



SAFETY DATA SHEET NITOFLOR HARDTOP S

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

1.1. Product identifier

Product name NITOFLOR HARDTOP S

Product number 1853282UK9

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

Identified uses Monolithic surface hardening compound

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 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 STOT SE 3 - H335

Environmental hazards Not Classified

Human health Dust or splashes from the mixture may cause permanent eye damage. Dust may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing. Dust has an irritating effect on moist skin. Prolonged contact with moist or wet product may cause burns. Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

Environmental The product will harden into a solid mass in contact with water and moisture. The resultant material is not biodegradable.

2.2. Label elements

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Hazard pictograms



Signal word

Danger

Hazard statements

H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H317 May cause an allergic skin reaction.
 H335 May cause respiratory irritation.

Precautionary statements

P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P501 Dispose of contents/ container in accordance with national regulations.

Contains

ORDINARY PORTLAND CEMENT

Supplementary precautionary statements

P261 Avoid breathing vapour/ spray.
 P264 Wash contaminated skin thoroughly after handling.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P310 Immediately call a POISON CENTER/ doctor.
 P312 Call a POISON CENTRE/doctor if you feel unwell.
 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.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.

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

QUARTZ (SiO₂)	50 - 100%
CAS number: 14808-60-7	EC number: 238-878-4
Classification Not Classified	
ORDINARY PORTLAND CEMENT	30-60%
CAS number: 65997-15-1	EC number: 266-043-4
Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 STOT SE 3 - H335	

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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	No personal protective equipment is needed for first aid responders. First aid workers should avoid contact with wet cement or wet cement containing preparations.
Inhalation	Move affected person to fresh air at once. Dust in throat and nasal passages should clear spontaneously. Get medical attention if irritation persists or later develops, or if discomfort, coughing or other symptoms persist.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Give milk instead of water if readily available. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Skin contact	After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Get medical attention promptly if symptoms occur after washing.
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. Show this Safety Data Sheet to the medical personnel.

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	Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.
Ingestion	Ingestion of large doses may result in irritation to the gastrointestinal tract.
Skin contact	May have an irritating effect on moist skin after prolonged contact, or may cause dermatitis after repeated contact. Prolonged skin contact with wet preparation may cause serious burns without pain being felt, including through clothing.
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.
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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.
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5.2. Special hazards arising from the substance or mixture

Specific hazards	Water used for fire extinguishing, which has been in contact with the product, may be corrosive. No unusual fire or explosion hazards noted.
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Hazardous combustion products	No known hazardous decomposition products.
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5.3. Advice for firefighters

Protective actions during firefighting	No specific firefighting precautions known.
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Special protective equipment for firefighters	Use protective equipment appropriate for surrounding materials.
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SECTION 6: Accidental release measures

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6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Use work methods which minimize dust production. Avoid contact with eyes and prolonged skin contact. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of dust.

6.2. Environmental precautions

Environmental precautions Collect and dispose of spillage as indicated in Section 13. Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into suitable waste disposal containers and seal securely. Dry material: Collect powder using special dust vacuum cleaner with particle filter. Alternatively, damp powder with fine spray (to avoid dust formation) and remove slurry. Place into container and allow to solidify before disposal as described in section 13. Wet material: Clean up wet material and place in a container. Allow to dry and solidify before disposal as described in section 13.

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 Avoid contact with skin and eyes. Avoid generation and spreading of dust. Avoid inhalation of dust. Mechanical ventilation or local exhaust ventilation may be required. Change contaminated clothing. Do not eat, drink or smoke when using the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry and cool place. Unsuitable container materials: Aluminium. The product contains less than 2 mg chromate/kg dry cement, and this limit will not be exceeded for 6 months from the packing date stated on the packaging. Seal opened containers and use up as soon as possible. To be stored out of reach of children in its original packaging in a dry place.

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

ORDINARY PORTLAND CEMENT

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

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

WEL = Workplace Exposure Limit

ORDINARY PORTLAND CEMENT (CAS: 65997-15-1)

DNEL

Workers - Inhalation; Short term : 3 mg/m³

8.2. Exposure controls

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Protective equipment



Appropriate engineering controls

Atmospheric levels of dust must be maintained within the Occupational Exposure Limit. Where mechanical methods are inadequate or impractical, appropriate personal protective equipment must be used.

