



SAFETY DATA SHEET NITOMORTAR HB BASE

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

1.1. Product identifier

Product name NITOMORTAR HB BASE

Product number M1925020UK9

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

Identified uses Base Component of Three-Part Epoxy System

1.3. Details of the supplier of the safety data sheet

Supplier Fosroc International Limited
 Drayton Manor Business Park
 Coleshill Road
 Tamworth
 Staffordshire
 B78 3XN
 England
 Tel: +44 (0) 1827 262222
 Fax: +44 (0) 1827 262444
 enquiryuk@fosroc.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 1827 265 279 (Monday-Sunday 24 hours a day)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 2 - H411

Human health The product contains a sensitising substance. May cause sensitisation or allergic reactions in sensitive individuals.

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

2.2. Label elements

Hazard pictograms



Signal word Warning

NITOMORTAR HB BASE

Hazard statements	H315 Causes skin irritation. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	P264 Wash contaminated skin thoroughly after handling. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P501 Dispose of contents/ container in accordance with national regulations.
Contains	bis[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE, Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol, 1,4 BUTANE DIGLYCIDYL ETHER
Supplementary precautionary statements	P261 Avoid breathing vapour/ spray. P272 Contaminated work clothing should not be allowed out of the workplace. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P321 Specific treatment (see medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/ attention. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P337+P313 If eye irritation persists: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P391 Collect spillage.

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

bis[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE	30-60%
CAS number: 1675-54-3	EC number: 216-823-5
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	10-30%
CAS number: 9003-36-5	EC number: 500-006-8
Classification Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	

NITOMORTAR HB BASE

1.4 BUTANE DIGLYCIDYL ETHER	10-30%
CAS number: 2425-79-8	EC number: 219-371-7
Classification	
Acute Tox. 4 - H302	
Acute Tox. 4 - H332	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Skin Sens. 1 - H317	
TITANIUM DIOXIDE	1-5%
CAS number: 13463-67-7	EC number: 236-675-5
	REACH registration number: 01-2119489379-17-0000
Classification	
Not Classified	
CALCIUM CARBONATE	1-5%
CAS number: 471-34-1	EC number: 207-439-9
	REACH registration number: 01-2119486795-18-XXXX
Classification	
Not Classified	

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	Get medical attention if any discomfort continues.
Inhalation	Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. 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. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Remove affected person from source of contamination. Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. 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 dependent on the concentration and the length of exposure.
Inhalation	May cause respiratory system irritation.
Ingestion	May cause discomfort if swallowed.
Skin contact	Skin irritation. May cause sensitisation or allergic reactions in sensitive individuals.

NITOMORTAR HB BASE

Eye contact Irritation of eyes and mucous membranes.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable 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

Specific hazards No unusual fire or explosion hazards noted.

Hazardous combustion products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting No specific firefighting precautions known. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

Reference to other sections For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Avoid the formation of mists. Avoid inhalation of vapours/spray and contact with skin and eyes. Do not eat, drink or smoke when using the product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

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. Keep only in the original container.

Storage class Chemical storage.

7.3. Specific end use(s)

NITOMORTAR HB BASE

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

Occupational exposure limits

TITANIUM DIOXIDE

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

CALCIUM CARBONATE

Long-term exposure limit (8-hour TWA): 10 mg/m³ inhalable dust

Long-term exposure limit (8-hour TWA): 4 mg/m³ respirable dust

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (CAS: 9003-36-5)

DNEL Workers - Inhalation; Long term systemic effects: 29.39 mg/m³
Workers - Dermal; Long term systemic effects: 104.15 mg/kg/day
Workers - Dermal; Short term local effects: 8.3 µg/cm²

PNEC - Fresh water; 0.003 mg/l
- marine water; 0.0003 mg/l
- STP; 10 mg/l

1.4 BUTANE DIGLYCIDYL ETHER (CAS: 2425-79-8)

DNEL Industry - Dermal; Long term systemic effects: 9.26 mg/kg/day
Industry - Inhalation; Long term systemic effects: 1.63 mg/m³

PNEC - STP; 100 mg/l
- Fresh water; 0.024 mg/l
- Sediment (Freshwater); 0.084 mg/kg
- marine water; 0.0024 mg/l
- Sediment (Marinewater); 0.0084 mg/kg
- Soil; 0.0027 mg/kg

TITANIUM DIOXIDE (CAS: 13463-67-7)

