

TILE GROUT

DATA SHEETS

1. TECHNICAL DATA SHEET
2. MATERIAL SAFETY DATA SHEET



TILE GROUT:
INTERIOR/EXTERIOR
WATERPROOF
HIGH STRENGTH
WALL & FLOOR

1. TECHNICAL DATA SHEET

1.1 DESCRIPTION

EcoTile Tile Grout is cement-based, waterproof tile grout designed and formulated for grouting between ceramic, porcelain, clay, and quarry tiles, after the adhesive has set on walls and floors up to a maximum width of 8 mm, both interior and exterior. It has ingredients to assist in water resistance, flexibility, additional strength, workability and has excellent shrink resistance. Plastic, cohesive and easy to apply. Hard in 24 hours. Supplied in powder form for mixing with water.

1.2 SURFACE PREPARATION

1. Minimum joint width for walls is 2mm and for floors 3mm, or as specified by the tile manufacturer.
2. It is not recommended to butt joint tiles.
3. The surface must be firm and clean. The joints must be free of loose material and adhesive residue prior to grouting.
4. It is advisable to moisten the joints before applying tile grout to assist the flow of the grout into the joints. Do not moisten joints when using EcoTile paste adhesives.

1.3 MIXING

1. Gradually mix 5kg of EcoTile Tile Grout to $\pm$ 1.35 litres of EcoTile Bond-It.
2. Mix to a thick creamy smooth paste. Mechanical mixing will result in a lump free, easier to use mix.
3. Allow the mixture to stand for 5 minutes for the properties of the EcoTile Tile Grout to form.
4. Remix before use.
5. Check tiles for staining before grouting commences. Do not add more water.

1.4 APPLICATION

1. Apply EcoTile Tile Grout liberally to the surface and work it into joints with a sponge rubber-faced float or a rubber squeegee, approximately 1m at a time, ensuring that joints are filled.
2. The excess EcoTile Tile Grout must be worked away from the joints and cleaned off with the grout squeegee as work

progresses, and not left to harden. The grouted joints must be left to dry and harden for approximately 2 hours. The excess EcoTile Tile Grout can then be cleaned off with a DAMP, NOT WET, sponge. Do not leave excess moisture on grout joints. The joints can be finished off by pointing along the joint lines.

3. The joints must be allowed to dry for 24 hours before polishing with a clean dry cloth.
4. For permanently wet areas, increased flexibility, and additional strength or in areas where food or cosmetic staining may occur, e.g., kitchens and bathrooms, the water in the mix should be replaced with EcoTile Bond-It.
5. Mix as above.
6. Note that the grout will dry a shade darker.
7. For quarry or porous non-glazed tiles, it is recommended that these tiles be sealed before grouting to avoid any staining of the tiles.

1.5 COVERAGE

Using the following formula, it is possible to calculate the quantity of EcoTile Tile Grout required per square metre of tiling.

$$\text{Kg/m}^2 = \frac{(A+B)}{(A \times B)} \times C \times D \times 1.7$$

A = Length of tile

B = Width of tile

C = Thickness of tile

D = Average joint width

1.6 COLOUR

See the EcoTile Tile Grout colour selector.

1.7 TECHNICAL DATA

Final Drying Time:	24 hours at 20°C and 50% humidity.
Water Demand:	5,4 litres/20 kg.
Temperature:	Resistant up to 90°C.
Shelf Life:	As cement, 6-9 months.
Pot Life:	90 minutes.
Bulk Density:	1,2kg/litre.
Application Temperature:	+ 5°C to + 30°C.
Packaging:	Selected colours in 1 kg, 5 kg and 20 kg bags.

1.8 WARNING

Do not ingest. Keep away from children and pets. Do not empty into drains.

1.9 PRECAUTIONS

Wear rubber gloves. In the event of contamination, rinse thoroughly with cold water. Seek medical assistance if irritation or discomfort persists.

1.10 STORAGE

Store in dry conditions.

1.11 GUARANTEE

EcoTile products are manufactured and tested in accordance with the highest standards and are guaranteed to be fit for purpose and free from defects. This guarantee is subject to the performance of EcoTile products when used strictly in accordance with the methods specifications for the particular project and where professional and competent workmanship is followed.

EcoTile Tile Grout is manufactured by EcoTile, a division of EcoCem.

