

MATERIAL SAFETY DATA SHEET

1. Identification of the substance/preparation and company

Product Name: Flowcem WR Epoxy

Application: Epoxy resin component of a 3 pack surface damp proof membrane. Mixed product is applied using a trowel.

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
Bisphenol A epoxy resins, mw <700	-	25068-38-6	50 – 75	Xi; N; R43. R36/38. R51/53.
Also may contain various pigments, thixotropic agents, surfactants and additives.				

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

3. Hazards Identification

Irritating to eyes and skin. Acute effects: Contact with eyes may cause mild irritation and discomfort. Contact with skin causes irritation, redness and discomfort which is transient.

May cause sensitisation by skin contact. Repeated and /or prolonged exposure may cause an allergic eczema reaction/sensitisation. Once sensitised, an individual may produce an allergic reaction every time they are in contact with epoxy resin.

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

When the base is mixed with the hardener an exothermic reaction starts (i.e. heat is generated). If the mix is not applied within 20 - 30 minutes some smoking may occur.

4. First Aid measures

- General Information** : Immediately remove any contaminated clothing.
In case of accident or if you feel unwell, seek medical advice and take the relevant safety data sheets.
Never give anything by mouth to an unconscious person.
- Inhalation** : Move to fresh air. If breathing has stopped or is laboured give assisted respiration (e.g. mouth to mouth). If symptoms persist seek medical advice.
Prevent aspiration of vomit, turn victim's head to the side.
- Skin contact** : Remove contaminated clothing and shoes. Remove product from skin and wash with soap and plenty of water. Clean with detergents, avoid use of solvents.
- Eye Contact** : Hold eyelids apart and immediately flush with plenty of water for at least 15 minutes.
If irritation persists, seek medical advice.

Ingestion : Immediately seek medical advice. Do not induce vomiting (unless under medical supervision).
If a person vomits when lying on his back, place him in the recovery position.

5. Fire-fighting measures

Suitable extinguishing media : Water spray, carbon dioxide (CO₂), foam, dry powder.
Un-Suitable extinguishing media : High volume water jet.
Special exposure hazards : Burning produces noxious and toxic fumes – carbon oxides. Under conditions of incomplete combustion or pyrolysis, phenolics and carbon oxides may be evolved.
Special protective equipment : Wear self-contained breathing apparatus and protective suit.
Additional information : Standard procedure for chemical fires.
Water mist may be used to cool closed containers.

6. Accidental release measures

Personal precautions : Use personal protective equipment as detailed in Section 8.
Ensure adequate ventilation. Do not breathe vapours.
Keep away from sources of ignition – No smoking.
Keep unauthorised personnel away.
Environmental precautions : Remove all sources of fire/sparks.
Prevent the product from entering drains.
Avoid subsoil penetration. Do not contaminate surface water.
Methods for cleaning up : Soak up with an inert absorbent material (e.g. sand) and dispose of as hazardous waste in accordance with section 13.
Solvents are not recommended for clean-up unless the recommended guidelines for the solvent(s) are followed.
Any residual product may be removed using steam or hot soapy water.

7. Handling and storage

Handling : Provide sufficient air exchange and/or exhaust in work rooms. Avoid formation of aerosol.
Ensure adequate ventilation. Use personal protective equipment as detailed in Section 8.
Handle and open container with care. Avoid inhalation of vapours & skin and eye contact.
Do not eat, drink or smoke when handling.
Storage : Keep containers tightly closed and store in a cool, well-ventilated place at 5 - 25 °C.
Keep container tightly closed, away from drink, food, food containers and animal feeding stuffs.
Do not store with strong bases, strong acids and strong oxidising agents.
Specific Use : Provide adequate ventilation and, if necessary, air extraction in working areas.

8. Exposure controls/personal protection

Exposure limit values – None set for the ingredients in this product.

Engineering measures to reduce exposure : Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Respiratory protection : Required in insufficiently ventilated working areas (especially during mixing).
An air-fed mask, or for short periods of work, a combination of

- charcoal filter and particulate filter respirator.
- Eye protection** : Closely fitting safety goggles.
- Hand protection** : Rubber or plastic gloves (Polyvinyl, nitrile-butyl).
Check regularly for degradation/holes and replace as necessary.
- Skin and body protection** : Protective suit and heavy duty work shoes.
- Protective measures** : Handle in accordance with good industrial hygiene and safety practice.
Wash hands before breaks and immediately after handling the product.
Keep working clothes separate. When using do not eat, drink or smoke.