DNEL Industry - Inhalation; Long term : 10 mg/m³
Consumer - Oral; Long term : 700 mg/kg/day

PNEC - Fresh water; >1 mg/l
- marine water; 0.127 mg/l
- Soil; 100 mg/kg
- STP; 100 mg/kg

8.2. Exposure controls

Protective equipment



NITOMORTAR HB BASE

Appropriate engineering controls	Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.
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: 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. Wear protective gloves made of the following material: Butyl rubber. Nitrile rubber. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.
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	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 contaminated. Do not eat, drink or smoke when using this product. Do not smoke in work area.
Respiratory protection	No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid.
Colour	White.
Odour	Mild.
Odour threshold	Not determined.
pH	Not determined.
Melting point	Not determined.
Initial boiling point and range	>200°C @ 1 atm
Flash point	>150°C Closed cup.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not applicable.
Vapour pressure	<0.1 kPa @ 20°C
Vapour density	Not determined.
Relative density	1.18 @ 20°C
Bulk density	Not applicable.
Solubility(ies)	Insoluble in water.
Partition coefficient	Not applicable.

NITOMORTAR HB BASE

Auto-ignition temperature	>300°C
Decomposition Temperature	Not determined.
Viscosity	Not determined.
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	No data available.
--------------------------	--------------------

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The following materials may react with the product: Amino, hydroxyl or carboxyl groups
-------------------	--

10.2. Chemical stability

Stability	Stable at normal ambient temperatures.
------------------	--

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not known.
---	------------

10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time.
----------------------------	---

10.5. Incompatible materials

Materials to avoid	Strong acids. Strong alkalis. Strong oxidising agents.
---------------------------	--

10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition:- Oxides of carbon. Irritant fumes.
---	---

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀)	The toxicological assessment is based on a knowledge of the toxicity of the product's components.
-------------------------------------	---

ATE oral (mg/kg)	3,900.0
-------------------------	---------

Acute toxicity - inhalation

ATE inhalation (gases ppm)	35,100.04
-----------------------------------	-----------

ATE inhalation (vapours mg/l)	85.8
--------------------------------------	------

ATE inhalation (dusts/mists mg/l)	11.7
--	------

Inhalation	Gas or vapour may irritate the respiratory system.
-------------------	--

Ingestion	May cause discomfort if swallowed.
------------------	------------------------------------

NITOMORTAR HB BASE

Skin contact	Irritating to skin. May cause sensitisation by skin contact.
Eye contact	Irritating to eyes.
Route of exposure	Skin and/or eye contact

SECTION 12: Ecological information

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

12.1. Toxicity

Toxicity The product contains a substance which is harmful to aquatic organisms.

12.2. Persistence and degradability

Persistence and degradability The product is not expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product contains potentially bioaccumulating substances.

Partition coefficient Not applicable.

12.4. Mobility in soil

Mobility Viscous liquid. Insoluble 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 Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Waste is suitable for incineration.

Disposal methods Dispose of waste via a licensed waste disposal contractor. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Note that fully cured material is not considered as hazardous waste.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	3082
UN No. (IMDG)	3082
UN No. (ICAO)	3082
UN No. (ADN)	3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS bis[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE, EPOXY RESIN (Type F) (Number average MW <= 700))

NITOMORTAR HB BASE

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS bis[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE, EPOXY RESIN (Type F) (Number average MW <= 700))

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS bis[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE, EPOXY RESIN (Type F) (Number average MW <= 700))

Proper shipping name (ADN) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS bis[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE, EPOXY RESIN (Type F) (Number average MW <= 700))

14.3. Transport hazard class(es)

ADR/RID class	9
ADR/RID classification code	M6
ADR/RID label	9
IMDG class	9
ICAO class/division	9
ADN class	9

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



14.6. Special precautions for user

EmS	F-A, S-F
ADR transport category	3
Emergency Action Code	•3Z
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(-)

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

NITOMORTAR HB BASE

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

National regulations	The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).
EU legislation	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). 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). Commission Regulation (EU) No 2015/830 of 28 May 2015.
Guidance	Workplace Exposure Limits EH40. Respiratory protective equipment at work (HSG53).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information	The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	07/09/2020
Revision	5b
Supersedes date	15/02/2019
SDS number	27248
Hazard statements in full	H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H411 Toxic to aquatic life with long lasting effects.