Address: 275 Cowen Ntuli Street, Eastdene, Middelburg, 1050

Email: info@ecocem.co.za

2. MATERIAL SAFETY DATA SHEET

2.1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING PRODUCT IDENTIFIER

Trade Name: EcoTile Tile Grout

RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Product use: Industrial/Commercial/Residential

DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company name of supplier: **ECOCEM (Pty) Ltd**

Street: 275 Cowen Ntuli Street

State/postal code/city: Middelburg, 1050

Telephone: +27 71 360 9802

Information about the Safety Data Sheet: +27 11 360 9802

Email: info@ecocem.co.za

2.2 HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

CLASSIFICATION (SANS 10234)

Skin corrosion, Category 1A H314: Causes severe skin burns and eye damage.

Serious eye damage, Category 1 H318: Causes serious eye damage.

Specific target organ toxicity - single exposure, Category 3, Respiratory system H335: May cause respiratory irritation.

2.3 MIXING & APPLICATION

BONDING LIQUID is pre-mixed and does not require mixing. It is best applied with a mohair roller or brush.

2.4 LABEL ELEMENTS

LABELLING (SANS 10234)

Hazard pictograms :



Signal word:	Danger
Hazard statements:	H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation.
Precautionary statements:	Prevention: P260 Do not breathe dust or mist. P280 Wear protective gloves/protective clothing/eye Protection/face protection. Response: P301 + P 330 + P331 - IF SWALLOWED: Rinse mouth. Do Not induce vomiting. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 + P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

Hazardous components which must be listed on the label: Cement

OTHER HAZARDS:

This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

2.5 COMPOSITION/INFORMATION ON INGREDIENTS

MIXTURES

HAZARDOUS COMPONENTS

CHEMICAL NAME	CAS-NO. EC-NO. REGISTRATION NUMBER	CLASSIFICATION (SANS 10234)	CONCENTRATION (% W/W)
Cement Portland	Not Assigned	H318: Eye Dam. 1 H315: Skin Irrit. 2 H317: Skin Sens. 1 H335: STOT SE3 H373: STOT RE2	10 – 20 %

For explanation of abbreviations see section 2.11.10.

2.6 FIRST AID MEASURES

2.6.1 DESCRIPTION OF FIRST AID MEASURES

General advice:	Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.
In inhaled:	Move to fresh air. Consult a physician after significant exposure.

IMPORTANT NOTICE: ECOCEM believes the information on this sheet to be correct – but does not guarantee its accuracy or completeness. Conduct your own tests of this product to determine its suitability for intended use. User assumes all risks and liability during testing and use of this product. In special cases, obtain professional advice. The only obligation of ECOCEM shall be to replace any of this product proved to be defective in material. ECOCEM shall not be liable for any injury, loss or damage, direct or consequential, relating to the use or inability to use this product. Except as expressly provided above, all products sold, and samples furnished without any warranty of merchantability or any other warranty, express or implied. ECOCEM reserves the right to change the information on this datasheet. Please contact ECOCEM on +27 11 360 9802 or email info@ecocem.co.za to ensure you have the latest version. Ecocem is a member of the Green Building Council South Africa (GBCSA).

In case of skin contact:	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
In case of eye contact:	Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Keep eye wide open while rinsing.
If swallowed:	Do not induce vomiting without medical advice. Rinse mouth with water. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person.

2.6.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Symptoms:	Cough Respiratory disorder Dermatitis See Section 2.11.5 for more detailed information on health effects and symptoms.
Risks:	Health injuries may be delayed. Corrosive effects. Irritant effects. Causes serious eye damage. May cause respiratory irritation. Causes severe burns.

2.7 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treatment:	Treat symptomatically
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2.8 FIREFIGHTING MEASURES

2.8.1 EXTINGUISHING MEDIA

Suitable extinguishing media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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2.8.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Hazardous combustion products: No hazardous combustion products are known.

2.8.3 ADVICE FOR FIREFIGHTERS

Special protective equipment for:	In the event of fire, wear self-contained breathing firefighters apparatus.
Further information:	Standard procedure for chemical fires.

2.9 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES

Personal precautions:

- Use personal protective equipment.
- Avoid breathing dust.
- Deny access to unprotected persons.

