

Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)



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

Identification of the substance/preparation

Product name or Trade name :

Sikatop 110 Armatec EpoCem Part A

Use of the substance/preparation : Chemical product for construction and industry

Company/undertaking identification

Manufacturer/Distributor : Sika Limited
Watchmead Welwyn Garden City
Hertfordshire. AL7 1BQ
United Kingdom

Telephone no. : 01707 394444

Fax no. : 01707 329129

e-mail address of person responsible for this SDS : EHS@uk.sika.com

Emergency telephone number : -

2. HAZARDS IDENTIFICATION

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Xi; R36/38
R43
N; R51/53

Human health hazards : Irritating to eyes and skin. May cause sensitisation by skin contact.

Environmental hazards : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Additional warning phrases : Contains epoxy constituents. See information supplied by the manufacturer.

See section 11 for more detailed information on health effects and symptoms.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical family/ Characteristics : Waterthinnable, modified epoxy resin

Ingredient name	CAS number	%	EC number	Classification
reaction product: bisphenol A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)	25068-38-6	35-50	500-033-5	Xi; R36/38 R43 N; R51/53 [1]
reaction product: bisphenol F-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)	9003-36-5	10-20	500-006-8	Xi; R36/38 R43 N; R51/53 [1]
oxirane, mono[(C12-14-alkyloxy)methyl]derivs	68609-97-2	2.5-5	271-846-8	Xi; R36/38 R43 N; R51/53 [1]
See section 16 for the full text of the R-phrases declared above				

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Occupational exposure limits, if available, are listed in section 8.

4. FIRST AID MEASURES

First-aid measures

- Inhalation** : Get medical attention if adverse health effects persist or are severe.
- Ingestion** : Do not induce vomiting unless directed to do so by medical personnel. Maintain an open airway. Seek immediate medical attention.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Obtain medical attention if symptoms occur.
- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See section 11 for more detailed information on health effects and symptoms.

5. FIRE-FIGHTING MEASURES

Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon oxides
halogenated compounds
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13).
- Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container.

7. HANDLING AND STORAGE

7. HANDLING AND STORAGE

Handling : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Avoid release to the environment. Refer to special instructions/safety data sheet. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous.

Storage : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Packaging materials

Recommended : Use original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
No exposure limit value known.	

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Exposure controls

- Occupational exposure controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.
- Respiratory protection** : No special measures required.
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Recommended: Butyl rubber/nitrile rubber gloves.
- Eye protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
- Skin protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Use barrier skin cream.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

General information

Appearance

Form	: Liquid.
Colour	: White.
Odour	: Faint odour.

Important health, safety and environmental information

Flash point	: Closed cup: Not applicable.
Solubility	: Insoluble in the following materials: water

10. STABILITY AND REACTIVITY

Stability	: The product is stable. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid	: Avoid release to the environment. Refer to special instructions/safety data sheet.
Materials to avoid	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Potential acute health effects

Inhalation	: May cause irritation.
Ingestion	: Irritating to mouth, throat and stomach.
Skin contact	: Irritating to skin. May cause sensitisation by skin contact.
Eye contact	: Irritating to eyes.
Chronic effects	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

12. ECOLOGICAL INFORMATION

Environmental effects	: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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13. DISPOSAL CONSIDERATIONS

Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
Packaging	: Completely emptied packaging or practically empty packaging containing dried/cured residues, once relieved of all pressure can be disposed of as non-hazardous waste. Packaging may still contain hazardous residues and disposal should undertaken by a licensed waste contractor. Any disposal practice must be in compliance with local and national laws and regulations.

14. TRANSPORT INFORMATION

International transport regulations

ADR

UN number : UN3082
 ADR Class : 9
 Classification code : M6
 Packing group : III
 Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
 Contains : Epoxide resin
 Label No. : 9

IMDG

UN number : UN3082
 IMDG Class : 9
 Packing group : III
 Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
 Contains : Epoxide resin
 Emergency schedules (EmS) : F-A, S-F
 Marine pollutant : No.
 Label no. : 9

IATA

UN number : UN3082
 IATA Class : 9
 Packing group : III
 Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
 Contains : Epoxide resin
 Label no. : 9

