

KONSTRUKT HES GROUT
High Early Strength Class C Cementitious Grout

Product Code:
GROUTHES20

Issue Date: 21/08/2015

This product is classified as hazardous according to criteria of NOHSC

Section 1 – Identification of the Material and Supplier

PRODUCT (MATERIAL) NAME: HES GROUT
OTHER NAMES:
RECOMMENDED USES: High early strength non-shrink cementitious grout.
SUPPLIER NAME/ADDRESS: I TLS-TWA Australia Pty Ltd – 250 Princes Hwy Dandenong Vic 3175
TELEPHONE NUMBER: (03) 9791 8211 **FACSIMILE NUMBER:** (03) 9791 8644
EMERGENCY PHONE NUMBER: (03) 9791 8211 **HOURS:** 0800-1700 Mon-Fri

Section 2 – Hazards Identification

HAZARD CLASSIFICATION: HAZARDOUS SUBSTANCE.
NON-DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

RISK PHRASES:

R37/38 Irritating to respiratory system and skin.
R48/20 Danger of serious damage to health by prolonged exposure through inhalation
R41 Risk of serious damage to eyes.

SAFETY PHRASES:

S22 Do not breath dust.
S24 Avoid contact with skin.
S25 Avoid contact with eyes.
S36 Wear suitable protective clothing.
S37 Wear suitable gloves.
S39 Wear eye/face protection.
S51 Use only in well ventilated areas.
S09 Keep container in a well ventilated place.
S401 To clean the floor and all objects contaminated by this material, use water and detergent.
S13 Keep away from food, drink and animal feeding stuffs.
S26 In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.
S46 If swallowed, IMMEDIATELY contact Doctor or Poisons Information Centre. (show this container or label).

Section 3 – Composition/Information on Ingredients

INGREDIENTS:

Chemical Name:	Proportion:	CAS Number:
Portland cement	30 – 60%	[65997-15-1]
Crystalline silica (quartz)	30 – 60%	[14808-60-7]

Balance of formulation consists of ingredients below cut-off rates or ingredients determined not to be hazardous.

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Section 4 – First Aid Measures

INGESTION:	If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
INHALATION:	If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
SKIN:	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Remove contaminated clothing and wash before reuse. Wash off skin with soap and water. Seek medical assistance if irritation persists.
EYES:	If this product comes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay.
FIRST AID FACILITIES:	Eye wash and normal washroom facilities.
ADVICE TO DOCTOR:	Treat symptomatically. POISON INFORMATION CENTRE – 13 11 26 Australia-wide.

Section 5 – Fire Fighting Measures

EXTINGUISHING MEDIA:	There is no restriction on the type of extinguisher which may be used. Use extinguishing media suitable for surrounding area.
FIRE FIGHTING:	Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves for fire only. Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting procedures suitable for surrounding area.
FIRE/EXPLOSION HAZARD:	Non combustible. Not considered a significant fire risk, however containers may burn, silicon dioxide (SiO ₂). May emit poisonous fumes. May emit corrosive fumes.
FIRE INCOMPATIBILITY:	None known.
HAZCHEM CODE:	Not applicable.
ADDITIONAL INFORMATION:	Not applicable.

Section 6 – Accidental Release Measures

MINOR SPILLS	Remove all ignition sources. - Clean up all spills immediately. - Avoid contact with skin and eyes. - Control personal contact by using protective equipment.
MAJOR SPILLS	Moderate hazard. - CAUTION: Advise personnel in area. - Alert Emergency Services and tell them location and nature of hazard. - Control personal contact by wearing protective clothing. - Prevent, by any means available, spillage from entering drains or water courses.

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Section 7 – Handling and Storage

- PROCEDURE FOR HANDLING:**
- Avoid all personal contact, including inhalation.
 - Wear protective clothing when risk of exposure occurs.
 - Use in a well-ventilated area.
 - Prevent concentration in hollows and sumps.
- SUITABLE CONTAINER:**
- Polyethylene or polypropylene container.
 - Check all containers are clearly labelled and free from leaks.
- STORAGE INCOMPATIBILITY:**
- Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.
 - Avoid contact with copper, aluminium and their alloys.
- STORAGE REQUIREMENTS:**
- Store in original containers.
 - Keep containers securely sealed.
 - Store in a cool, dry area protected from environmental extremes.
 - Store away from incompatible materials and foodstuff containers.