ENVIRONMENTAL PRECAUTIONS

Environmental precautions:

- Do not flush into surface water or sanitary sewer system.
- If the product contaminates rivers and lakes or drains inform respective authorities.

METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Methods for cleaning up:

- Pick up and arrange disposal without creating dust.
- Keep in suitable, closed containers for disposal.

REFERENCE TO OTHER SECTIONS

For personal protection see section 8.

2.10 HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Advice on safe handling:

- Avoid exceeding the given occupational exposure limits (see section 2.11).
- Do not get in eyes, on skin, or on clothing.
- For personal protection see section 2.11.
- Smoking, eating, and drinking should be prohibited in the application area.
- Follow standard hygiene measures when handling chemical products.

Advice on protection against:

- Avoid dust formation. Provide appropriate exhaust fire and explosion ventilation at places where dust is formed.

Hygiene measures:

- Handle in accordance with good industrial hygiene and safety practice.
- When using do not eat or drink.
- When using do not smoke.
- Wash hands before breaks and at the end of workday.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Requirements for storage areas:

- Keep container tightly closed in a dry and well - and containers ventilated place.
- Store in accordance with local regulations.

Other data:

- Keep in a dry place. No decomposition if stored and applied as directed.

SPECIFIC END USE(S)

Specific use(s):

- Construction products.

2.11 EXPOSURE CONTROLS/PERSONAL PROTECTION

2.11.1 CONTROL PARAMETERS

OCCUPATIONAL EXPOSURE LIMITS

COMPONENTS	CAS-NO.	VALUE TYPE (FORM OF EXPOSURE)	CONTROL PARAMETERS	BASIS
Quartz (SiO ₂)	14808-60-7	TWA OEL-CL (Respirable dust)	0,1 mg/m ³	ZA OEL
Further information	Control Limit			
		TWA OEL-RL (Respirable dust)	0,1 mg/m ³	ZA OEL
Further information	Recommended Limit			
		TWA (Respirable dust)	0,1 mg/m ³	2004/37/EC
Further information	Carcinogens or mutagens			

2.11.2 EXPOSURE CONTROLS

PERSONAL PROTECTIVE EQUIPMENT

Eye protection:	Safety glasses with side-shields conforming to EN166. Eye wash bottle with pure water. Wear eye/face protection.
Hand protection:	Chemical-resistant, impervious gloves complying with an ap-proved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manufacturer specifications.
Recommended:	Butyl rubber/nitrile rubber gloves. Contaminated gloves should be removed.
Skin and body protection:	Dust impervious protective suit Protective clothing (e.g. Safety shoes acc. to EN ISO 20345, long-sleeved working clothing, long trousers). Rubber aprons and protective boots are additionally recommended for mixing and stirring work.
Respiratory protection:	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe work-ing limits of the selected respirator. Particulate filter P. P1: Inert material; P2, P3: hazardous substances. Ensure adequate ventilation. This can be achieved by local exhaust extraction or by general ventilation. (EN 689 - Methods for determining inhalation exposure). This applies in particular to the mixing / stirring area. In case this is not sufficient to keep the concentrations under the occupational exposure limits then respiration protection measures must be used.

2.11.3 PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Powder
Colour:	Grey
Odour:	Odourless
Odour Threshold:	No data available
Flash point:	Not applicable
Autoignition temperature:	No data available
Decomposition temperature:	No data available
Lower explosion limit (Vol-%):	No data available
Upper explosion limit (Vol-%):	No data available
Flammability:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available
pH:	> 11
	at 500,00 g/l
	20 °C
Melting point/range/Freezing point:	No data available
Boiling point/boiling range:	No data available
Vapour pressure:	No data available
Density:	No data available
Bulk density:	ca.1,8 kg/m ³
Water solubility:	Insoluble
Partition coefficient: n-octanol/Water:	No data available
Viscosity, dynamic:	No data available
Viscosity, kinematic:	Not applicable
Relative vapour density:	No data available
Evaporation rate:	No data available

OTHER INFORMATION

No data available

2.11.4 STABILITY AND REACTIVITY

REACTIVITY

No dangerous reaction known under conditions of normal use.

CHEMICAL STABILITY

The product is chemically stable.

POSSIBILITY OF HAZARDOUS REACTIONS

Hazardous reactions: Stable under recommended storage conditions.

