



Hazardous, Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: FOSROC NITOFLOR N (NOVOLAC) HARDENER

Synonyms

Fosroc Nitoflor N (Novolac) Hardener

Product Code

Bar Code FC605175-10L12721 9300611583598

Recommended use: Hardener component of a general purpose binder for use in environments where high chemical resistance is required. Applied by brush or roller.

Supplier:	Parchem Construction Supplies Pty Ltd
Company No.:	80 069 961 968
Street Address:	Distributed in New Zealand by:
	Concrete Plus Ltd
	150 Hutt Park Road
	Gracefield
	New Zealand 5010
	Ph: 0800 657 156
Telephone:	(02) 4350 5000

Emergency Telephone number: Australia – 1800 220 770; New Zealand – 0800 220 770

2. HAZARDS IDENTIFICATION

This material is hazardous according to criteria of EPA New Zealand.

EPA Group Standard: HSR002658 - Surface Coatings and Colourants (Corrosive) Group Standard



Signal Word Danger

Hazard Classifications

- 6.1D Substances that are acutely toxic Oral
- 6.1D Substances that are acutely toxic Dermal
- 6.1E Substances that are acutely toxic Respiratory tract irritant
- 8.2B Substances that are corrosive to dermal tissue
- 8.3A Substances that are corrosive to ocular tissue
- 6.5B Substances that are contact sensitisers
- 6.8A Substances that are known or presumed human reproductive or developmental toxicants
- 9.1C Substances that are harmful in the aquatic environment (H412)
- 9.2B Substances that are ecotoxic in the soil environment
- 9.3C Substances that are harmful to terrestrial vertebrates

Hazard Statements

- Harmful if swallowed. H302
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.

Product Name: FOSROC NITOFLOR N (NOVOLAC) HARDENER



- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.
- H360 May damage fertility or the unborn child.
- H412 Harmful to aquatic life with long lasting effects.
- H422 Toxic to the soil environment.
- H433 Harmful to terrestrial vertebrates.

Prevention Precautionary Statements

- P102 Keep out of reach of children.
- P103 Read carefully and follow all instructions.
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe dust, fume, gas, mist, vapours or spray.
- P264 Wash hands, face and all exposed skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P281 Use personal protective equipment as required.

Response Precautionary Statements

Nesponse i recautio	Jiary Statements
P101	If medical advice is needed, have product container or label at hand.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.
P330	Rinse mouth.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.

Storage Precautionary Statements

P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Disposal Precautionary Statement

P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

DANGEROUS GOOD CLASSIFICATION

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Dangerous Goods Class: 8

3. COMPOSITION INFORMATION		
CHEMICAL ENTITY	CAS NO	PROPORTION
Benzyl alcohol	100-51-6	30 - 60 % (w/w)
Isophorone diamine	2855-13-2	30 - 60 % (w/w)
1,6-Hexanediamine, trimethyl-	25620-58-0	10 - 30 % (w/w)
Product Name: FOSROC NITOFLOR N (NOVOLAC) HARDENER	Reference No:	PARNZLEN000076

Phenol, 4,4'-(1-methylethylidene)bis-Ingredients determined to be non-hazardous or below reporting limits



80-05-7

10 - 30 % (w/w) Balance

100%

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin Contact: Effects may be delayed. This material, or a component of the material, can be absorbed through the skin with resultant toxic effects. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance. For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance.

Eye contact: Immediately irrigate with copious quantities of water for 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre.

Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Immediately call Poisons Centre or Doctor.

PPE for First Aiders: Wear safety shoes, overalls, gloves, chemical goggles, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically. Effects may be delayed. Can cause corneal burns.

5. FIRE FIGHTING MEASURES

Hazchem Code: 2X

Issued: 30 March 2020

Suitable extinguishing media: If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Combustible material.

Fire fighting further advice: On burning or decomposing may emit toxic fumes. Fire fighters to wear selfcontained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion or decomposition.

Version: 2.1

6. ACCIDENTAL RELEASE MEASURES



SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

LARGE SPILLS

Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Dangerous Goods - Initial Emergency Response Guide No: 36

7. HANDLING AND STORAGE

Handling: Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Store locked up. Keep container standing upright. Keep containers closed when not in use - check regularly for leaks.

This material is classified as a Class 8 Corrosive as per the criteria of the "New Zealand NZS5433: Transport of Dangerous Goods on Land" and/or the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and must be stored in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits: No value assigned for this specific material by WorkSafe New Zealand.

Biological Limit Values: As per the WorkSafe New Zealand the ingredients in this material do not have a Biological Limit Allocated.

Engineering Measures: Natural ventilation should be adequate under normal use conditions..

Personal Protection Equipment: SAFETY SHOES, OVERALLS, GLOVES, CHEMICAL GOGGLES, RESPIRATOR.

Wear safety shoes, overalls, gloves, chemical goggles, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:

Liquid

Product Name: FOSROC NITOFLOR N (NOVOLAC) HARDENER



Colour: Odour:	Clear pale yellow - co Amine	blourless
Solubility: Specific Gravity: Relative Vapour Der Vapour Pressure (20 Flash Point (°C): Flammability Limits Autoignition Temper Melting Point/Range Boiling Point/Range pH: Viscosity: Total VOC (g/Litre):	0 °C):` (%): rature (°C): ∋ (°C):	Insoluble in water 1.02 >1 N Av >95 (PMCC) N App N Av N Av >200 N App N Av N Av N Av

(Typical values only - consult specification sheet) N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: This material is thermally stable when stored and used as directed.