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.



SAFETY DATA SHEET NITOMORTAR HB HARDENER

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

1.1. Product identifier

Product name NITOMORTAR HB HARDENER

Product number A1920122UK9, A1920142UK9

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

Identified uses Hardener for trafficguard system

1.3. Details of the supplier of the safety data sheet

Supplier Fosroc International Limited
Drayton Manor Business Park
Coleshill Road
Tamworth
Staffordshire
B78 3XN
England
Tel: +44 (0) 1827 262222
Fax: +44 (0) 1827 262444
enquiryuk@fosroc.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 1827 265 279 (Monday-Sunday 24 hours a day)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 1B - H360F

Environmental hazards Aquatic Chronic 3 - H412

Human health Dust or splashes from the mixture may cause permanent eye damage. Corrosive to skin and eyes. The product contains a sensitising substance. May cause sensitisation or allergic reactions in sensitive individuals.

Environmental The product contains a substance which is harmful to aquatic organisms.

2.2. Label elements

Hazard pictograms



Signal word

Danger

NITOMORTAR HB HARDENER

Hazard statements	<p>H312 Harmful in contact with skin.</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H360F May damage fertility.</p> <p>H412 Harmful to aquatic life with long lasting effects.</p>
Precautionary statements	<p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
Contains	TRIETHYLENETETRAMINE, DIETHYLENETRIAMINE, Bisphenol A
Supplementary precautionary statements	<p>P201 Obtain special instructions before use.</p> <p>P202 Do not handle until all safety precautions have been read and understood.</p> <p>P261 Avoid breathing vapour/ spray.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P273 Avoid release to the environment.</p> <p>P260 Do not breathe vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P308+P313 IF exposed or concerned: Get medical advice/ attention.</p> <p>P310 Immediately call a POISON CENTER/ doctor.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P363 Wash contaminated clothing before reuse.</p> <p>P405 Store locked up.</p>

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

TRIETHYLENETETRAMINE	60-100%
CAS number: 112-24-3	EC number: 203-950-6
Classification	
Acute Tox. 4 - H312	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
Aquatic Chronic 3 - H412	

NITOMORTAR HB HARDENER

DIETHYLENETRIAMINE	10-30%
CAS number: 111-40-0	EC number: 203-865-4
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317	
BENZYL ALCOHOL	10-30%
CAS number: 100-51-6	EC number: 202-859-9
	REACH registration number: 01-2119492630-38
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H332 Eye Irrit. 2 - H319	
Bisphenol A	<1%
CAS number: 80-05-7	EC number: 201-245-8
	REACH registration number: 01-2119457856-23
Substance of very high concern (SVHC).	
Classification Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 1B - H360F STOT SE 3 - H335	

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

Composition comments This product contains a substance that is a SVHC.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air at once. Rinse nose and mouth with water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Keep affected person warm and at rest. Get medical attention immediately.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. 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 affected person from source of contamination. Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes and get medical attention.

NITOMORTAR HB HARDENER

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	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. May cause skin sensitisation or allergic reactions in sensitive individuals.
Eye contact	Eye contact may cause serious and potentially irreversible injuries.

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

Notes for the doctor	Treat symptomatically.
-----------------------------	------------------------

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Specific hazards	No unusual fire or explosion hazards noted.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting	Containers close to fire should be removed or cooled with water.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Do not breathe vapour.
-----------------------------	---

6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground. Contain spillage with sand, earth or other suitable non-combustible material.
----------------------------------	--

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Avoid contamination of ponds or watercourses with washing down water.
--------------------------------	--

6.4. Reference to other sections

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

Usage precautions	Provide adequate ventilation. Avoid contact with skin and eyes. Avoid the formation of mists. Do not use in confined spaces without adequate ventilation and/or respirator.
--------------------------	---

7.2. Conditions for safe storage, including any incompatibilities

NITOMORTAR HB HARDENER

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

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

Occupational exposure limits

DIETHYLENETRIAMINE

Long-term exposure limit (8-hour TWA): WEL 1 ppm 4.3 mg/m³

Sk

Bisphenol A

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

Ingredient comments WEL = Workplace Exposure Limits

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

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

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: Chemical splash goggles.

Hand protection

Wear protective gloves made of the following material: Nitrile rubber. Viton rubber (fluoro rubber). Polyvinylidene chloride/polyethylene (PVDC/PE).

