



SAFETY DATA SHEET

(Following Regulations (EC) No 1907/2006 & (EC) No 1272/2008)

SDS Number: 1007 Date of first issue: 13 March 2013 Date of last revision: 21 February 2022

1 - Identification of product

1.1 - Identification of Product

Tradenames: Hardener, Kaowool Hardener, Superwool Hardener,

The above mentioned product is a hardener.

1.2 - Use of Product

This product is used to produce a hard surface finish.

1.3 - Identification of Company

IDENTIFICATION OF THE MANUFACTURER/SUPPLIER

Murugappa Morgan Thermal Ceramics Ltd.,
Plot No: 26 & 27, SIPCOT Industrial complex,
Ranipet, Vellore District, Tamil Nadu, India
Pin: 632403

Murugappa Morgan Thermal Ceramics Ltd.,
Plot No: 681, Motibhoyan Village,
Sanand-Kalol state Highway, Kalol Taluk,
Gandhi Nagar District, Gujarat, India

Website

www.morganthermalceramics.com
sds.tc@morganplc.com

1.4 - Emergency information

EMERGENCY CONTACT NUMBER

Tel 1: +91 (4172) 244 313 extn no. 215 or 201
Language: English

Opening hours: Only available during office hours

2 - Hazard Identification

2.1 - Classification of the substance/ mixture

2.1.1 CLASSIFICATION ACCORDING TO REGULATION (EC) NO 1272/2008

Not classified as hazardous according to Classification, Labelling and Packaging regulations (CLP) 1272/2008 EEC

2.2 - Labelling Elements

Not applicable

2.3 - Other hazards which do not result in classification

Mild mechanical irritation to skin, eyes and upper respiratory system may result from exposure to high dust concentrations of dried product.

These effects are usually temporary.

Pre-existing skin and respiratory conditions including dermatitis, asthma or chronic lung disease might be aggravated by exposure.

3 - Composition / Information On Ingredients

This product is an inorganic liquid hardening agent.

COMPONENT	%	CAS Number	REACH Registration Number	Hazard Classification according to CLP
Water	60-80	7732-18-5	Not yet available	Not classified as hazardous
Colloidal silica	20-40	7631-86-9	01-2119379499-16	Not classified as hazardous

None of the components are radioactive under the terms of European Directive Euratom 96/29.

4 - First-Aid measures

Skin

In case of skin irritation rinse affected areas with water and wash gently. Do not rub or scratch exposed skin.

Eyes

In case of eye contact flush abundantly with water; have eye bath available. Do not rub eyes. Seek medical attention if irritation persists.

Nose and Throat

If these become irritated move to a dust free area, drink water and blow nose. Seek medical attention if irritation persists.

If symptoms persist, seek medical advice.

4.2 - Most Important symptoms and effects, both acute and delayed

No symptoms or effects expected either acute or delayed

4.3 - Indication of any immediate medical attention and special treatment required

No special treatment required, if exposure occurs wash exposed areas to avoid irritation.

5 - Fire-fighting measures

5.1 - Extinguishing media

Use extinguishing agent suitable for surrounding combustible materials.

5.2 - Special hazards arising from the substance or mixture

Non-combustible products,

5.3 - Advice for firefighters

Packaging and surrounding materials may be combustible.

6 - Accidental Release Measures

6.1 - Personal precautions, protective equipment and emergency procedures

Wear suitable goggles, gloves and protective clothing.

6.2 - Environmental precautions

Do not flush spillage to drain and prevent from entering natural watercourses.
For waste disposal refer to section 13

6.3 - Methods and materials for containment and clean up

Contain spillage, absorb in earth or sand and shovel into suitable containers

6.4 - Reference to other sections

For further information, please refer to sections 7 and 8

7 - Handling and storage

7.1 - Precautions for safe handling

Handling of dried product can be a source of dust emission and therefore the processes should be designed to limit the amount of handling. Whenever possible, handling should be carried out under controlled conditions (i.e., using dust exhaust system).
Regular good housekeeping will minimise secondary dust dispersal.

