



# SAFETY DATA SHEET

## 1: IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product Name: **NITOBOND EP BASE**

Application: Base component of epoxy bonding agent system.

Company: **Fosroc Limited**

Address: Coleshill Road, Tamworth, Staffordshire. B78 3TL

Telephone: 01827 262222 Out of Hours: 01827 265279 Fax: 01827 262444

## 2: COMPOSITION/INFORMATION ON INGREDIENTS

Composition: epoxy resin, inorganic fillers, pigment.

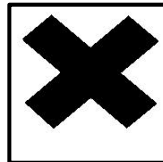
Hazardous Ingredient(s)	Symbol	Risk Phrases	Other Information	%
epoxy resin (number average molecular weight <700)	Xi, N	R36/38, 43, 51/53	Cas No: 25068-38-6 Cas No: Cas No: Cas No:	>50

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: HAZARDS IDENTIFICATION

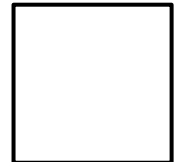
R36/38: Irritating to eyes and skin.  
R43: May cause sensitisation by skin contact  
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment



IRRITANT



Dangerous for the Environment



## 4: FIRST AID MEASURES

Eyes: Irrigate immediately with copious quantities of water for several minutes. Obtain medical attention if irritation persists.

Skin: Wash thoroughly with soap and water or suitable skin cleanser as soon as possible. Obtain medical advice if skin disorders develop.

Inhalation: Remove from exposure.

Ingestion: Obtain medical attention. Do NOT induce vomiting. Beware of aspiration if vomiting occurs.

## 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Carbon dioxide, powder, foam or water fog - Do not use water jets.

Special Exposure Hazards: Toxic fumes. 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 water courses.  
Decontamination Procedures: Soak up with inert absorbent or contain and remove by best available means.  
Gather into containers. Dispose of as waste.

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## 7: HANDLING AND STORAGE

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Handling: Avoid skin and eye contact. Maintain good standards of personal hygiene. Do not eat, drink or smoke whilst using this product. Ensure adequate ventilation.

Storage: Keep containers dry and tightly closed.

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## 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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Occupational Exposure Limits:- None assigned.

Substance	8 Hour TWA	STEL	Source/Other Information
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Engineering Control Measures: No specific ventilation requirement noted.

Personal Protective Equipment: Impervious gloves (eg PVC). Safety glasses (Conforming to EN 166) / Goggles (Conforming to EN 166). Plastic apron. Change contaminated clothing and clean before re-use.

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## 9: PHYSICAL AND CHEMICAL PROPERTIES

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Physical State: Viscous liquid.

Colour: White

Odour: Mild.

pH(concentrate): Not applicable.

pH(working dilution):

Boiling Point/Range (°C): Not determined.

Melting Point/Range (°C):

Flash Point (closed, °C): >150

Autoflammability (°C): Not determined.

Viscosity (at 20°C):

Explosive Properties (%): Not known.

Oxidising Properties:

Vapour Pressure (kPa at 20°C): <0.1

Relative Density (at 20°C): 1.12

Water Solubility: Insoluble.

Fat Solubility: Not determined.

Partition Coefficient (n-octanol/water):

Other data:

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## 10: STABILITY AND REACTIVITY

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Stability: Stable: reacts with compounds containing amino, hydroxyl or carboxyl groups to give stable, cross linked materials.

Conditions to Avoid: None known.

Materials to Avoid: Strong acids. Strong alkalis. Strong oxidising agents.

Hazardous Decomposition Products: Thermal decomposition:- Oxides of carbon. Irritant fumes.

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## 11: TOXICOLOGICAL INFORMATION

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

Expected oral LD50, rat > 2g/kg.

Classified as a skin sensitiser.

### Health Effects

On Eyes: Causes transient irritation.

On Skin: Irritation. May cause sensitisation.

By Inhalation: May cause respiratory irritation.

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

Chronic: Repeated and prolonged skin contact may lead to skin disorders.

Other:

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## 12: ECOLOGICAL INFORMATION

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Environmental Assessment: When used and disposed of as intended, no adverse environmental effects are foreseen.

Mobility: Viscous liquid. Insoluble in water.

Persistence and Degradability: Not readily biodegradable.

Bioaccumulative Potential: Has the potential to bioaccumulate.

Ecotoxicity: Ecotoxic to fish/daphnia/algae.

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## 13: DISPOSAL CONSIDERATIONS

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Disposal must be in accordance with local and national legislation.