Conditions to avoid: Elevated temperatures and sources of ignition.

Incompatible materials: Incompatible with oxidising agents, strong acids and strong bases.

Hazardous decomposition products: Thermal decomposition and combustion produce noxious fumes containing oxides of carbon, oxides of nitrogen, amine compounds and ammonia.

Hazardous reactions: No known hazardous reactions.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Inhalation: Material is an irritant to mucous membranes and respiratory tract.

Skin contact: Harmful in contact with skin. Can be absorbed through the skin with resultant toxic effects. Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns. A skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

Ingestion: Harmful if swallowed. Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract.

Eye contact: A severe eye irritant. Corrosive to eyes: contact can cause corneal burns. Contamination of eyes can result in permanent injury.

Acute toxicity

Inhalation: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): LC50 > 20.0 mg/L for vapours or LC50 > 5.0 mg/L for dust and mist or LC50 > 5,000 ppm gas



Skin contact: This material has been classified as a 6.1D - Substances that are acutely toxic. Acute toxicity estimate (based on ingredients): 1,000 - 2,000 mg/Kg bw

Ingestion: This material has been classified as a 6.1D - Substances that are acutely toxic. Acute toxicity estimate (based on ingredients): 300 - 2,000 mg/Kg bw

Corrosion/Irritancy: Eye: this material has been classified as a 8.3A - Substances that are corrosive to ocular tissue. Skin: this material has been classified as a 8.2B - Substances that are corrosive to dermal tissue.

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified 6.5B - Substances that are contact sensitisers.

Aspiration hazard: This material has been classified as non-hazardous.

Specific target organ toxicity (single exposure): This material has been classified as non-hazardous.

Chronic Toxicity

Mutagenicity: This material has been classified as non-hazardous.

Carcinogenicity: This material has been classified as non-hazardous.

Reproductive toxicity (including via lactation):

This material has been classified as a 6.8A - Substances that are known or presumed human reproductive or developmental toxicants.

Specific target organ toxicity (repeat exposure): This material has been classified as non-hazardous.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >100 mg/L

Long-term aquatic hazard: This material has been classified as a Category Chronic 2 Hazard. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): 1 - 10 mg/L, where the substance is not rapidly degradable and/or BCF \geq 500 and/or log Kow \geq 4.

Ecotoxicity in the soil environment: This material has been classified as a 9.2B - Substances that are ecotoxic in the soil environment.

Ecotoxicity to terrestrial vertebrates: This material has been classified as a 9.3C - Substances that are harmful to terrestrial vertebrates.

Ecotoxicity to terrestrial invertebrates: This material has been classified as non-hazardous.

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: No information available.



13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".



UN No:	2735
Dangerous Goods Class:	8
Packing Group:	II
Hazchem Code:	2X
Emergency Response Guide No:	36

Proper Shipping Name:

POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONEDIAMINE; TRIMETHYLHEXANE DIAMINE)

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), dangerous when wet substances (Class 4.3), oxidising agents (Class 5.1), organic peroxides (Class 5.2), radioactive substances (Class 7) or food and food packaging in any quantity. Note 1: Concentrated strong alkalis are incompatible with concentrated strong acids. Note 2: Concentrated strong acids are incompatible with concentrated strong alkalis. Note 3: Acids are incompatible with Dangerous Goods of Class 6 which are cyanides. Exemptions may apply.

MARINE TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea. This material is classified as a Marine Pollutant (P) according to the International Maritime Dangerous Goods Code.



UN No: Dangerous Goods Class: Packing Group: 2735 8 II

Proper Shipping Name:

POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONEDIAMINE; TRIMETHYLHEXANE DIAMINE)

AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.





UN No: Dangerous Goods Class: Packing Group: 2735 8 II

Proper Shipping Name:

POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONEDIAMINE; TRIMETHYLHEXANE DIAMINE)

15. REGULATORY INFORMATION

This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances) The Stockholm Convention (Persistent Organic Pollutants) The Rotterdam Convention (Prior Informed Consent)

This material is subject to the following international agreements:

Basel Convention (Hazardous Waste)

· Wastes from production, formulation and use of resins, latex, plasticizers, glues/adhesives

International Convention for the Prevention of Pollution from Ships (MARPOL)

Annex III - Harmful Substances carried in Packaged Form

This material/constituent(s) is covered by the following requirements:

• All components of this product are listed on or exempt from the New Zealand Inventory of Chemical (NZIoC).

• All components of this product are listed on or exempt from the Australian Inventory of Chemical Substances (AICS).

EPA Group Standard: HSR002658 - Surface Coatings and Colourants (Corrosive) Group Standard

Approved handler	No
Location test certificate	No
Fire extinguishers	No
Signage	Yes
Emergency response	Yes
Hazardous atmosphere zone	No

16. OTHER INFORMATION

Reason for issue: Minor Text Changes

This Safety Data Sheet has been prepared by Chemical Data Services Pty Ltd (chemdata.com.au) on behalf of its client.

Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since the company cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review



constructive solutions

this SDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.