

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** KAOGRIP

**Other Names:** Ceramic Fibre Blanket refractory adhesive filler

**Recommended Use:** SMF Blanket adhesive

**Manufacturer's Product Code:** 9260

**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

Classified as hazardous according to the criteria of Australian Safety & Compensation Council (ASCC)

Not classified as a dangerous good according to the criteria of the ADG Code

### 2.1 RISK PHRASE

R36/37/38 – Irritating to eyes, respiratory system and skin.

### 2.2 SAFETY PHRASES

S3/9/14 – Keep in a cool place, well-ventilated place and away from acid, alkalis, heat sources and foodstuffs.

S20/21 – when using do not eat, drink or smoke

S24/25 – Avoid contact with skin and eyes

S26 – In case of contact with eye, rinse immediately with plenty of water

S36/37/39 - Wear Suitable protective clothing, gloves and eye/face protection

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Proportion
Silicate binder containing Sodium Metasilicate	1344-09-8	25-30%
Clay		10-30%

## 4. FIRST AID MEASURES

### 4.1 ROUTES OF EXPOSURE

#### Swallowed

Moderate toxicity; Ingestion may result in nausea, vomiting, abdominal pain and diarrhoea. Ingestion is considered unlikely due to product form and application.

**Eyes**

Irritant; Exposure may result in lacrimation, irritation, pain, redness, conjunctivitis and possible corneal burns with prolonged contact.

**Skin**

Prolonged contact may result in irritation, itching, inflammation and possible skin rash.

**Inhalation**

Irritant; Over exposure at high levels may result in irritation of the nose and throat, with coughing. Due to the low vapour pressure of this product an inhalation hazard is not expected. Avoid dust inhalation with dry product.

## 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**

Hold eyelids apart and flush continuously with water. Continue until advised to stop by the Poisons Information Centre, a doctor, or for at least 15 minutes. Keep patient calm.

**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 as for strong corrosive material

## 5. FIRE FIGHTING MEASURES

**Flammability**

Not applicable to aqueous solution

**Hazchem Code**

None allocated

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 EMERGENCY PROCEDURES

**Spillage**

Slippery when spilt. Avoid accidents clean up immediately. Contain using sand and earth. Use absorbent (soil, sand, vermiculite, or inert material). Collect and seal in properly labeled drums for disposal. Wash down areas with excess water before solidification occurs. Hot water is more effective.

**Fire and Explosion**

Non flammable, No fire or explosion hazard exists. Decomposition may produce toxic fumes of:

- Caustic Compounds

- May emit poisonous fumes
- May emit corrosive fumes

**Extinguishing**

Non flammable

**6.2 METHODS AND MATERIAL FOR CONTAINMENT AND CLEAN UP**

Contain using sand and earth. Use absorbent (soil, sand, vermiculite or inert material). Collect and seal in properly labeled drums for disposal. Wash down areas with excess water before solidification occurs. Hot water is more effective. Do not flush spillage to drain and prevent from entering natural watercourses.

## 7. HANDLING AND STORAGE

**7.1 PRECAUTIONS FOR SAFE HANDLING**

Before use carefully read the product label. Use of safe work practices is 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).

**7.2 STORAGE**

Store in cool, dry, well ventilated area, removed from oxidising agents, acids, active metals, direct sunlight, heat sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Large storage areas should be bounded and have appropriate ventilation systems. Do not use aluminium, galvanised or tin-plated containers

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**8.1 NATIONAL EXPOSURE STANDARDS HYGIENE STANDARDS AND EXPOSURE LIMITS**

None listed

**8.2 ENGINEERING CONTROLS**

Review your applications in order to identify potential sources of dust exposure. Where possible use local exhaust ventilation.

**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 splash-proof goggles or safety glasses with side shields.

**Respiratory protection:**

Where an inhalation risk exists, wear a Class P1 (Particulate) Respirator.

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

**8.4 VENTILATION**

Do not inhale dust/vapours. Use in well ventilated areas. In poorly ventilated areas, mechanical explosion proof extraction ventilation is recommended.

### 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 potential risks to health resulting from the exposure to 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.* WATER: Sodium silicate can persist indefinitely. BIOLOGICAL: Moderately toxic to aquatic organisms, TLm (mosquito fish) = 2320 ppm/96 hours (OHMS/TADS).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>APPEARANCE</b>	Beige Paste	<b>BULK DENSITY</b>	
<b>ODOUR</b>	Odorless	<b>MELTING POINT</b>	Not Applicable
<b>pH</b>	Not Available	<b>SOLUBILITY IN WATER</b>	Soluble
<b>VAPOUR PRESSURE</b>	Not Available	<b>SPECIFIC GRAVITY</b>	1.52 - 1.58
<b>VAPOUR DENSITY</b>	Not Available	<b>CHEMICAL FAMILY</b>	Refractory Ceramic Fibre
<b>BOILING POINT</b>	>100°C		
<b>LENGTH WEIGHTED GEOMETRIC MEAN DIAMETER</b>			

## 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. This product is stable under normal conditions; it absorbs carbon dioxide on exposure to air which, results in the deposition of insoluble silica. Incompatibility: Sodium silicate solutions are strongly alkaline and therefore, render it incompatible with aluminium, copper, brass, bronze, zinc and tin.

### 10.2 CONDITIONS & MATERIALS TO AVOID

Keep away from oxidizing agents, acids, active metals, direct sunlight, heat sources and foodstuffs.

### 10.3 HAZARDOUS DECOMPOSITION PRODUCTS AND HAZARDOUS REACTIONS

None

## 11. TOXICOLOGICAL INFORMATION

### 11.1 EPIDEMIOLOGY

Not Available

### 11.2 TOXICOLOGY

The product is a severe irritant to the eyes and skin (Irritant R36/38).

Oral LD50 (rat): 1153 mg/kg.

TLm 96: 100-10 PPM

TLm 96: Median Tolerance Limit - the concentration of toxicant or substance at which 50% of the test organisms survive (over a 96-hour period).

As manufactured the amorphous crystalline silica present is neither fibrotic nor carcinogenic in wet or dried form. Continuous use of the product above 980° C may lead to the formation of disordered cristobalite.

## 12. ECOLOGICAL INFORMATION

Sodium silicate can persist indefinitely. BIOLOGICAL: Moderately toxic to aquatic organisms, TLm (mosquito fish) = 2320 ppm/96 hours (OHMS/TADS).

## 13. DISPOSAL CONSIDERATIONS

### Waste Disposal

SOLUTIONS: Cover with sodium carbonate (soda ash), add to water and neutralize with dilute acid (e.g. 6M HCl or similar). SOLIDS: Collect and dissolve with water. Add sodium carbonate, mix and treat as above. Absorb with soil and dispose of to an approved landfill site. Contact the manufacturer for additional information

## 14. TRANSPORT INFORMATION

This material is a scheduled poison (S5) and must be stored, maintained and secured within the relevant regulations. Keep containers closed at all times. Store away from acids and foodstuffs

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

Although there is no scheduled number, there is a constituent in the product that is classified as S5.

### Regulatory List

Sodium Metasilicate is found on the following regulatory list:

- Australia New Zealand Food Standard Code
- Australia High volume Industrial Chemical List (HVICL)
- Australia Inventory of Chemical Substances (AICS)
- International Council of Chemical associations (ICCA)

## 16. OTHER INFORMATION

### 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)]

# Material Safety Data Sheet

## KAOGRIP

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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 ---