Personal protection

Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. This product may present a chromate (VI) allergy risk. It contains a chromate reducing agent, but users should wear appropriate personal protective equipment.

Eye/face protection

The following protection should be worn: Chemical splash goggles. (conform EN 166)

Hand protection

Use impervious, abrasion and alkali resistant gloves. Barrier cream applied before work may make it easier to clean the skin after exposure, but does not prevent absorption through the skin. 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

Use barrier creams to minimise skin contact. Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures

This product contains silica sands.

The grain size distribution of silica sand present means that it is not classified as hazardous. However, any respirable crystalline dust generated by secondary processing may cause health effects.

Prolonged and /or massive inhalation of respirable crystalline silica dust may cause lung fibrosis, commonly referred to as silicosis. Principal symptoms of silicosis are cough and breathlessness.

Occupational exposure to respirable crystalline silica dust should be monitored and controlled.

Respiratory protection

Wear a respirator fitted with the following cartridge: Particulate filter, type P2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Dusty powder.
Colour	Grey.
Odour	Odourless.
Odour threshold	Not relevant.
pH	pH (concentrated solution): >12
Melting point	>1250°C
Initial boiling point and range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Evaporation factor	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	The product is not flammable.

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Vapour pressure	Not applicable.
Vapour density	Not applicable.
Bulk density	2 kg/l
Solubility(ies)	Slightly soluble in water. Hardens in contact with water.
Auto-ignition temperature	Not determined.
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	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.
Comments	Information given is applicable to the product as supplied.

9.2. Other information

Other information Not determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity When mixed with water, hardens to form a stable mass that is not reactive in normal conditions.

10.2. Chemical stability

Stability Stable under the prescribed storage conditions. When stored under humid conditions, the chromate neutralization will decrease. This product contains a chromate reducing agent to reduce the risk of allergic dermatitis caused by chromium (VI). This product has a shelf life. If not stored in accordance with packaging instructions (sealed and dry), there is an increased risk of the presence of hexavalent chromate leading to an increased risk of an allergic reaction.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None known. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Water, moisture.

10.5. Incompatible materials

Materials to avoid Acids. Chemically-active metals.

10.6. Hazardous decomposition products

Hazardous decomposition products No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Skin sensitisation

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Skin sensitisation	Some individuals may exhibit eczema upon exposure to wet cement caused either by the high pH which induces irritant contact dermatitis, or by an immunological reaction to soluble Cr (VI) which elicits allergic contact dermatitis. The cement contains a soluble Cr (VI) reducing agent and as long as the mentioned period of effectiveness is not exceeded, a sensitising effect is not expected.
Inhalation	Irritating to respiratory system. Inflammation of the nasal mucous membrane by exposure to cement dust.
Ingestion	May cause irritation of mouth, throat and digestive tract.
Skin contact	This product is strongly irritating. Prolonged contact may cause burns. May cause sensitisation by skin contact.
Eye contact	Irritating and may injure eye tissue if not removed promptly.
Acute and chronic health hazards	Repeated and/or prolonged contact may lead to dermatitis.

SECTION 12: Ecological information

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

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish

Not determined.

The product is not expected to be hazardous to the environment. The addition of cements to water will, however, cause the pH to rise and may therefore be toxic to aquatic life in some circumstances.

12.2. Persistence and degradability

Persistence and degradability The product is not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating.

12.4. Mobility in soil

Mobility

The product hardens to a solid, immobile substance. The product is not volatile but may be spread by dust-raising handling.

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

Do not empty into drains, sewers or water courses. Cement that has exceeded its shelf life: when demonstrated that it contains more than 0.0002% Cr (VI), the product shall not be used other than in controlled closed and totally automated processes. It may be recycled and/or treated again with a reducing agent.

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Disposal methods 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

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.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information For professional users only. Only trained personnel should use this material.

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

Revision date 30/08/2019

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Revision	3b
Supersedes date	25/05/2017
SDS number	12821
Hazard statements in full	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation.

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.