9. Physical and chemical properties

Appearance	: Liquid	pH	: ~7
Odour	: Slight	Relative Density	: ~1.1 at 20°C
Boiling Point	: ~ 100°C	Water solubility	: Dispersible at 20°C
Flashpoint	: > 200°C	Viscosity	: 90-130 mPa's at 25°C

10. Stability and reactivity

Material is stable.

When the base is mixed with the hardener an exothermic reaction starts (i.e. heat is generated).
If the mix is not applied within 20 - 30 minutes some smoking may occur.

- Conditions to avoid** : Take precautionary measures against extremes of temperature.
Excessive heating over a prolonged period of time degrades the product, causing discolouration.
- Materials to avoid** : Strong acids, strong bases, strong oxidising agents.
- Hazardous decomposition products** : Burning produces noxious and toxic fumes.
Carbon monoxide, carbon dioxide (CO₂).

11. Toxicological information

- Acute oral toxicity** : LD₅₀ (rat) dose > 2,000 mg/kg.
Single dose oral toxicity is believed to be low.
- Eye irritation** : Irritating (rabbit).
- Skin Irritation** : Irritating (rabbit) dermal.
- Sensitisation** : Sensitisation (dermal) guinea pig: Sensitising.
- Carcinogenicity** : A recent review of available data for the type of epoxy resin used in this product by the IARC (International Agency for Research into Cancer) has concluded:
Group 3: Unclassifiable as to carcinogenicity to humans.

12. Ecological information

- Additional ecological information** : Avoid subsoil penetration.
Prevent product from entering drains, do not contaminate surface water.

13. Disposal considerations

- Unused Product / waste from cleaning etc.** : Dispose in compliance with local and national regulations.
EC Waste Catalogue (EWC) code: 08 01 11
- Contaminated packaging** : Partially filled containers shall be disposed of as for the unused product above.

If the container has been used for mixing with the Hardener, can be disposed of, in accordance with local and national regulations, as non-hazardous packaging waste. Remove/invalidate the warning label. Use EWC Code 150104 for metal.

Well drained containers, not used for mixing with the Hardener, shall be disposed of as hazardous packaging waste. Use EWC Code: 150110*.

14. Transport information

Proper shipping name: Environmentally hazardous substance, Liquid, n.o.s.
UN No: 3082

ADR/RID

Class : 9 **Item No** : 11 ° c
HI No : 90 **Packing Group** : III
Contains : Bisphenol A epoxy resin

IMO

Class : 9 **Marine Pollutant** : Yes.
Packing Group : III
Contains : Bisphenol A epoxy resin

IATA

Class : 9
Packing Group : III
Contains : Bisphenol A epoxy resin

15. Regulatory information

Classification according to EEC directive:

Symbols:



Irritant



Dangerous for the environment

R-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.

S-phrases

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.
S61 : Avoid release to the environment. Refer to special instructions/safety data sheets.

Special provisions statement : Contains epoxy constituents. See information supplied by the manufacturer.

Hazardous component(s) which must be listed on the label : Bisphenol A-epoxy resins, mw <700

EC Directives: Dangerous Substances Directive, 67/548/EEC & adaptations
Dangerous Preparations Directive, 88/379/EEC
Safety Data Sheets Directive, 91/155/EEC
Statutory Instruments: Chemicals (Hazard Information & Packaging for Supply) Regs 2002.

Codes of Practice Control of Substances Hazardous to Health Regs 1999
Environmental Protection (Duty of Care) Regs. 1991.
Waste Management. The Duty of Care.

Guidance Notes Approved classification and labelling guide (Fifth edition). L131.
The compilation of safety data sheets (Third edition).
Occupational Exposure Limits EH40
CHIP for Everyone HSG(108)

16. Other Information

This safety data sheet has been prepared in accordance with CHIP3. The text has changed in sections 1 and 13.

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.

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.

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:

- | | | | | | |
|--------|---|---|---|---|-------------------------------|
| Xi | : | Irritant | N | : | Dangerous for the environment |
| 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. | | | |
| R52/53 | : | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. | | | |

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.

When the base is mixed with the hardener an exothermic reaction starts (i.e. heat is generated).

If the mix is not applied within 20 - 30 minutes some smoking may occur.

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.

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Flowcrete SA (Pty) Ltd is a subsidiary of Flowcrete Group plc

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