CONDITIONS TO AVOID

Conditions to avoid: No data available

INCOMPATIBLE MATERIALS

Materials to avoid: No data available

HAZARDOUS DECOMPOSITION PRODUCTS

No decomposition if stored and applied as directed.

2.11.5 TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY

Not classified based on available information.

SKIN CORROSION/IRRITATION

Causes severe burns.

SERIOUS EYE DAMAGE/EYE IRRITATION

Causes serious eye damage.

RESPIRATORY OR SKIN SENSITISATION

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

GERM CELL MUTAGENICITY

Not classified based on available information.

CARCINOGENICITY

Not classified based on available information.

REPRODUCTIVE TOXICITY

Not classified based on available information.

STOT - SINGLE EXPOSURE

May cause respiratory irritation.

STOT - REPEATED EXPOSURE

Not classified based on available information.

ASPIRATION TOXICITY

Not classified based on available information.

2.11.6 ECOLOGICAL INFORMATION

TOXICITY

No data available.

PERSISTENCE AND DEGRADABILITY

No data available.

BIO ACCUMULATIVE POTENTIAL

No data available.

MOBILITY IN SOIL

No data available.

RESULTS OF PBT AND VPVB ASSESSMENT PRODUCT:

Assessment: This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

COMPONENTS:

Portland Cement GP:

Assessment: This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very

OTHER ADVERSE EFFECTS

Product:

Additional ecological information: There is no data available for this product.

Components:

Portland Cement GP:

Additional ecological information: There is no data available for this product.

2.11.7 DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

Product: The generation of waste should be avoided or minimized 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

Contaminated packaging: 15 01 10* packaging containing residues of or Contaminated by dangerous substances.

2.11.8 TRANSPORT INFORMATION

UN NUMBER

Not regulated as a dangerous good.

UN PROPER SHIPPING NAME

Not regulated as a dangerous good.

TRANSPORT HAZARD CLASS(ES)

Not regulated as a dangerous good.

PACKING GROUP

Not regulated as a dangerous good.

ENVIRONMENTAL HAZARDS

Not regulated as a dangerous good.

SPECIAL PRECAUTIONS FOR USER

No data available.

TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

Not applicable.

2.11.9 REGULATORY INFORMATION

SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

International Chemical Weapons Convention (CWC):	Not applicable
Schedules of Toxic Chemicals and Precursors	
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	None of the components are listed ($\Rightarrow$ 0.1 %).
REACH - List of substances subject to authorisation: (Annex XIV)	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	Not applicable
Regulation (EC) No 850/2004 on persistent organic Pollutants	Not applicable
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	Not applicable

CHEMICAL SAFETY ASSESSMENT

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

2.11.10 OTHER INFORMATION

FULL TEXT OF H-STATEMENTS

H315:	Causes skin irritation.
H317:	May cause an allergic skin reaction.
H318:	Causes serious eye damage.
H335:	May cause respiratory irritation.
H373:	May cause damage to organs through prolonged or repeated exposure.

FULL TEXT OF OTHER ABBREVIATIONS

Eye Dam.:	Serious eye damage
Skin Irrit.:	Skin irritation
Skin Sens.:	Skin sensitisation
STOT RE:	Specific target organ toxicity - repeated exposure
STOT SE:	Specific target organ toxicity - single exposure
ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS:	Chemical Abstracts Service
DNEL:	Derived no-effect level

EC50:	Half maximal effective concentration
GHS:	Half maximal effective concentration
IATA:	International Air Transport Association
IMDG:	International Maritime Code for Dangerous Goods
LD50:	Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)
LC50:	Median lethal concentration (concentrations of the chemical in air that kills 50% of the test animals during the observation period)
MARPOL:	International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978
OEL:	Occupational Exposure Limit
PBT:	Persistent, bioaccumulative and toxic
PNEC:	Predicted no effect concentration
REACH:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Reg-istration, Evaluation, Authorisation and Restriction of Chemi-cals (REACH), establishing a European Chemicals Agency
SVHC:	Substances of Very High Concern
vPvB:	Very persistent and very bioaccumulative

CLASSIFICATION OF THE MIXTURE:

Skin Corr. 1A	H314
Eye Dam. 1	H318
STOT SE 3	H335

CLASSIFICATION PROCEDURE:

On basis of test data.
On basis of test data.
Calculation method

The information contained in this Material 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 product data sheet prior to any use and processing.