

MATERIAL SAFETY DATA SHEET

1. Identification of the substance/preparation and company

Product Name: Flowcem WR AGGREGATE

Manufacturer: Flowcrete SA (Pty) Ltd
176 Voortrekker Street
Jacobs
4052

Telephone Number: (031) 461 3411

2. Composition/information on constituents

Chemical Name	EINECS No.	CAS No.	% by weight	Symbols and Risk Phrases
Cement	270-659-9	68475-76-3	30 - 40	Xi; R41.
Silica Sand, Silicon dioxide	238-878-4	14808-60-7	> 50	None.
Respirable crystalline silica	-	14808-60-7	Trace	Xn; R48:R20

See section 16 Additional information, for full text regarding symbols and Risk phrases.

3. Hazards Identification

Risk of serious damage to eyes. The lime, calcium silicates and alkalis within the cement are partially soluble and when mixed with water will give rise to a potentially hazardous alkaline solution. The eyes are particularly vulnerable and damage will increase with contact time. Contact with wet cement may cause irritation, dermatitis or burns.
Contact between cement powder and body fluids (e.g. sweat and eye fluid) may also cause skin and respiratory irritation, dermatitis or burns.

4. First Aid measures

General Information : In case of accident or you feel unwell, seek medical advice and take the relevant safety data sheets. Never give anything by mouth to an unconscious person.

Inhalation : If irritation occurs, move to fresh air. If nose or airways become inflamed seek medical advice.

Skin contact : Wash with soap and plenty of water before continuing. If irritation, pain or other skin trouble occurs, seek medical advice.
Contaminated clothing should be removed and washed thoroughly before re-use.

Eye Contact : Hold eyelids apart and immediately flush with plenty of water for at least 15 minutes. Seek medical advice immediately.

Ingestion : Wash out mouth with water and give patient plenty of water to drink.

5. Fire-fighting measures

This material is non-combustible and will not facilitate combustion with other materials.

6. Accidental release measures

Personal precautions : Use personal protective equipment as detailed in Section 8.
Ensure adequate ventilation.

Environmental : Avoid the formation of dust clouds.

precautions

Methods for cleaning up : Sweep or preferably vacuum up and collect in suitable containers for disposal in accordance with Section 13. Avoid creating a dust cloud, dampen with water if possible. Addition of water may result in the product hardening in situ if not removed quickly.

7. Handling and storage

Handling : Provide sufficient air exchange and/or exhaust in work rooms. Avoid formation of dust cloud.
Ensure adequate ventilation. Use personal protective equipment as detailed in Section 8.
Handle and open container with care.

Storage : Store in a dry, cool, well-ventilated place.

8. Exposure controls/personal protection

Maximum exposure limit for Silica, respirable crystalline dust : 0.1 mg/m³ 8hr TWA (8 hour time weighted average) (CHAN)

Occupational Exposure Standard for dust, Total inhalable dust : 10mg/m³ 8hr TWA
Respirable dust : 4 mg/m³ 8hr TWA

Engineering measures to reduce exposure : Local exhaust ventilation is recommended where dust is likely to be generated from the handling of dry material.

Personal protective equipment

Respiratory protection : Dust respirator if the conditions are dusty.

Eye protection : Goggles or face shield.

Hand protection : Impervious gloves.

Skin and body protection : Protective suit.

Protective measures : Use of the basic principles of Industrial Hygiene will enable this material to be used safely.

9. Physical and chemical properties

Appearance	: Granules/powder mix	pH	: ~11 - 14
Odour	: None	Water solubility	: slight
Boiling Point	: Not applicable	Water miscibility	: Not applicable
Flashpoint	: Not applicable	Vapour pressure	: Not applicable
Explosion limits	: No data		

10. Stability and reactivity

Material is inert and stable.

Conditions to avoid : Damp storage conditions.

Materials to avoid : Not applicable

Hazardous decomposition products : None.

11. Toxicological information

Corrosivity/irritation : **Skin** – Cement powder or any cement/water mixture may cause irritant contact dermatitis, allergic dermatitis and/or burns.

Eye – Cement is a severe eye irritant. Mild exposure can cause soreness. Gross exposures or untreated mild exposures can lead to chemical burning and ulceration of the eye.

Respiratory tract – Cement powder may cause inflammation of the mucous membranes.

Ingestion – The swallowing of small amounts of cement or any cement/water

mix is unlikely to cause significant reaction. Larger doses may result in irritation of the gastro intestinal tract.

Repeated-dose toxicity : High repeated exposures to cement in excess of the OES have been linked with thinitis and coughing.

12. Ecological information

Ecotoxicity : LC₅₀ aquatic toxicity not determined. The addition of cement to water will raise the pH and may therefore be toxic to aquatic life in some circumstances.

