SAFETY DATA SHEET
NITOBOND EP HARDENER

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Name NITOBOND EP HARDENER

Product No. A1711114UK9, A1711116UK9, A1711392UK9

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

Identified uses Hardener Component of Two-Part Epoxy Bonding System

1.3. Details of the supplier of the safety data sheet

Supplier:

FOSROC Limited
Drayton Manor Business Park
Coleshill Road
Tamworth
Staffordshire
B78 3TL
Tel. +44 (0) 1827 262222
Fax. +44 (0) 1827 262444
enquiryuk@fosroc.com

1.4. Emergency telephone number

+44 (0) 1827 265 279 (08.30 to 17.00hrs Mon - Thu; 08.30 to 16.00hrs Fri)

Manufacturer Fosroc Limited, Coleshill Road, Tamworth, Staffordshire, ENGLAND.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xn;R22. Xi;R36/38. R43.

Environment

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

2.2. Label elements

Contains: POLYMER OF C-18 UNSATURATED FATTY ACID DIMER WITH TRIETHYLENETETRAMINE & TALL OIL FATTY ACIDS
N'-(3AMINOPROPYL)-N,N-DIMETHYLPROPANE-1,3-DIAMINE

Labelling

Harmful

Risk Phrases

R22	Harmful if swallowed.
R36/38	Irritating to eyes and skin.
R43	May cause sensitisation by skin contact.

Safety Phrases

S24/25	Avoid contact with skin and eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37	Wear suitable gloves.

S60 This material and its container must be disposed of as hazardous waste.

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

POLYMER OF C-18 UNSATURATED FATTY ACID DIMER WITH TRIETHYLENETETRAMINE & TALL OIL FATTY ACIDS **60-100%**

CAS-No.: 68082-29-1 **EC No.:**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Skin Irrit. 2 - H315	Xi;R36/38.
Eye Irrit. 2 - H319	R43.
Skin Sens. 1 - H317	

BENZYL ALCOHOL **10-30%**

CAS-No.: 100-51-6 **EC No.: 202-859-9** **Registration Number: 01-2119492630-38-xxxx**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox. 4 - H302	Xn;R20/22
Acute Tox. 4 - H332	

N'-(3AMINOPROPYL)-N,N-DIMETHYLPROPANE-1,3-DIAMINE **5-10%**

CAS-No.: 10563-29-8 **EC No.: 234-148-4**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox. 4 - H302	Xn;R21/22.
Acute Tox. 4 - H312	C;R34.
Skin Corr. 1B - H314	R43.
Skin Sens. 1 - H317	

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

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Information

No recommendations given: treat according to symptoms.

Inhalation.

Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

Ingestion

DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Immediately rinse mouth and drink plenty of water (200-300 ml). Provide rest, warmth and fresh air. Get medical attention immediately!

Skin Contact

Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and 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.

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

General Information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation.

Upper respiratory irritation. Coughing, chest tightness, feeling of chest pressure.

Ingestion

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

Skin Contact

Chemical burns.

Eye Contact

Irritation, burning, lachrymation, blurred vision after liquid splash.

4.3. Indication of any immediate medical attention and special treatment needed

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing Media

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

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

Hazardous Combustion Products

In case of fire, toxic gases (CO, CO2, NOx) may be formed.

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Containers close to fire should be removed immediately or cooled with water.

Protective Measures In Fire

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use protective gloves, goggles and suitable protective clothing. Do not breathe vapour.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground. Contain spillages with sand, earth or any suitable adsorbent material.

6.3. Methods and material for containment and cleaning up

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.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Provide good ventilation. Avoid contact with skin and eyes. Avoid forming spray/aerosol mists. Do not use in confined spaces without adequate ventilation and/or respirator.

7.2. Conditions for safe storage, including any incompatibilities

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

Storage Class

Corrosive storage.

7.3. 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

Ingredient Comments

No exposure limits noted for ingredient(s).

8.2. Exposure controls

Protective Equipment

Process Conditions

Provide eyewash, quick drench.

Engineering Measures

Provide adequate general and local exhaust ventilation.

Respiratory Equipment

In case of inadequate ventilation and work of brief duration, use suitable respiratory equipment.
It is recommended to use respiratory equipment with combination filter, type A2/P2.
At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used.

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.

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.

Skin Protection

Wear apron or protective clothing in case of contact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Green
Odour	Amine.
Solubility	Insoluble in water
Initial Boiling Point and Boiling Range:	> 200
Relative Density	1.15
Vapour Pressure	0.01 kPa 20
Flash Point (°C)	130
Auto Ignition Temperature (°C)	335°C
Flammability Limit - Lower(%)	1.3%
Flammability Limit - Upper(%)	13%

9.2. Other information

Volatile Organic Compound (VOC)	0 g/litre

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Not determined.

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid heat. Avoid contact with strong oxidisers.

10.5. Incompatible materials

Materials To Avoid

Strong acids. Strong oxidising substances.

10.6. Hazardous decomposition products

Ammonia or amines. In case of fire, toxic gases (CO, CO2, NOx) may be formed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation

May cause irritation to the respiratory system.

Ingestion.

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

Skin Contact

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.

Eye Contact

Irritating and may cause redness and pain. Risk of serious damage to eyes.

Health Warnings

May cause sensitisation by skin contact.

Route of entry

Inhalation. Ingestion. Skin and/or eye contact.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.1. Toxicity

Acute Fish Toxicity

Ecotoxic to fish/daphnia/algae

12.2. Persistence and degradability

Degradability:

There are no data on the degradability of this product. The product is not expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative Potential:

No data available on bioaccumulation. Not expected to be bioaccumulative

12.4. Mobility in soil

Mobility:

The product is immiscible with water and will sediment in water systems.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB Substances.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

General Information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Incinerate in suitable combustion chamber. Note that fully cured material is not considered as hazardous waste.

SECTION 14: TRANSPORT INFORMATION

General The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2 UN Proper shipping name

Not applicable.

14.3 Transport hazard class(es)

Transport Labels

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

Tunnel Restriction Code (E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

Uk Regulatory References

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.

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).

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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

Water Hazard Classification

Water hazard class 2 (German Regulation) (Self Assessment): hazardous for water. Do not allow product to reach ground water, water course or sewage system.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision Date	3 May 2013
Revision	3

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.
R36/38	Irritating to eyes and skin.
R43	May cause sensitisation by skin contact.

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.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.