Section 8 – Exposure Controls / Personal Protection

NATIONAL EXPOSURE STANDARDS:

Exposure to dust should be kept as low as practicable, and below the NES for the product as listed below:

Crystalline silica (quartz) – 0.1 mg/m³ TWA as respirable dust

Dust (NOS- not otherwise specified) - 10mg/m³ TWA as inspirable dust.

BIOLOGICAL LIMIT VALUES: Not established for the product.

ENGINEERING CONTROLS: If used in limited ventilation, ensure adequate ventilation to maintain exposure levels are kept below standards, by using a local exhaust. Keep containers closed when not in use.

PERSONAL PROTECTION: Avoid unnecessary contact as good work practice. Wash contaminated clothing and protective equipment before storing and reuse. Wash hands before eating, smoking or using the toilet.

RESPIRATORY PROTECTION: Type AX-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

EYE PROTECTION: Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent].

PROTECTIVE GLOVES: Rubber, PVC or other protective gloves are necessary, and desirable, especially if this product is being used frequently or for lengthy periods. Consult AS2 161 for guidance.

CLOTHING: Clean overalls should be worn, preferably with an apron. Consult AS2919 for clothing guidance.

SAFETY FOOTWEAR: Wearing safety boots is advisory. Consult AS/NZ2210 for advice on Occupational Protective Footwear.

OTHER

- Overalls.
- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.

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Material Data:**SILICA CRYSTALLINE - QUARTZ:**

The concentration of dust, for application of respirable dust limits, is to be determined from the fraction that penetrates a separator whose size collection efficiency is described by a cumulative log-normal function with a median aerodynamic diameter of 4.0 µm (+-) 0.3 µm and with a geometric standard deviation of 1.5 µm (+-) 0.1 µm, i.e..generally less than 5 µm.

Because the margin of safety of the quartz TLV is not known with certainty and given the associated link between silicosis and lung cancer it is recommended that quartz concentrations be maintained as far below the TLV as prudent practices will allow.

WARNING: For inhalation exposure ONLY: This substance has been classified by the ACGIH as A2 Suspected Human Carcinogen.

- For calcium silicate:

Containing no asbestos and <1% crystalline silica

ES TWA: 10 mg/m³ inspirable dust

TLV TWA: 10 mg/m³ total dust (synthetic nonfibrous) A4

Although in vitro studies indicate that calcium silicate is more toxic than substances described as "nuisance dusts" is thought that adverse health effects which might occur following exposure to 10-20 mg/m³ are likely to be minimal.

The TLV-TWA is thought to be protective against the physical risk of eye and upper respiratory tract irritation in workers and to prevent interference with vision and deposition of particulate in the eyes, ears, nose and mouth.

For calcium oxide:

The TLV-TWA is thought to be protective against undue irritation and is analogous to that recommended for sodium hydroxide.

NOTE: This substance has been classified by the ACGIH as A4 NOT classifiable as causing Cancer in humans.

Portland cement is considered to be a nuisance dust that does not cause fibrosis and has little potential to induce adverse effects on the lung.

Section 9 – Physical and Chemical Properties**APPEARANCE (COLOUR, PHYSICAL FORM, SHAPE):**

Fine grey powder

ODOUR: None**VAPOUR PRESSURE:** Negligible**MELTING POINT:** Not available**BOILING POINT:** Not applicable**SOLUBILITY:** Partly miscible in water**SPECIFIC GRAVITY:** 1.5**FLASH POINT:** Non-combustible**UPPER FLAMMABLE LIMIT:** Not applicable**LOWER FLAMMABLE LIMIT:** Not applicable**VOLATILE ORGANIC COMPOUNDS (VOC) CONTENT:**

Not stated.