Unused Product: Dispose of through an authorised waste contractor to a licensed site.

Used/Contaminated Product: As for Unused product.

Packaging: Must be disposed of through an authorised waste contractor.

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## 14: TRANSPORT INFORMATION

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UN Number: 3082

IMO: Class: 9 Packing Group: III Marine Pollutant:

IATA/ICAO: Class: Packing Group: III

ADR: Class: 9 Item: 11(c)

Transport Name: Environmentally hazardous substance, liquid, nos (Epoxy Resin)

Hazchem/Kemler Code:

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## 15: REGULATORY INFORMATION

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### Hazard Label Data:-

Named Ingredients: epoxy resin (number average molecular weight <700).

UN Number:

Symbol(s): Xi,N

Risk Phrases: R36/38: Irritating to eyes and skin.  
R43: May cause sensitisation by skin contact.  
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Safety Phrases: S28: After contact with skin, wash immediately with plenty of soap and water.  
S37/39: Wear suitable gloves and eye/face protection.  
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S0062: Contains epoxy constituents. See information supplied by the manufacturer.

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

Statutory Instruments: Chemicals (Hazard Information and Packaging for Supply) (Amendment) Regs. 1996 (SI 1092).  
Health & Safety at Work, etc. Act 1974.  
Consumer Protection Act 1987.  
Control of Substances Hazardous to Health Regs. 1999 (SI 3246).  
Environmental Protection Act 1990.

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

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## 16: OTHER INFORMATION

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Also refer to the Safety Data Sheet(s) for information on other components of this product.

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 Ltd.

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 risk, as required by other health and safety legislation.

Further copies of this Safety Data Sheet may be obtained from Fosroc Limited.

Date Printed: 28/06/2002

SDS Reference: 0203/1 NBEP BASE

### REVISION

Supersedes issue no: 02 dated: 13.08.96

Sections updated/revised - no(s): 1, 12, 14.



## SAFETY DATA SHEET NITOBOND EP HARDENER

### 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

<b>PRODUCT NO.</b>	M1711110
<b>SUPPLIER</b>	FOSROC Limited Drayton Manor Business Park Coleshill Road Tamworth Staffordshire B78 3TL Tel. +44 (0) 1827 262222 Fax. +44 (0) 1827 262444 uk@fosroc.com
<b>EMERGENCY TELEPHONE</b>	+ 44 1827 265279 (24hr)
<b>MANUFACTURER</b>	Fosroc Limited, Coleshill Road, Tamworth, Staffordshire, ENGLAND.

### 2 HAZARDS IDENTIFICATION

Harmful if swallowed. Causes burns. May cause sensitisation by skin contact.

**CLASSIFICATION (1999/45)** Xn;R22. C;R34. R43.

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content %	Classification (67/548/EEC)
BENZYL ALCOHOL	202-859-9	100-51-6	10-30%	Xn;R20/22
TRIETHYLENETETRAMINE	203-950-6	112-24-3	5-10%	C;R34 Xn;R21 R43 R52/53
N'-(3AMINOPROPYL) -N,N-DIMETHYLPROPANE-1,3-DIAMINE	234-148-4	10563-29-8	5-10%	Xn;R21/22. C;R34. R43.

The Full Text for all R-Phrases is Displayed in Section 16

### 4 FIRST-AID MEASURES

#### **INHALATION**

Move the exposed person to fresh air at once. Rinse nose and mouth with water. NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Keep the affected person warm and at rest. Get prompt medical attention.

#### **INGESTION**

DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Provide rest, warmth and fresh air. Get medical attention immediately!

#### **SKIN CONTACT**

Remove affected person from source of contamination. Rinse the skin immediately with lots of water. Get medical attention promptly if symptoms occur after washing.

#### **EYE CONTACT**

Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

### 5 FIRE-FIGHTING MEASURES

#### **EXTINGUISHING MEDIA**

Use fire-extinguishing media appropriate for surrounding materials.

#### **UNUSUAL FIRE & EXPLOSION HAZARDS**

No unusual fire or explosion hazards noted.

### 6 ACCIDENTAL RELEASE MEASURES

#### **SPILL CLEAN UP METHODS**

Wear necessary protective equipment. Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Do not let washing down water contaminate ponds or waterways.

# NITOBOND EP HARDENER

## 7 HANDLING AND STORAGE

### STORAGE PRECAUTIONS

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

### STORAGE CLASS

Corrosive storage.

