8 for Occupational Exposure Limits.

3. HAZARD IDENTIFICATION

Causes burns.
Harmful by inhalation, in contact with skin and if swallowed.
May cause sensitization by skin contact.



IRRITANT

4. FIRST AID MEASURES

Eyes: Irrigate immediately with copious quantities of water for several minutes. Obtain medical attention urgently.
Skin: Wash immediately with soap and water or suitable skin cleanser. Remove contaminated clothing immediately. Obtain medical attention if irritation persists.
Inhalation: Remove from exposure, rest and keep warm and obtain medical attention urgently.
Ingestion: Obtain medical attention urgently. Do NOT induce vomiting. Beware of aspiration if vomiting occurs.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Carbon dioxide, powder, foam or water.
Special Exposure Hazard: Toxic fumes. Nitrogen compounds. For further information see Section 10.
Special Protective Equipment: Self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear suitable protective clothing, gloves and eye/face protection.
Environmental Precautions: Prevent entry into drains, sewers and watercourses.
Decontamination Procedure: Soak up with inert absorbent or contain and remove by best available means. Gather into containers. Dispose of as waste. Clean contaminated area with water.

7. HANDLING AND STORAGE

Handling: Avoid breathing vapors. Ensure adequate ventilation. Maintain good standards of personal hygiene. Avoid skin and eye contact. Do not eat, drink or smoke whilst using this product.
Storage: Keep away from foodstuffs and food containers. Keep containers dry and tightly closed.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Occupational Exposure Limits:- None assigned.
Engineering Control Measures: Use only in well ventilated areas. Local exhaust ventilation is recommended.
Personal Protective Equipment: Avoid skin and eye contact. Impervious gloves (e.g. PVC). Safety glasses/Goggles. Change contaminated clothing and clean before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Color: Straw
Odor: Amine
pH (concentrate): ~ 11.5
Boiling point/Range (°C): >200°C
Melting point/Range (°C): Not applicable
Flash Point (closed, °C): 107
Autoflammability (°C): Autoignition temperature: >300
Explosive Properties (%): Lower explosive limit (LEL): 1.3%. upper explosive limit (UEL): 13%
Oxidizing Properties: Not determined
Vapor Pressure (kPa at 20°C): 0.01
Relative Density (at 20°C): 1.00
Water Solubility: Partially soluble

10. STABILITY AND REACTIVITY

Stability: Stable if used as directed.
Conditions to avoid: Any source of ignition. Temperatures (°C) below 0°C.
Material to avoid: Strong oxidizing agents. Strong acids. Strong alkalis.
Hazardous Decomposition Products: Thermal decomposition:-Oxides of carbon. Nitrogen compounds, in some fire circumstances, hydrogen cyanide.

11. TOXICOLOGICAL INFORMATION

The following toxicological assessment is based on a knowledge of the toxicity of the product's components.

Expected oral LD₅₀, rat 1030 mg/kg.

Classified as a skin sensitizer.

Health Effects

On eyes: Causes irreversible damage to eye tissue if not removed promptly.
On skin: Corrosive – causes burns. May cause sensitization.
By Inhalation: Harmful by inhalation. May cause respiratory irritation. Vapors may cause headaches, dizziness and central nervous system depression.
By Ingestion: Harmful if swallowed. May cause irritation of mouth, throat and digestive tract. Ingestion of significant amounts may result in severe systematic effects.
Chronic: Repeated and prolonged skin contact will result in severe irritation leading to burns.

12. ECOLOGICAL INFORMATION

Environmental Assessment: When used and disposed of as intended, no adverse environmental effects are foreseen.
Mobility: Mobile liquid. Insoluble in water.
Persistence & Degradability: Expected to be not readily biodegradable.
Bioaccumulative Potential: Not known.
Ecotoxicity: Ecotoxic to fish/daphnia/algae. Not expected to be inhibitory to sewage bacteria.

13. DISPOSAL CONSIDERATIONS

Disposal must be in accordance with local and national legislation.
Unused Product: Classified as a special waste. May be reacted with base component to give an inert polymeric material.
Used/Contaminated Product: Classified as a special waste. Dispose of through an authorized waste contractor to a licensed site.
Packaging: Must be disposed of through an authorized waste contractor.

14. TRANSPORT INFORMATION

UN/SI Number: 1760
IMO: Class: 8 Packing Group: III Marine Pollutant: No

IATA/ICAO: Class: 8 Packing Group: III
ADR: Class: 8 Item: 66 (c)
Transport Name: Corrosive liquids, nos (Isophorone diamine)
Hazchem/Kemler Code: 2X/80

15. REGULATORY INFORMATION

Hazard Label Data:-

Name Ingredients: Isophorone diamine
Benzyl alcohol

UU Number: 1760

Symbol(s): C

Risk Phrases: Causes burns.
Harmful by inhalation, in contact with skin and if swallowed.
May cause sensitization by skin contact.

Safety Phrases: Avoid contact with skin and eyes.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wear suitable protective clothing, gloves and eye/face protection.
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

EC Directives: Dangerous Substances Directive, 67/548/EEC and adaptations.
Dangerous Preparations Directive, 88/379/EEC.
Safety Data Sheets Directive, 91/155/EEC.

Statutory Instrument: Chemicals (Hazard Information and Packaging) Regs. 1993 (SI 1746).
Health & Safety at Work, etc. Act 1974.
Control of Substances Hazardous to Health Regs. 1988 (SI 1657).
Environmental Protection (Duty of Care) Regs. 1991 (SI 2839).
The Control of Pollution (Special Waste) Regulations 1980 (SI 1709).

Codes of Practice: Waste Management. The Duty of Care.

Guidance Notes: Occupational skin diseases: health and safety precautions (EH 26).

The above publications are available from HMSO.

16. OTHER INFORMATION

The data and advice given apply when the product is used for the stated application or applications. The product is not sold as suitable for any other application. Use of the product for applications other than as stated in this sheet may give rise to risks not mentioned in this sheet. The product should not be used other than for the stated application or applications without seeking advice from Fosroc International Limited. If this product has been purchased for supply to a third party for use at work, it is the purchaser's duty to take all necessary steps to secure that any person handling or using the product is provided with the information in this sheet.

It is the responsibility and duty of the employer to inform employees and others who may be affected of any hazards described in this sheet and of any precautions which should be taken. This sheet does not constitute or substitute for the users' own assessment of workplace risks, as required by other health and safety legislation.

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