

**1. Identification of the substance/preparation and company**

**Product Name:** **Mondéco Earth Base A.**

**Application:** Epoxy resin component of a multi-pack anti-bacterial terrazzo floor system. Mixed material is applied by Flowcrete sledge or wooden float and finished with a trowel.

**Manufacturer:**  
Flowcrete S.A. (Pty) Ltd, 176 Voortrekker Street, Jacobs, 4026  
Tel: +27 31 461 3411 Fax: +27 31 461 3475  
E-mail: southafrica@flowcrete.com Website: <http://www.flowcrete.com>

**2. Composition/information on constituents**

Chemical Name	EINECS No.	CAS No.	% by weight	Symbols and Risk Phrases
Bisphenol A/F epoxy resins, mw <700	-	25068-38-6	> 50	Xi; N; R43. R36/38. R51/53.
Aliphatic glycidyl ether	240-260-4	16096-31-4	< 20	Xi; R43. R36/38. R52/53.
Solvent naphtha (petroleum), light aromatic (< 0.1% benzene)	265-199-0	64742-95-6	< 5	Xn; N; R10. R37. R51/53. R65.
Tri-n-butyltin maleate	223-701-5	4027-18-3	< 2	Xn; N; R20/22. R36/37/38. R50.

Also may contain various non-classified 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.**

**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** : 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 (CO<sub>2</sub>), 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 breath vapours.  
Keep away from sources of ignition – No smoking.  
**Environmental precautions** : 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. Do not eat, drink or smoke when handling.  
**Storage** : Keep containers tightly closed and store in a cool, well-ventilated place.  
Keep away from drink, food, food containers and animal feeding stuffs.  
Do not store with strong bases, strong acids and strong oxidising agents.

## 8. Exposure controls/personal protection

### Workplace Exposure Limits:

Solvent naphtha:- 50 ppm (8 hour Time Weighted Average)  
Tin compounds, organic 0.1 mg/m<sup>3</sup> 8hr TWA 0.2 mg/m<sup>3</sup> 15 min Short Term Exposure Limit (STEL)

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

**Personal protective equipment** :

- Respiratory protection** : Not required under normal conditions in a well ventilated workplace.
- 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.  
When using do not eat, drink or smoke.

## 9. Physical and chemical properties

Appearance	: Liquid, colour on label	pH	: ~7
Odour	: Slight, faint epoxy	Relative Density	: ~1.22 at 20 °C
Boiling Point	: >100 °C	Water solubility	: Practically insoluble at 20 °C
Flashpoint	: >70 °C	Water miscibility	: Immiscible
Explosion limits	: Not available.		
Vapour pressure	: < 0.01 Pa at 20 °C for epoxy resin (100Pa = 1mbar)		

## 10. Stability and reactivity

Material is stable.

**Conditions to avoid** : Take precautionary measures against extremes of temperature.  
Excessive heating over a prolonged period of time degrades the product, causing discoloration.  
Take necessary action to avoid static electricity discharge.

**Materials to avoid** : Strong acids, strong bases, strong oxidising agents and amines.

**Hazardous decomposition products** : Burning produces noxious and toxic fumes.  
Carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>).

## 11. Toxicological information

- Acute oral toxicity** : LD<sub>50</sub> (rat) dose > 5,000 mg/kg (epoxy resin)  
LD<sub>50</sub> (rat) dose = 2,900 mg/kg (aliphatic glycidylether)
- Eye irritation** : Irritating (rabbit)
- Skin Irritation** : Irritating (rabbit) dermal
- Sensitisation** : Repeated and/or prolonged exposure has caused allergic eczema/sensitisation in humans.
- Long term toxicity** : No data known.

- Mutagenicity** : No data known.
- 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.
- Reproductive toxicity (fertility, developmental)** : No data known.

## 12. Ecological information

- Ecotoxicity** : Tri-n-butyltin maleate:  
 TL<sub>50</sub> / 96 hrs static / rainbow trout / 54.6 ppb  
 LC<sub>50</sub> / 24 – 48 hrs / daphnia magna / 250 ppb  
 Acute Oral LD<sub>50</sub> / Mallard Duck / 1,631 mg/kg  
 Dietary LD<sub>50</sub> / 8 day / Mallard Duck / 3,401 ppm
- Epoxy Resin  
 LC<sub>50</sub> / 96 hrs / rainbow trout / 2.4 mg/l  
 LC<sub>50</sub> / 24 hrs / daphnia magna Straus 1820 / 3.6 mg/l
- Mobility** : Mobile.
- Persistence and degradability** : Not readily biodegradable.
- Bioaccumulative potential** : No data available.
- 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.  
Use EC Waste Catalogue (EWC) code: 08 01 11
- Contaminated packaging** : If the container has been used for mixing with the Hardener, can be disposed in accordance with local regulations.  
Use EWC Code: 150102 for plastic or 150104 for metal.  
Remove/invalidate the warning label.
- If the container has not been used for mixing with the Hardener, treat as hazardous waste, use EWC code: 150110\*.
- Empty containers can be disposed of as non-hazardous waste after cleaning.  
Use EWC Code: 150102 for plastic or 150104 for metal.  
Remove/invalidate the warning label.

## 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 Instruction** : 914  
**Packing Group** : III                    (Cargo aircraft)  
**Contains** : Bisphenol A epoxy resin

**15. Regulatory information**

**Classification according to EEC directive:**

**Symbols:**



Xi - Irritant



N – 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.
- S60** : This material and its container must be disposed of as hazardous waste.
- 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.

Control of Substances Hazardous to Health Regs 2002  
 Environmental Protection (Duty of Care) Regs. 1991.

**Codes of Practice** Waste Management. The Duty of Care.  
 Approved classification and labelling guide (Fifth edition). L131.  
 The compilation of safety data sheets (Third edition).

**Guidance Notes** Occupational Exposure Limits EH40  
 CHIP for Everyone HSG(108)

**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.

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.
Xn	: Harmful		
R10	: Flammable.		
R20/22	: Harmful by inhalation and if swallowed.		
R36/38	: Irritating to eyes and skin.		
R36/37/38	: Irritating to eyes, respiratory system and skin.		
R43	: May cause sensitisation by skin contact.		
R50	: Very toxic to aquatic organisms.		
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.		
R65	: Harmful: may cause lung damage if swallowed.		

### Training Advice

Operators 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.

Always wet grind the floor to minimise dust creation.

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.