

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: ThermGrip

Recommended Use: High temperature fibre adhesive

Manufacturer's Product Code: 9260

Supplier Name: Morgan 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 Safework Australia
Not classified as a dangerous good according to the criteria of the ADG Code

RISK PHRASE

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

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	Not Available	10-30%
Water	7732-18-5	30-60%

4. FIRST AID MEASURES

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.

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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.

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

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

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Extinguishing

Non flammable

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

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.

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

NATIONAL EXPOSURE STANDARDS HYGIENE STANDARDS AND EXPOSURE LIMITS

None listed

ENGINEERING CONTROLS

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

PERSONAL PROTECTIVE EQUIPMENT

Skin protection:

Disposable coveralls or long sleeve loose fitting clothing and PVC or rubber gloves (launderable 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.

VENTILATION

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

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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.

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

APPEARANCE	Beige Paste	MELTING POINT	Not Applicable
ODOUR	Odourless	SOLUBILITY IN WATER	Soluble
pH	Not Available	SPECIFIC GRAVITY	1.52 - 1.58
VAPOUR PRESSURE	Not Available		
VAPOUR DENSITY	Not Available		
BOILING POINT	>100°C		

10. STABILITY AND REACTIVITY

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.

CONDITIONS & MATERIALS TO AVOID

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

HAZARDOUS DECOMPOSITION PRODUCTS AND HAZARDOUS REACTIONS

None

11. TOXICOLOGICAL INFORMATION

EPIDEMIOLOGY

Not Available

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).

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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

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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).

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