15. REGULATORY INFORMATION

EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Hazard symbol or symbols : Xi, N
 Irritant, Dangerous for the environment
Contains : reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular weight <= 700)
 reaction product: bisphenol F-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)
 oxirane, mono[(C12-14-alkyloxy)methyl]derivs
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 : S24- Avoid contact with skin.
 S37- Wear suitable gloves.
Additional warning phrases : Contains epoxy constituents. See information supplied by the manufacturer.
VOC content (EU) : VOC (w/w): 0%

National regulations

15. REGULATORY INFORMATION

- Regulatory information** : Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP 3)
Control of Substances Hazardous to Health Regulations 2002 (COSHH) (as amended)
Health & Safety at Work Act 1974
The Environmental Protection (Duty of Care) Regulations 1991
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007
- Guidance Publications** : Approved Code of Practice - Management of Health and Safety at Work, HSE
General Approved Code of Practice to COSHH Regulations, HSE.

16. OTHER INFORMATION

Full text of classifications referred to in sections 2 and 3 : 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.

Full text of classifications referred to in sections 2 and 3 : Xi - Irritant
N - Dangerous for the environment

History

Date of printing : 04.08.2009.

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☑ Indicates information that has changed from previously issued version.

Notice to reader

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the Technical Data Sheet prior to any use and processing.

Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)



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

Identification of the substance/preparation

Product name or Trade name :

SikaTop 110 Armatec EpoCem Part B

Use of the substance/preparation : Chemical product for construction and industry

Company/undertaking identification

Manufacturer/Distributor : Sika Limited
Watchmead Welwyn Garden City
Hertfordshire. AL7 1BQ
United Kingdom

Telephone no. : 01707 394444

Fax no. : 01707 329129

e-mail address of person responsible for this SDS : EHS@uk.sika.com

Emergency telephone number : -

2. HAZARDS IDENTIFICATION

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : R43

Human health hazards : May cause sensitisation by skin contact.

See section 11 for more detailed information on health effects and symptoms.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical family/ Characteristics : Waterthinnable, modified polyamine

Ingredient name	CAS number	%	EC number	Classification
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	1-5	220-666-8	Xn; R21/22 [1] C; R34 R43 R52/53
See section 16 for the full text of the R-phrases declared above				

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in section 8.

4. FIRST AID MEASURES

First-aid measures

Inhalation : Get medical attention if adverse health effects persist or are severe.

Ingestion : Do not induce vomiting unless directed to do so by medical personnel. Maintain an open airway. Seek immediate medical attention.

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4. FIRST AID MEASURES

- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Obtain medical attention if symptoms occur.
- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

See section 11 for more detailed information on health effects and symptoms.

5. FIRE-FIGHTING MEASURES

Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon oxides
nitrogen oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13).
- Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container.

7. HANDLING AND STORAGE

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous.
- Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Packaging materials

- Recommended** : Use original container.

7. HANDLING AND STORAGE

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
No exposure limit value known.	

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Exposure controls

Occupational exposure controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

Respiratory protection : No special measures required.

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Recommended: Butyl rubber/nitrile rubber gloves.

Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Use barrier skin cream.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

General information

Appearance

Form : Liquid.
Colour : White.
Odour : Faint odour.

Important health, safety and environmental information

pH : 10
Flash point : Closed cup: Not applicable.
Vapour pressure : 2.3 kPa (17.25 mm Hg)
Density : ~1 g/cm³ [20°C (68°F)]
Solubility : Insoluble in the following materials: water

10. STABILITY AND REACTIVITY

Stability	: The product is stable. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid	: No specific data.
Materials to avoid	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Potential acute health effects

Inhalation	: May cause irritation.
Ingestion	: Can cause gastrointestinal disturbances.
Skin contact	: May cause sensitisation by skin contact.
Eye contact	: May cause eye irritation.
Chronic effects	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

12. ECOLOGICAL INFORMATION

Environmental effects	: Avoid contact of spilt material and runoff with soil and surface waterways. Do not empty into drains; dispose of this material and its container in a safe way.
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13. DISPOSAL CONSIDERATIONS

Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
Packaging	: Completely emptied packaging or practically empty packaging containing dried/cured residues, once relieved of all pressure can be disposed of as non-hazardous waste. Packaging may still contain hazardous residues and disposal should undertaken by a licensed waste contractor. Any disposal practice must be in compliance with local and national laws and regulations.

