Macor Machinable Glass Ceramic #225-5511

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet | Version No: 2.0 | Chemwatch 4587-24

Issue Date: 15-Oct-2010 | CD 2011/2

XC9317SC

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME
Macor Machinable Glass Ceramic #225-5511

SYNONYMS
RS-Components, refractory, "fluoro-phlogopite mica"

PRODUCT USE

Use as per manufacturer's instructions.

SUPPLIER

Company: RS Components Pty Ltd Company: RS Components Pty Ltd Address: Address: 25 Pavesi Street Units 30- 31 Warehouse World Smithfield 761 Great South Road NSW 2164 Penrose Auckland 1006 Australia New Zealand Telephone: 02 9681 8500 Telephone: 09 579 5885 Emergency Tel: **1800 039 008** Emergency Tel: **1800 039 008** Emergency Tel: **03 95733112** Emergency Tel: **03 9573 3112** Fax: 02 9681 8600 Fax: 09 579 9585

Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to NOHSC Criteria, and ADG Code.

CHEMWATCH HAZARD RATINGS

	Min	Max
Flammability:	0	
Toxicity:	0	
Body Contact:	2	
Reactivity:	0	
Chronic:	2	

Min/Nil=0
Low=1
Moderate=2
High=3
Extreme=4



POISONS SCHEDULE
None

RISK	SAFETY
■ Irritating to skin.	• Avoid contact with skin.
■ Limited evidence of a carcinogenic effect.	• Avoid contact with eyes.
■ Cumulative effects may result following exposure*.	• Wear suitable protective clothing.
■ May produce discomfort of the eyes and respiratory tract*.	• Wear suitable gloves.
* (limited evidence).	• Wear eye/face protection.
	• To clean the floor and all objects contaminated by this material, use water and detergent.
	• Keep away from food, drink and animal feeding stuffs.
	• In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.
	• If swallowed, IMMEDIATELY contact Doctor or Poisons Information Centre. (show this container or label).

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
Insulating refractory rod, consisting of		
fluorophlogopite mica		30-60
glass fibres	65997-17-3	30-60

Section 4 - FIRST AID MEASURES

SWALLOWED
· 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.

EYE
If this product comes in contact with the eyes: · Wash out immediately with fresh 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. · Seek medical attention without delay; if pain persists or recurs seek medical attention. · Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

Brush off dust. If skin or hair contact occurs: · Flush skin and hair with running water (and soap if available). · Seek medical attention in event of irritation.

INHALED

· If dust is inhaled, remove from contaminated area. · Encourage patient to blow nose to ensure clear passage of breathing. · If irritation or discomfort persists seek medical attention.

NOTES TO PHYSICIAN

■ Treat symptomatically.

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

Product is not combustible. No special firefighting procedures required.
Use fire fighting procedures suitable for surrounding area.

FIRE/EXPLOSION HAZARD

· Non combustible.
· Not considered a significant fire risk, however containers may burn.

FIRE INCOMPATIBILITY

No known incompatibility with normal range of industrial materials.

HAZCHEM

None

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

· Generally not applicable.

MAJOR SPILLS

· Clear area of personnel and move upwind.
· If inhalation risk of exposure exists, wear SAA approved dust respirator.
· Collect recoverable product into labelled containers for recycling.
· Clean up all spills immediately.
· Avoid breathing dust and contact with skin and eyes.
· Wear protective clothing, gloves, safety glasses and dust respirator.
· Wet residue with water to prevent dusting.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

Avoid generating and breathing dust.
· Limit all unnecessary personal contact.
· Wear protective clothing when risk of exposure occurs.
· Use in a well-ventilated area.
· Avoid contact with incompatible materials.

SUITABLE CONTAINER

Supplied as rods.

STORAGE INCOMPATIBILITY

· Keep dry . Segregate from strong acids.
Avoid contamination of water, foodstuffs, feed or seed.

STORAGE REQUIREMENTS

Store flat in load designed racking.
· 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.
Store under cover . · Keep dry.