Other skin and body protection

Wear apron or protective clothing in case of contact.

Hygiene measures

Provide eyewash station and safety shower. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes wet or contaminated.

Respiratory protection

No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Organic vapour filter.

NITOMORTAR HB HARDENER

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Amber.
Odour	Musty (mouldy). Amine.
Odour threshold	Not determined.
pH	Not applicable.
Melting point	Not applicable.
Initial boiling point and range	>180°C @ 1 atm
Flash point	>110°C
Evaporation factor	Not determined.
Flammability (solid, gas)	Not applicable.
Other flammability	Not determined.
Vapour pressure	0.1 kPa @ 20°C
Vapour density	Not determined.
Relative density	0.98 @ 20°C
Bulk density	Not applicable.
Solubility(ies)	Partially soluble in water.
Partition coefficient	Not determined.
Viscosity	<15 P @ 20°C
Explosive properties	Not applicable.
Oxidising properties	Not determined.

9.2. Other information

Other information	Not available.
--------------------------	----------------

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
-------------------	---

10.2. Chemical stability

Stability	Stable at normal ambient temperatures.
------------------	--

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not determined. Will not polymerise.
---	--------------------------------------

10.4. Conditions to avoid

Conditions to avoid	Avoid heat. Avoid freezing.
----------------------------	-----------------------------

10.5. Incompatible materials

Materials to avoid	Strong acids. Strong oxidising agents. Alkalis - inorganic. Alkalis - organic.
---------------------------	--

NITOMORTAR HB HARDENER

10.6. Hazardous decomposition products

Hazardous decomposition products Ammonia or amines. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 2,314.52

Acute toxicity - dermal

ATE dermal (mg/kg) 1,319.97

Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l) 26.12

Inhalation May cause respiratory system irritation.

Ingestion Causes burns. May cause chemical burns in mouth and throat. May cause stomach pain or vomiting. Ingestion of significant amounts may result in severe systemic effects.

Skin contact Product has a defatting effect on skin. May cause allergic contact eczema. May cause sensitisation by skin contact. Causes burns. Harmful in contact with skin.

Eye contact Irritating and may injure eye tissue if not removed promptly.

Acute and chronic health hazards May cause sensitisation by skin contact.

Route of exposure Inhalation Ingestion. Skin and/or eye contact

SECTION 12: Ecological information

Ecotoxicity Dangerous for the environment if discharged into watercourses.

12.1. Toxicity

Toxicity Ecotoxic to fish / daphnia / algae

12.2. Persistence and degradability

Persistence and degradability The product is not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation. Not expected to be bioaccumulative.

Partition coefficient Not determined.

12.4. Mobility in soil

Mobility Mobile. The product is miscible with water and may spread in water systems.

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

NITOMORTAR HB HARDENER

13.1. Waste treatment methods

General information	Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
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)	1760
UN No. (IMDG)	1760
UN No. (ICAO)	1760
UN No. (ADN)	1760

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	CORROSIVE LIQUID, N.O.S. (CONTAINS TRIETHYLENETETRAMINE, DIETHYLENETRIAMINE)
Proper shipping name (IMDG)	CORROSIVE LIQUID, N.O.S. (CONTAINS TRIETHYLENETETRAMINE, DIETHYLENETRIAMINE)
Proper shipping name (ICAO)	CORROSIVE LIQUID, N.O.S. (CONTAINS TRIETHYLENETETRAMINE, DIETHYLENETRIAMINE)
Proper shipping name (ADN)	CORROSIVE LIQUID, N.O.S. (CONTAINS TRIETHYLENETETRAMINE, DIETHYLENETRIAMINE)

14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID classification code	C9
ADR/RID label	8
IMDG class	8
ICAO class/division	8
ADN class	8

Transport labels



14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ICAO packing group	II
ADN packing group	II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

NITOMORTAR HB HARDENER

14.6. Special precautions for user

EmS	F-A, S-B
ADR transport category	2
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

National regulations	Control of Substances Hazardous to Health Regulations 2002 (as amended).
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). Commission Regulation (EU) No 2015/830 of 28 May 2015.
Guidance	Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information	Only trained personnel should use this material. For professional users only.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	24/09/2020
Revision	6c
Supersedes date	06/09/2019
SDS number	27862
Hazard statements in full	H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H360F May damage fertility. H412 Harmful to aquatic life with long lasting effects.