14. TRANSPORT INFORMATION

International transport regulations

ADR

Not regulated.

Proper shipping name :

IMDG

Not regulated.

Marine pollutant : No.

IATA

Not regulated.

15. REGULATORY INFORMATION

EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Hazard symbol or symbols	: Xi Irritant
Contains	: 3-aminomethyl-3,5,5-trimethylcyclohexylamine
Risk phrases	: R43- May cause sensitisation by skin contact.
Safety phrases	: S24- Avoid contact with skin. S37- Wear suitable gloves.
VOC content (EU)	: VOC (w/w): 0%

National regulations

Regulatory information	: Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP 3) Control of Substances Hazardous to Health Regulations 2002 (COSHH) (as amended) Health & Safety at Work Act 1974 The Environmental Protection (Duty of Care) Regulations 1991 The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007
Guidance Publications	: Approved Code of Practice - Management of Health and Safety at Work, HSE General Approved Code of Practice to COSHH Regulations, HSE.

16. OTHER INFORMATION

Full text of classifications referred to in sections 2 and 3 : R21/22- Harmful in contact with skin and if swallowed.
R34- Causes burns.
R43- May cause sensitisation by skin contact.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of classifications referred to in sections 2 and 3 : C - Corrosive
Xn - Harmful

History

Date of printing	: 04.08.2009.
Date of issue	: 04.08.2009.
Date of previous issue	: No previous validation.

☑ Indicates information that has changed from previously issued version.

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Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)



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

Identification of the substance/preparation

Product name or Trade name :

SikaTop 110 Armatec Epocem Part C

Use of the substance/preparation : Chemical product for construction and industry

Company/undertaking identification

Manufacturer/Distributor : Sika Limited
Watchmead Welwyn Garden City
Hertfordshire. AL7 1BQ
United Kingdom

Telephone no. : 01707 394444

Fax no. : 01707 329129

e-mail address of person responsible for this SDS : EHS@uk.sika.com

Emergency telephone number : -

2. HAZARDS IDENTIFICATION

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Xi; R41, R37/38

Human health hazards : Risk of serious damage to eyes. Irritating to respiratory system and skin.

Additional hazards : Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

See section 11 for more detailed information on health effects and symptoms.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical family/ Characteristics : Mixture of cements, aggregates and additives

Ingredient name	CAS number	%	EC number	Classification
Quartz (SiO ₂)	14808-60-7	50-75	238-878-4	Not classified. [2]
Cement	65997-15-1	25-35	266-043-4	Xi; R41, R37/38 [1] [2]
silicon dioxide	7631-86-9	5-10	231-545-4	Not classified.
Quartz (SiO ₂)	14808-60-7	<10	238-878-4	Xn; R48/20 [1] [2]
sodium nitrite	7632-00-0	<1	231-555-9	O; R8 [1] T; R25 N; R50
See section 16 for the full text of the R-phrases declared above				

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in section 8.

4. FIRST AID MEASURES

First-aid measures

- Inhalation** : Get medical attention.
- Ingestion** : Do not induce vomiting unless directed to do so by medical personnel. Maintain an open airway. Seek immediate medical attention.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Obtain medical attention if symptoms occur.
- Eye contact** : Get medical attention immediately. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See section 11 for more detailed information on health effects and symptoms.

5. FIRE-FIGHTING MEASURES

Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : No specific fire or explosion hazard.
- Hazardous combustion products** : Decomposition products may include the following materials: metal oxide/oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Large spill** : Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Avoid creating dusty conditions and prevent wind dispersal.
- Small spill** : Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container.

7. HANDLING AND STORAGE

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe dust. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous.

