

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Sealcoat 607™

Other Names: Mastic

Recommended Use: Thermal insulation repair compound (Med/High temperature)

Manufacturer's Product Code:

Supplier Name: Thermal Ceramics, A Division of Morganite Australia Pty. Ltd.
Address: 10 – 14 Toogood Ave, Beverley South Australia, 5009 Australia
Telephone: 1800 467 858
Fax: 1800 467 850

Emergency Contact: (08) 8243 5300
(Monday to Friday, 8:00a.m – 4:00p.m)

2. HAZARDS IDENTIFICATION

Not classified as hazardous according to the criteria of Safe Work Australia (SWA)
Not classified as a dangerous good according to the criteria of the ADG Code

2.1 RISK PHRASE

None.

2.2 SAFETY PHRASES

S36 Wear suitable protective clothing
S37 Wear suitable gloves
Refer to Safe Work Australia Code of Practice for SMF, [NOHSC: 2006 (1990)].

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Proportion
Amorphous alkaline earth silicate fibre	65997-17-3	20 - 40%
Silica (amorphous)	7631-86-9	10-20%
Bentonite	1302-78-9	1-10%
Water	7732-18-5	35-70%
Anionic Polymer	NA	1-10%

4. FIRST AID MEASURES

4.1 ROUTES OF EXPOSURE

Swallowed

If ingested in sufficient quantity may cause temporary gastric irritation.

Eyes

Physical irritation, abrasive action may cause damage to outer surface of the eye.

Skin

May cause irritation and inflammation due to mechanical action of fibre ends

Inhalation

Irritation to nose, throat and upper respiratory tract

4.2 FIRST AID MEASURES

Swallowed

For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor. Do not induce vomiting.

Eyes

Flush gently with running water for 15 minutes. Seek medical attention if irritation persists.

Skin

Remove contaminated clothing and gently flush affected areas with water. Seek medical advice if irritation persists.

Inhalation

If over exposure occurs, leave exposure area immediately. Seek medical attention if symptoms develop.

Advice to Doctor

Treat symptomatically

5. FIRE FIGHTING MEASURES

Flammability

Non flammable, No fire or explosion hazard exists

Hazchem Code

None allocated

6. ACCIDENTAL RELEASE MEASURES

6.1 EMERGENCY PROCEDURES

Spillage

If spilt (bulk), contact emergency services if appropriate. If product is damaged, seal and minimize fibre release. Clean area using approved micro-filter equipped vacuum cleaner or wet sweep. Clear the area of all unprotected personnel and prevent spill entering drains or waterways. Collect and place in sealable containers for disposal or reuse. Avoid generating dust.

Fire and Explosion

Non flammable, No fire or explosion hazard exists. Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use water fog to cool intact containers and nearby storage areas.

Extinguishing

Non flammable

6.2 METHODS AND MATERIAL FOR CONTAINMENT AND CLEAN UP

Pick up large pieces and use a vacuum cleaner fitted with high efficiency filter (HEPA). If brushing is used, ensure that the areas are wetted down first.

- Do not use compressed air for clean up.
- Do not allow being wind blown.
- Do not flush spillage to drain and prevent from entering natural water courses.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas (ex if container is damaged).

Handling & Installation

The following applies to the dry form of Sealcoat 607™

- a) All installation practices should be designed to minimise the liberation of any airborne fibre or dust.
- b) In large installations of several days/weeks duration, the installation area should be clearly designated and barriers erected to limit access
- c) The synthetic mineral fibre materials should be stored in sealed plastic bags or similar containers until installation is to proceed. These containers should be opened within the designated work area when work is to start.
- d) Where possible, materials should be delivered in sizes such that a minimum of handling and machining is required. However when cutting or drilling is required, these should be done with hand tools fitted with local exhaust extraction. The exhaust from such extraction equipment should be fitted and positioned away from other work areas.
- e) Empty storage bags should be folded and stored in a waste container along with any waste material.
- f) Upon completion of the job, all excess materials should be sealed in bags prior to removal from the designated work area. The work area should be vacuumed using an industrial vacuum cleaner. Wet mopping and wiping can be utilised if an industrial vacuum cleaner is not available.