Mobility : The product is not volatile and insoluble in water, will accumulate in the ground.

Persistence and degradability : Non biodegradable. The hydrated lime in the cement will react with atmospheric and dissolved carbon dioxide to form calcium carbonate (e.g. chalk).

Bioaccumulative potential : Not applicable.

Additional ecological information : High concentrations of cement in water (>100 mg/l) may have a sterilising effect in sewage works.

13. Disposal considerations

Unused Product/waste from cleaning etc. : Dispose in accordance with local and national regulations. EC Waste Catalogue code: 08 01 99

Contaminated packaging : Dispose of as non-hazardous packaging waste, use EWC Code 150101 for paper, 150102 for plastic.

14. Transport information

Not classified as hazardous for transport.

15. Regulatory information

Classification according to EEC directive:

Symbols:



Irritant

R-phrases

R41 : Risk of serious damage to eyes.

S-phrases

S22 : Do not breathe dust.

S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 : After contact with skin, wash immediately with plenty of water and soap.

S36/37/39 : Wear suitable protective clothing, gloves and eye/face protection.

Special provisions statement : None.

Hazardous component(s) which must be listed on the label : Cement.

EC Directives: Dangerous Substances Directive, 67/548/EEC & adaptations.
Dangerous Preparations Directive, 1999/45/EC.
Safety Data Sheets Directive, 91/155/EEC and adaptations.

Statutory Instruments: Chemicals (Hazard Information & Packaging for Supply) Regs 2002.

Codes of Practice Control of Substances Hazardous to Health Regs 2002.
Environmental Protection (Duty of Care) Regs. 1991.
Waste Management. The Duty of Care.
Approved classification and labelling guide (Fifth edition). L131.

Guidance Notes	The compilation of safety data sheets (Third edition).
	Occupational Exposure Limits EH40
	CHIP for Everyone HSG(108)
	Construction Information Sheet No 26 (revision 2) CIS26(rev2) - Cement
	Construction Information Sheet No 36 (revision 1) CIS36(rev1) - Silica
	Chemical Hazard Alert Notice 35 – Respirable Crystalline Silica

16. Other Information

This safety data sheet has been prepared in accordance with CHIP3. The provision of Safety data sheets comes under Regulation 6 of CHIP (CHIP is the recognised abbreviation for the Chemicals, Hazard Information and Packaging Regulations). This is in addition to the Health and Safety at Work Act 1974.

Users of our products should take appropriate measures to ensure working practices are in accordance with the Control of Substances Hazardous to Health Regulations (COSHH). This data sheet does not replace the obligation of the user to provide their own assessment of workplace risk as required by other Health & Safety legislation.

Maximum exposure limits and Occupational Exposure Standards have been taken from EH40 Occupational Exposure Standards (from HSE Books).

EC Directive relating to the classification, packaging and labelling of dangerous substances and preparations - Classification(s) and Risk (R) phrase(s) referred to in this document:

Xn	: Harmful	Xi	: Irritant
R41	: Risk of serious damage to eyes.		
R43	: May cause sensitisation by skin contact.		
R48:R20	: Harmful : danger of serious damage to health by prolonged exposure through inhalation.		

Training Advice

Applicators need to be trained in:-

- Handling and hygiene associated with use of industrial chemicals.
- Correct mixing and application of the product.
- Correct cleaning and disposal methods.

Restrictions on Use

The product is intended for use by appropriately trained applicators in industrial situations. It is not suitable for use in home DIY applications, especially because of its hazardous nature and the protective measures required.

Notes

Do not use organic solvents for skin cleansing, it will lead to defatting of the skin, skin irritation and/or dermatitis.

Some solvents can be absorbed through the skin.

Beware of cross contamination where different products are in use in the same location.

Take into account the Manual Handling regulations when dealing with the mixed product.

This safety data sheet is based on our present knowledge and experience and is intended to serve as a guide for safe handling of the product regarding to health and environmental aspects.

Flowcrete SA (Pty) Ltd
176 Voortrekker Street
Jacobs
Durban
Kwa Zulu Natal
Tel: +27 31 461 3411
Fax: +27 31 461 3475

Flowcrete SA (Pty) Ltd
47 Forge Road
Spartan
Gauteng
Tel: +27 11 394 1980
Fax: +27 11 394 3003

Flowcrete SA (Pty) Ltd
1A Gabriel place
Cnr Gabriel & Main Road
Plumstead
Cape Town
Tel: +27 21 797 0214
Fax: +27 21 761 6664

Email: southafrica@flowcrete.com
Flowcrete SA (Pty) Ltd is a subsidiary of Flowcrete Group plc

www.flowcrete.com