7.2 - Conditions for safe storage

Store in original packaging in a dry area.
Avoid storage below +2°C and above +43°C.
The product has a shelf life of approximately 12 months.
Avoid damaging the packaging.

7.3 - Specific end use

Please refer to your local Morgan Thermal Ceramics' supplier.

8 - Risk Management Measures / Exposures Controls / Personal Protection

8.1 - Control parameters

Industrial hygiene standards and occupational exposure limits vary between countries and local jurisdictions. Check which exposure levels apply to your facility and comply with local regulations. If no regulatory dust or other standards apply, a qualified industrial hygienist can assist with a specific workplace evaluation including recommendations for respiratory protection. Examples of national OELs (November 2014) are given in the table below.

COUNTRY	Total Dust (mg/m3)	Resp Dust (mg/m3)	Source
Austria	10	6	Grenzwerteverordnung
Belgium	10	3	Valeurs limites d'exposition professionnelle – VLEP/ Grenswaarden voor beroepsmatige blootstelling – GWBB
Denmark	10	5	Grænseværdier for stoffer og materialer
Finland	No limit	No limit	Finnish Ministry of Social Affairs and Health
France	10	5	Institut National de Recherche et de Sécurité
Germany*	10	1,25	TRGS 900
Hungary	No limit	No limit	<i>EüM-SZCSM rendelet</i>
Ireland	10	4	HAS – Ireland
Italy	10	3	Uses EU values
Luxembourg	10	6	Agents Chimiques, Cancérigènes Ou Mutagènes Au Travail
Netherlands	10	5	SER
Norway	10	5	Veiledning om administrative normer for forurensning i arbeidsatmosfære
Poland	No limit	No limit	Dziennik Ustaw 2010
Spain	10	3	INSHT
Sweden	10	5	AFS 2005:17
Switzerland	10	6	SUVA - Valeurs limites d'exposition aux postes de travail
UK	10	4	EH40/2005

Information on monitoring procedures

United Kingdom

MDHS 14/4 - "General methods for sampling and gravimetric analysis of respirable, thoracic and inhalable aerosols"

NIOSH

NIOSH 0500 "Particulates not otherwise regulated, total"

NIOSH 0600 "Particulates not otherwise regulated, respirable"

8.2 - Exposure controls

Review your applications in order to identify potential sources of exposure. If necessary, conduct personal air monitoring. Use technical and/or organisational means to comply with regulations.

8.2.2 - Personal Protective Equipment

Skin Protection

Use of gloves and work clothes is recommended.

Eye Protection

Wear safety glasses

Respiratory Protection

Use appropriate respiratory protective equipment (RPE) if necessary.

Information and Training of workers

Workers should be informed on:

- The requirements for the use of protective equipment and clothing.

Workers should be trained on:

- The proper use of protective equipment

8.2.3 - Environmental Exposure Controls

Refer to local, national or European applicable environmental standards for release to air water and soil.

For waste, refer to section13

9 - Physical and chemical properties

Information on basic physical and chemical properties	Not Applicable
State	White Liquid
Colour	Not applicable
Odour	None
Odour threshold	Not Applicable
pH	9.7
Melting point/freezing point	Not determined
Initial boiling point and boiling point range	Not applicable
Flash point	Not applicable
Evaporation rate	Not Applicable
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	Not applicable
Vapour pressure	Not applicable
Vapour density	Not Applicable
Relative density	Not applicable
Solubility(ies)	not soluble in water
Partition co-efficient: n-octanol/water	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not Applicable
Viscosity	Not Applicable
Other safety information	No further relevant information available.
Particle Characteristics	Not applicable
Explosive properties	Not applicable
Oxidising properties	Not applicable

10 - Stability and Reactivity

10.1 - Reactivity

The material is stable and non reactive.