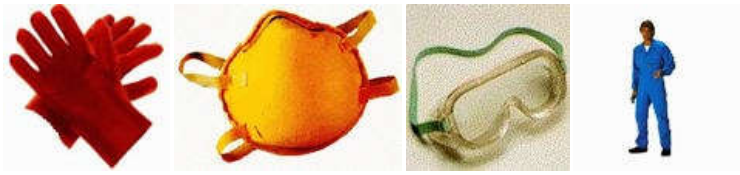
Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m³	STEL ppm	STEL mg/m³	Peak ppm	Peak mg/m³	TWA F/CC	Notes
Australia Exposure Standards	glass fibres (Glasswool)		0.5					0.5	(see Chapter 14, see also Synthetic mineral fibres)
Australia Exposure Standards	glass fibres (Synthetic mineral fibres (SMF))		0.5					0.5	(see Chapter 14)

ENDOELTABLE

PERSONAL PROTECTION



RESPIRATOR
• Particulate dust filter. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)
EYE
· Full face shield or · Safety glasses with side shields.
· 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].
HANDS/FEET
· Barrier cream and · Cotton gloves or · Protective gloves eg. Leather gloves or gloves with Leather facing.
· Safety footwear.
OTHER
· Overalls.
· Eyewash unit.
· Loose fitting protective clothing, eg overalls/ long sleeve shirts.
· When working above head height, use head covering, dust mask and goggles.
· Minimise dust generation by using sharp hand cutting tools if possible.
· Powered tools (eg saws etc.) should only be used if fitted with dust extraction and containment equipment.

ENGINEERING CONTROLS
Dust from old, fired refractories may be more hazardous than new materials. Use respiratory protection when rebuilding or demolishing old furnaces.
Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.
The basic types of engineering controls are:
Process controls which involve changing the way a job activity or process is done to reduce the risk.
Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.
· Hazard relates to dust released by sawing, cutting, sanding, trimming or other finishing operations.
· Avoid generating and breathing dust.
· Effective dust extraction and good ventilation is required when using cutting, shaping or sanding tools. Wear a disposable dust mask AS 1715 (1991) class P1 or P2 when machining.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE
White porcelain-like manufactured rod; does not mix with water.

PHYSICAL PROPERTIES

Does not mix with water.
Sinks in water.

State	Manufactured	Molecular Weight	Not applicable
Melting Range (°C)	Not available	Boiling Range (°C)	Not applicable
Solubility in water (g/L)	Immiscible	Flash Point (°C)	Not applicable
pH (1% solution)	Not applicable	Decomposition Temp (°C)	Not available
pH (as supplied)	Not applicable	Autoignition Temp (°C)	Not applicable
Vapour Pressure (kPa)	Not applicable	Upper Explosive Limit (%)	Not applicable
Specific Gravity (water=1)	2.52	Lower Explosive Limit (%)	Not applicable
Relative Vapour Density (air=1)	Not applicable	Volatile Component (%vol)	Not applicable
Evaporation Rate	Not applicable		

Section 10 - CHEMICAL STABILITY

CONDITIONS CONTRIBUTING TO INSTABILITY
¦ Product is considered stable and hazardous polymerisation will not occur.

For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS	CHRONIC HEALTH EFFECTS
■ Irritating to skin.	■ Limited evidence of a carcinogenic effect.
■ May produce discomfort of the eyes and respiratory tract*.	■ Cumulative effects may result following exposure*.
■ * (limited evidence).	■ * (limited evidence).

TOXICITY AND IRRITATION
Not available. Refer to individual constituents.

Section 12 - ECOLOGICAL INFORMATION

No data

Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
Macor Machinable Glass Ceramic #225-5511	No Data Available	No Data Available		
glass fibres	No Data Available	No Data Available		

Section 13 - DISPOSAL CONSIDERATIONS

¦ Recycle wherever possible.
Bury residue in an authorised landfill.

Section 14 - TRANSPORTATION INFORMATION

HAZCHEM:
None (ADG7)
NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: UN, IATA, IMDG

Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE
None

REGULATIONS
Regulations for ingredients
glass fibres (CAS: 65997-17-3,94551-77-6) is found on the following regulatory lists;
"Australia Inventory of Chemical Substances (AICS)","Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - AppendixA"
No data for Macor Machinable Glass Ceramic #225-5511 (CW: 4587-24)

Section 16 - OTHER INFORMATION

Ingredients with multiple CAS Nos
Ingredient Name CAS glass fibres 65997-17-3, 94551-77-6

■ Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.
Alist of reference resources used to assist the committee may be found at:
www.chemwatch.net/references.

■ The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

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