Removal

For the removal of embrittled Superwool™ 607™ based fibre materials the following procedures are recommended:

- a) All practices should be designed to minimise the liberation of any airborne fibre or dust
- b) In large installations of several days/weeks duration, the installation area should be clearly designated and barriers erected to limit access
- c) Upon completion of the job, all excess materials should be sealed in bags prior to removal from the designated work area. The work area should be vacuumed using an industrial vacuum cleaner. Wet mopping and wiping can be utilised if an industrial vacuum cleaner is not available.
- d) With prolonged operations above 980o C, a small proportion of Superwool X607 may transform to wollastonite and disordered cristobalite warranting higher levels of dust control and respiratory protection.

7.2 STORAGE

Store in sealed container in cool, dry area, removed from foodstuffs. Ensure packages are adequately labelled, protected from physical damage and sealed when not in use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 NATIONAL EXPOSURE STANDARDS HYGIENE STANDARDS AND EXPOSURE LIMITS

Country	Chemical	Exposure Limit*	Sources
Australia	Synthetic Mineral Fibre	0.5 fibre/ml	SafeWork Australia
Australia	Silica (amorphous)	TWA 10 mg/m ³	SafeWork Australia

* Time weighted average concentrations

8.2 ENGINEERING CONTROLS

Review your applications in order to identify potential sources of dust exposure. Local exhaust ventilation, which collects dust at source, can be used. For example down draft tables, emission controlling tools and materials handling equipment. Keep the workplace clean. Use a vacuum cleaner fitted with a HEPA filter; avoid brushing and compressed air.

8.3 PERSONAL PROTECTIVE EQUIPMENT

Skin protection:

Disposable coveralls or long sleeve, loose fitting clothing and PVC or rubber gloves (launder able clothing should be washed separately from other clothing).

Eye protection:

As necessary wear dust-proof goggles or safety glasses with side shields.

Respiratory protection: (Dried Sealcoat 607™)

The National Standard for Synthetic Mineral Fibres [NOHSC:1004(1990)] advises the use of the following PPE that for installation and removal of both bonded and unbonded glass-wool material. A half-face Class P2 (Particulate) respirator should be worn during work in enclosed or poorly ventilated spaces, or where evidence suggests that respirable fibre levels may exceed 0.5 fibres/ml.

All respiratory devices should be tested for compliance with AS/NZS 1715 & AS/NZS 1716.

8.4 VENTILATION

Use with adequate natural or mechanical ventilation during installation. If cutting with power tools, local extraction ventilation is recommended. Clean area with micro equipped vacuum cleaner or by wet sweeping.

8.5 INFORMATION AND TRAINING OF WORKERS

Workers should be trained on good working practices and informed on applicable local regulations. This may include:

- the applications involving fibre-containing products;
- the potential risks to health resulting from the exposure to fibrous dust;
- the requirements regarding smoking, eating and drinking at the workplace;
- the requirements for protective equipment and clothing;
- the good working practices to limit dust emissions;
- the proper use of protective equipment;

8.6 ENVIRONMENTAL EXPOSURE CONTROLS

Refer to local applicable environmental permitted standards for air, water and soil. *For waste, refer to Section 13.*

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Off white Paste	BULK DENSITY	
ODOUR	Odorless	MELTING POINT	>1330°C
pH	Not Available	SOLUBILITY IN WATER	Insoluble, slowly soluble in physiological solutions
VAPOUR PRESSURE	Not Available	SPECIFIC GRAVITY	Not Available
VAPOUR DENSITY	Not Available	CHEMICAL FAMILY	Synthetic Mineral Fibres
BOILING POINT	Not Available		
LENGTH WEIGHTED GEOMETRIC MEAN DIAMETER			

10. STABILITY AND REACTIVITY

10.1 STABILITY

This material is chemically stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.2 CONDITIONS & MATERIALS TO AVOID

None

10.3 HAZARDOUS DECOMPOSITION PRODUCTS AND HAZARDOUS REACTIONS

None

11. TOXICOLOGICAL INFORMATION

11.1 EPIDEMIOLOGY

Extensive investigations of the production workers of synthetic mineral fibre have been ongoing for more than 10 years. The preliminary evidence is as follows:

1. There is no evidence of any fibrotic lung disease (interstitial fibrosis) whatsoever on X-ray.
2. There is no evidence of any lung disease among those employees exposed to synthetic mineral fibres that have never smoked.
3. A statistical "trend" was observed in smokers between slight decreases in measures of pulmonary function and the duration of exposure to synthetic mineral fibre however this trend is similar to that observed in smokers who work in other industries.
4. Pleural plaques (thickening along the chest wall) have been observed in a small number of employees in overseas plants who have had long duration of employment. A repeat study found inconsistencies in detecting such pleural plaques. No pleural plaques have been found in the Australian manufacturing workforce. There are several occupational and non-occupational causes for pleural plaques and it is generally considered that they are not indications of "pre-cancer" nor are they associated with any measurable effect on lung function.