10.2 - Chemical Stability

The product is inorganic, stable and inert

10.3 - Possibility of Hazardous Reactions

None

10.4 - Conditions to Avoid

Please refer to handling and storage advice in Section 7

10.5 - Incompatible Materials

None

10.6 - Hazardous decomposition products

Upon heating above 900°C for sustained periods, this amorphous material begins to transform to mixtures of crystalline phases. For further information please refer to Section 16.

11 - Toxicological information

Toxicokinetics, metabolism and distribution

11.1.1 BASIC TOXICOKINETICS

Exposure is not expected during normal use due to nature of the products, exposure during removal may be possible, predominantly by inhalation or ingestion, available toxicological information is as follows:

11.1.2 HUMAN TOXICOLOGICAL DATA

No human data available

11.1 - Information on hazard classes as defined in Regulation (EC) No 1272/2008

ACUTE TOXICITY

Lethal dose 50 % (LD50) / lethal concentration 50% (LC50): N.A.

CHRONIC TOXICITY

No effects reported

12 - Ecological information

12.1 - Toxicity

These products are inert materials that remain stable overtime.
No adverse effects of this material on the environment are anticipated.

12.2 - Persistence and degradability

Not established

12.3 - Bioaccumulative potential

Not established

12.4 - Mobility in soil

No information available

12.5 - Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

This mixture contains no substance considered to be very persistent and very bioaccumulative (vPvB).

12.6 - Endocrine Disrupting Properties

No additional information available

12.7 - Other adverse effects

13 - Disposal Considerations

13.1 - Disposal Considerations

To prevent waste materials from becoming airborne during waste storage, transportation and disposal, a covered container or plastic bagging is recommended.

For Australia, waste from these materials should be considered as hazardous waste and local waste authorities should be contacted for correct disposal methods.

For other countries, waste from these materials (even after use above 900°C) is not classified as hazardous waste and may generally be disposed of at a normal tipping site which has been licensed for the disposal of industrial waste. Taking into account any possible contamination during use, which may be classified as hazardous, expert guidance should be sought.

Such a waste is normally dusty (unless wetted) and so should be properly bagged and clearly labelled for disposal. At some tip sites dusty waste may be treated differently in order to ensure they are dealt with promptly and to avoid them being windblown. Check for national and /or regional regulations to identify all applicable disposal requirements.

14 - Transport information

14.1 - Transport information

14.1. UN number

Not Applicable

14.2. UN proper shipping name

Not Applicable

14.3. Transport hazard class(es)

Not Applicable

14.4. Packing group

Not Applicable

14.5. Environmental hazards

Not Applicable

14.6. Special precautions for user

Not Applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not Applicable

15 - Regulatory information

15.1 - Regulatory information

This SDS has been prepared in accordance with WHO GHS rev. 6 requirements. Where applicable, local regulations have been followed.

16 - Other Information

16.1 - ADDITIONAL INFORMATION AND PRECAUTIONS TO BE CONSIDERED UPON REMOVAL OF AFTER SERVICE MATERIAL

16.2 - uses advised against

16.3 - NOTE

This Safety Data Sheet was originally produced in English and has subsequently been translated in to other languages; whilst every effort has been made to make this an accurate translation, please be aware that technical terms do not always translate correctly. The English version should always be considered as the reference version.

16.4 - Further Information

FURTHER INFORMATION

Further information can be found on

<http://www.morganthermalceramics.com/>

<http://www.ecfia.eu/>

<http://www.safeworkaustralia.gov.au/sites/swa/about/publications/pages/workplace-exposure-standards-airborne-contaminants>

16.5 - Technical Datasheets

TECHNICAL DATA SHEETS

For more information on individual products please see the technical data sheet section at www.morganthermalceramics.com

16.6 - Revision Summary

Update to section 8.

16.7 - NOTICE

The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet. However, 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 authorization given or implied to practice any patented invention without a license. 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.