Section 10 – Stability and Reactivity**CHEMICAL STABILITY:** Stable.**CONDITIONS TO AVOID:** Keep away from strong acids.**INCOMPATIBLE MATERIALS:** No restrictions**HAZARDOUS DECOMPOSITION PRODUCTS:** Product is not combustible, however containers may burn.**HAZARDOUS REACTIONS:** None

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Section 11 – Toxicological Information

TOXICOLOGY INFORMATION: No toxicity data is available for this specific product, however toxicity data found for constituents are stated below:

This product contains a proportion of respirable free crystalline silica in the quartz component. Crystalline silica is classified as a Class 1 Human Carcinogen according to IARC (International Agency for Research on Cancer), however research on this is inconclusive and the ASCC/NOHSC has yet to classify crystalline silica as a human carcinogen. Current research indicates no excess risk of lung cancer or other cancers from using these products. Repeated exposure to respirable crystalline silica dust may lead to silicosis, or other serious delayed lung injury. The onset of silicosis is usually slow and lung damage may occur even when no symptoms or signs of ill-health have occurred. Silicosis can develop to a more serious degree even after exposure has ceased, and may also lead to other diseases including heart disease and scleroderma. Inhalation of dust, including crystalline silica dust, is considered by medical authorities to increase the risk of lung disease due to tobacco smoking.

HEALTH EFFECTS FROM THE LIKELY ROUTES OF EXPOSURE:

- INHALATION:** The dust is highly irritating to the upper respiratory tract and lungs, and may cause coughing and sneezing. Persons with pre-existing respiratory conditions may incur further disability if excessive concentrations of material are inhaled. Overexposure may cause coughing, wheezing and irritation of nasal passages.
- INGESTION:** Highly irritating and mildly corrosive if swallowed. May result in nausea, abdominal irritation, pain and vomiting. Ingestion is not expected to occur in normal industrial use.
- EYES:** The dust is highly irritating and abrasive to the eyes and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision if not promptly and properly treated.

Section 12 – Ecological Information

- ECOTOXICITY:** Not available
- PERSISTENCE AND DEGRADABILITY:** Not available
- MOBILITY:** Not available
- ENVIRONMENTAL PROTECTION:** Not expected to create environmental hazards unless dumped in massive quantity.

DISPOSAL METHODS AND CONTAINERS:

Refer to State Land Waste Management Authority. Empty containers must be decontaminated. Normally suitable for disposal at approved land waste site.

Section 13 – Disposal Consideration

Recycle wherever possible or consult manufacturer for recycling options.
Consult State Land Waste Management Authority for disposal.
Bury residue in an authorised landfill.
Recycle containers if possible, or dispose of in an authorised landfill.

Section 14 – Transport Information

- UN NUMBER:** None assigned
- UN PROPER SHIPPING NAME:** None assigned
- CLASS AND SUBSIDIARY RISK:** None assigned
- PACKING GROUP:** None assigned

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HAZCHEM CODE: None assigned**SPECIAL PRECAUTIONS PER USER:**

Keep containers tightly sealed when not in use. Store in a cool, dry, well-ventilated place and out of direct sunlight. Keep away from strong acids. No regulatory requirements apply to the transport of this product.

Section 15 – Regulatory Information**POISON SCHEDULE:** Not scheduled**OHS:** Unregulated**ENVIRONMENTAL:** Unregulated**ADDITIONAL NATIONAL AND/OR INTERNATIONAL REGULATORY INFORMATION:**

Unregulated

Section 16 – Other Information**DATE OF PREPARATION OR LAST REVISION OF MSDS:**

8 June 2011

REASON FOR REVISION: Revise company details**CONTACT POINT:** ITLS-TWA Australia Pty Ltd
(03) 9791 8211**LITERATURE REFERENCES / SOURCES OF DATA:**Material Safety Data Sheets from Suppliers
List of Designated Substances – Worksafe Australia (on-line) Australian Dangerous Goods Code 6th Edition
Standard for the Uniform Scheduling of Drugs and Poisons No 19

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PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.