7. HANDLING AND STORAGE

Storage : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Packaging materials

Recommended : Use original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
Quartz (SiO ₂)	EH40/2005 WELs (United Kingdom (UK), 8/2007). TWA: 0.1 mg/m ³ 8 hour(s). Form: respirable dust
Cement	EH40/2005 WELs (United Kingdom (UK), 8/2007). TWA: 10 mg/m ³ 8 hour(s). Form: inhalable dust TWA: 4 mg/m ³ 8 hour(s). Form: respirable dust
silicon dioxide	EH40/2005 WELs (United Kingdom (UK), 8/2007). TWA: 6 mg/m ³ 8 hour(s). Form: inhalable dust TWA: 2.4 mg/m ³ 8 hour(s). Form: respirable dust
Quartz (SiO ₂)	EH40/2005 WELs (United Kingdom (UK), 8/2007). TWA: 0.1 mg/m ³ 8 hour(s). Form: respirable dust

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Exposure controls

Occupational exposure controls : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

Respiratory protection : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
particulate filter P
P1: Inert material; P2: Xn; P3: T, T+
No special measures required.

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Recommended: Butyl rubber/nitrile rubber gloves.

Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Use barrier skin cream.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

9. PHYSICAL AND CHEMICAL PROPERTIES

General information

Appearance

Form	: Powder.
Colour	: Grey.
Odour	: Odourless.

Important health, safety and environmental information

pH	: >11 [Conc. (% w/w): 50%]
Flash point	: Closed cup: Not applicable.
Loose bulk density	: ~1200 kg/m ³
Solubility	: Insoluble in the following materials: water

10. STABILITY AND REACTIVITY

Stability	: The product is stable.
Conditions to avoid	: No specific data.
Materials to avoid	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Potential acute health effects

Inhalation	: Irritating to respiratory system.
Ingestion	: Irritating to mouth, throat and stomach.
Skin contact	: Irritating to skin.
Eye contact	: Severely irritating to eyes. Risk of serious damage to eyes.
Chronic effects	: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

12. ECOLOGICAL INFORMATION

Environmental effects	: Avoid contact of spilt material and runoff with soil and surface waterways. Do not empty into drains; dispose of this material and its container in a safe way.
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13. DISPOSAL CONSIDERATIONS

Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
European waste catalogue (EWC)	: 16 03 03* inorganic wastes containing dangerous substances
Packaging	:

13. DISPOSAL CONSIDERATIONS

Completely emptied packaging or practically empty packaging containing dried/cured residues, once relieved of all pressure can be disposed of as non-hazardous waste.

Packaging may still contain hazardous residues and disposal should undertaken by a licensed waste contractor.

Any disposal practice must be in compliance with local and national laws and regulations.

15 01 10* packaging containing residues of or contaminated by dangerous substances

14. TRANSPORT INFORMATION

International transport regulations

ADR

Not regulated.

IMDG

Not regulated.

Marine pollutant : No.

IATA

Not regulated.

15. REGULATORY INFORMATION

EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Hazard symbol or symbols	: Xi Irritant
Risk phrases	: R41- Risk of serious damage to eyes. R37/38- Irritating to respiratory system and skin.
Safety phrases	: S2- Keep out of the reach of children. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S39- Wear eye/face protection. S46- If swallowed, seek medical advice immediately and show this container or label.
Remark	: 76/769/EC / AII47
VOC content (EU)	: VOC (w/w): 0%

National regulations

Regulatory information	: Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP 3) Control of Substances Hazardous to Health Regulations 2002 (COSHH) (as amended) Health & Safety at Work Act 1974 The Environmental Protection (Duty of Care) Regulations 1991 Hazardous waste regulations 2005 The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007
Guidance Publications	: Approved Code of Practice - Management of Health and Safety at Work, HSE General Approved Code of Practice to COSHH Regulations, HSE. EH40, Workplace Exposure Limits, HSE (as updated). HS(G) 53, Respiratory Protection Equipment - a Practical Guide for Users, HSE.

15. REGULATORY INFORMATION

16. OTHER INFORMATION

Full text of classifications referred to in sections 2 and 3	:	R8- Contact with combustible material may cause fire. R25- Toxic if swallowed. R48/20- Harmful: danger of serious damage to health by prolonged exposure through inhalation. R41- Risk of serious damage to eyes. R37/38- Irritating to respiratory system and skin. R50- Very toxic to aquatic organisms.
Full text of classifications referred to in sections 2 and 3	:	O - Oxidising T - Toxic Xn - Harmful Xi - Irritant N - Dangerous for the environment

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☑ Indicates information that has changed from previously issued version.

Notice to reader

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the Technical Data Sheet prior to any use and processing.