11.2 TOXICOLOGY

The potential for SMF fibres to produce health effects has been the subject of extensive investigations over a number of decades. The Australian Refractory Synthetic mineral fibre Industry Association (ARCFIA) is continuing to support the necessary investigations and will make all data available to

interested parties. Information will be updated as studies are completed and reviewed. The following is a review of the results to date:

A number of studies have been conducted on the health effects of inhalation of Superwool™ 607™. A lifetime (6 hours per day, 5 days a week for 24 months) nose only inhalations study has been conducted in rats exposed to Maximum Tolerated Dose (30 mg/M3, 200 fibres/ml). The findings indicate;

- No progressive lung damage (interstitial fibrosis),
- Reversible cellular changes in the lung tissue similar to the effects observed after inhalation of high concentrations of inert dust.
- No cancer of the lung or mesothelioma incidence over the control group.

In 1997 the International Agency for Research on Cancer (IARC) reviewed the epidemiological and animal toxicology data on SMF (including synthetic mineral fibre, glass wool, rock-wool, and slag-wool) and classified the group as possible human carcinogens (IARC Group 2B). In October 2001 IARC lowered the classification for glass wool insulation from Group 2B to a Group 3 classification (not classifiable as to the carcinogenicity to humans). However negative results in animal studies with Superwool™ 607™ fibres appear to preclude an association in accordance with Note Q of the National Occupational Health and Safety Commission: NOHSC: 10005 (1999).

12. ECOLOGICAL INFORMATION

These products are inert materials, which remain stable over the time. Silica occurs naturally as quartz, flint, diatomite, agate, chalcedony, chert and tridymite. It is not anticipated to have an adverse effect on the environment.

13. DISPOSAL CONSIDERATIONS

Waste Disposal

Place in sealed, appropriately labeled plastic bags and dispose of in accordance with local authority guidelines. Suitable label: CAUTION: SYNTHETIC MINERAL FIBRE WASTE. Clean area with micro equipped vacuum or wet sweep.

14. TRANSPORT INFORMATION

Not regulated for transport purposes.

UN Number:	None Allocated
DG Class:	None Allocated
Subsidiary risk(s):	None Allocated
Packing Group:	None Allocated
Hazchem Code:	None Allocated
Tertiary risk(s):	None Allocated
EPG:	None Allocated

15. REGULATORY INFORMATION

Poison Schedule

None Available

16. OTHER INFORMATION

As produced, Superwool™ is vitreous (glassy) AES Wool that does not contain silica. Continued exposure to elevated temperatures may cause these materials to form crystalline phases including crystalline silica formation is dependant. The occurrence and extent of crystalline silica formation is dependant on the duration and temperature of exposure, CMS Wool chemistry and/or the presence of fluxing agents. The presence of crystalline silica can be confirmed only through laboratory analysis of the "hot face" fibre. If crystalline silica is present, follow appropriate hygiene standards and national or state regulations.

Respirable fibreglass is classified as possibly carcinogenic to humans (IARC Group 2B).Fibres of a diameter less than 3 microns are classified as respirable, while 3 microns or greater are classified as non respirable. If the fibrous glass can be demonstrated as meeting the conditions of Note Q in the List of Designated Hazardous Substances [NOHSC: 10005(1999)] then the classification as a carcinogen need not apply.

National Standard for Synthetic Mineral Fibres [NOHSC: 1004(1990)]

This code details the exposure standard and the appropriate testing procedures

National Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006(1990)]

This code details the minimum requirements for the safe handling of synthetic mineral fibres. It details provisions for the training, air monitoring, application procedures to reduce fibre release and personal protective equipment when using synthetic mineral fibres within the workplace.

NOTICE:

The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Safety Data Sheet. However safe as provided by law, no warranty or representation, express or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorisation given or implied to practice any patented invention without a licence. In addition, no responsibility can be assumed by the vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product (however, this shall not act to restrict the vendor's potential liability for negligence or under statute).

--- END OF MSDS ---