NITOMORTAR HB HARDENER

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.



SAFETY DATA SHEET

NITOMORTAR HB Aggregate

This SDS is not mandated under REACH Regulation (EC) No 1907/2006 and is provided for information only.

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

1.1. Product identifier

Product name NITOMORTAR HB Aggregate

Product number A1920123UK9, A1920143UK9

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

Identified uses Filler component of three part of epoxy resin system

1.3. Details of the supplier of the safety data sheet

Supplier Fosroc Limited
Drayton Manor Business Park
Coleshill Road
Tamworth
Staffordshire
B78 3XN
England
Tel: +44 (0) 1827 262222
Fax: +44 (0) 1827 262444
enquiryuk@fosroc.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 1827 265 279 (Monday-Sunday 24 hours a day)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

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

2.2. Label elements

Hazard statements NC Not Classified

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

NITOMORTAR HB Aggregate

QUARTZ (SiO₂)	60-100%
CAS number: 14808-60-7	EC number: 238-878-4
Classification	
Not Classified	

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	Get medical attention if any discomfort continues.
Inhalation	Move affected person to fresh air at once.
Ingestion	Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water.
Eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

Inhalation	Irritation of nose, throat and airway.
Ingestion	No specific symptoms known.
Skin contact	No specific symptoms known.
Eye contact	May cause temporary eye irritation.

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

Notes for the doctor	Treat symptomatically.
-----------------------------	------------------------

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	No unusual fire or explosion hazards noted.
Hazardous combustion products	No known hazardous decomposition products.

5.3. Advice for firefighters

Protective actions during firefighting	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
---	---

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin and eyes. For personal protection, see Section 8.
-----------------------------	---

6.2. Environmental precautions

Environmental precautions	Avoid release to the environment.
----------------------------------	-----------------------------------

6.3. Methods and material for containment and cleaning up

NITOMORTAR HB Aggregate

Methods for cleaning up Avoid generation and spreading of dust. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid generation and spreading of dust. Avoid inhalation of dust and 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. Keep only in the original container.

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

Occupational exposure limits

QUARTZ (SiO₂)

Long-term exposure limit (8-hour TWA): WEL 0,1 mg/m³ Respirable crystalline silica

WEL = Workplace Exposure Limit

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of dust. Observe any occupational exposure limits for the product or ingredients.

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: Chemical splash goggles.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Polyvinyl chloride (PVC). Rubber (natural, latex). The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Do not smoke in work area. 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 contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

Respiratory protection

Respiratory protection may be required if excessive airborne contamination occurs. Particulate filter, type P2.

NITOMORTAR HB Aggregate

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Powder.
Colour	Grey.
Odour	Odourless.
Odour threshold	Not applicable.
pH	Not applicable.
Melting point	>1600°C
Initial boiling point and range	Not determined.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Evaporation factor	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Other flammability	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	0.8 @ 20°C
Bulk density	Not determined.
Solubility(ies)	Insoluble in water.
Partition coefficient	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not determined.
Viscosity	Not applicable.
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

NITOMORTAR HB Aggregate

Possibility of hazardous reactions Does not decompose when used and stored as recommended. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid No specific material or group of materials is likely to react with the product to produce a hazardous situation.

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

Inhalation Dust in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing.

Ingestion May cause discomfort if swallowed.

Skin contact Prolonged and frequent contact may cause redness and irritation.

Eye contact Dust in the eyes will cause irritation.

SECTION 12: Ecological information

Ecotoxicity The product is not expected to be toxic to aquatic organisms.

12.1. Toxicity

Toxicity Not considered toxic to fish.

12.2. Persistence and degradability

Persistence and degradability The product is not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient Not applicable.

12.4. Mobility in soil

Mobility Not applicable.

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 Waste packaging should be collected for reuse or recycling.

NITOMORTAR HB Aggregate

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

General The product is not covered by international regulations 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)

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

Not applicable.

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

Transport in bulk according to Not applicable.

**Annex II of MARPOL 73/78
and the IBC Code**

SECTION 15: Regulatory information

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

National regulations The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).

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).
Commission Regulation (EU) No 2015/830 of 28 May 2015.

Guidance Workplace Exposure Limits EH40.
Approved Classification and Labelling Guide (Sixth edition) L131.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

NITOMORTAR HB Aggregate

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	15/02/2019
Revision	5b
Supersedes date	26/05/2017

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.