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### PROTECTIVE EQUIPMENT



### ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

### RESPIRATORY EQUIPMENT

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

### HAND PROTECTION

Use protective gloves made of: Nitrile. Viton rubber (fluor rubber). Polyvinylidene chloride/Polyethylene (PVD/PE).

### EYE PROTECTION

Wear approved chemical safety goggles where eye exposure is reasonably probable.

### OTHER PROTECTION

Wear appropriate clothing to prevent skin contamination or freezing. 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 & water if skin becomes contaminated. Promptly remove any clothing that becomes wet.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

<u>APPEARANCE</u>	Liquid
<u>COLOUR</u>	Green
<u>ODOUR</u>	Amine.
<u>SOLUBILITY</u>	Insoluble in water
<u>BOILING POINT (°C)</u>	> 200
<u>RELATIVE DENSITY</u>	1.15
<u>VAPOUR PRESSURE</u>	0.01 kPa 20
<u>FLASH POINT (°C)</u>	130

## 10 STABILITY AND REACTIVITY

### STABILITY

Stable under normal temperature conditions.

### CONDITIONS TO AVOID

Reacts violently with strong oxidising substances.

### HAZARDOUS POLYMERISATION

Will not polymerise.

### HAZARDOUS DECOMPOSITION PRODUCTS

Ammonia or amines.

## 11 TOXICOLOGICAL INFORMATION

### INHALATION

May cause irritation to the respiratory system. May cause sensitisation by inhalation. May cause respiratory allergy.

### INGESTION

Causes burns. May cause chemical burns in mouth and throat. May cause stomach pain or vomiting.

### SKIN CONTACT

May cause allergic contact eczema. Acts as a defatting agent on skin. May cause cracking of skin, and eczema. May cause sensitisation by skin contact. Causes burns. Harmful in contact with skin.

**NITOBOND EP HARDENER****EYE CONTACT**

Extreme irritation of eyes and mucous membranes, including burning and tearing. Causes burns.

**12 ECOLOGICAL INFORMATION****ECOTOXICITY**

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

**13 DISPOSAL CONSIDERATIONS****DISPOSAL METHODS**

Dispose of waste and residues in accordance with local authority requirements.

**14 TRANSPORT INFORMATION****PROPER SHIPPING NAME**

CORROSIVE LIQUID, N.O.S. (N'-(3AMINOPROPYL)-N, N-DIMETHYLPROPANE-1, 3-DIAMINE, ALIPHATISCHES POLYAMINADDUKT)

**ENVIRONMENTALLY HAZARDOUS SUBSTANCE/MARINE POLLUTANT**

No.

**UN NO. ROAD**

1760

**ADR CLASS NO.**

8

**ADR CLASS**

Class 8: Corrosive substances.

**ADR PACK GROUP**

III

**TUNNEL RESTRICTION CODE**

(E)

**HAZARD No. (ADR)**

80

**ADR LABEL NO.**

8

**HAZCHEM CODE**

2X

**UN NO. SEA**

1760

**IMDG CLASS**

8

**IMDG PACK GR.**

III

**EMS**

F-A, S-B

**UN NO. AIR**

1760

**AIR CLASS**

8

**AIR PACK GR.**

III

**15 REGULATORY INFORMATION****LABELLING**

Corrosive



Harmful

**CONTAINS**

N'-(3AMINOPROPYL)-N,N-DIMETHYLPROPANE-1,3-DIAMINE  
TRIETHYLENETETRAMINE

**RISK PHRASES**

R22

Harmful if swallowed.

R34

Causes burns.

R43

May cause sensitisation by skin contact.

**SAFETY PHRASES**

S25

Avoid contact with eyes.

S26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**NITOBOND EP HARDENER**

S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S60	This material and its container must be disposed of as hazardous waste.

**STATUTORY INSTRUMENTS**

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Control of Substances Hazardous to Health.

**APPROVED CODE OF PRACTICE**

Classification and Labelling of Substances and Preparations Dangerous for Supply.

**GUIDANCE NOTES**

Workplace Exposure Limits EH40.

Introduction to Local Exhaust Ventilation HS(G)37.

CHIP for everyone HSG(108).

**16 OTHER INFORMATION**

**REVISION DATE** 25/07/2010

**REV. NO./REPL. SDS** 1

**GENERATED**

**RISK PHRASES IN FULL**

R34	Causes burns.
R20/22	Harmful by inhalation and if swallowed.
R21/22	Harmful in contact with skin and if swallowed.
R21	Harmful in contact with skin.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R43	May cause sensitisation by skin contact.

**DISCLAIMER**

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.