

## SAFETY DATA SHEET

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

SDS Number: K1      Date of first issue: 14 July 2016      Date of last revision: 21 February 2022

### 1 - Identification of product

#### 1.1 - Identification of Product

**Tradenames:** Glue K1,

#### 1.2 - Use of Product

- Use Fireclay mortar

#### 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

This glue is an alkaline product. The pH of the product is higher than ceiling restrictions concerning dumping in surface water.

### 3 - Composition / Information On Ingredients

#### 3.2 Mixtures

Glue K1 is made from a base of chamotte & sodium silicate (N°CAS 1344-09-8).  
No materials found in this product are classified as dangerous.

### 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.

#### Nose and Throat

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

- In case of ingestion: Seek medical advice rapidly. Rinse the mouth with copious amounts of water. Do not induce vomiting.

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

- In case of contact with the skin: This product might cause skin rash.
- In case of contact with eyes: This product might irritate the eyes.
- In case of inhaling: Not applicable.
- In case of ingestion: Could cause stomach and digestion problems.

#### 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 allow to enter sewers / surface or ground water.

### 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

- Technical specifications: Not applicable.
- Precautions to be taken: Avoid contact with skin, eyes and clothing.
  - Wash one's hands after use.
  - Do not eat, drink and smoke in work areas.
- Recommendations for use: The product is ready for use. Nothing should be added apart from other products in the Refracol range (hardener, aggregate, etc.).
  - Avoid all contact with highly concentrated acidic products.

### 7.2 - Conditions for safe storage

- Technical means: Does not require any particular technical means.
  - Products in plastic containers must not be stacked.
- Storage conditions: For good conservation, the product should be stored at room temperature.
  - Containers must be kept sealed.
  - Avoid all contact with highly concentrated acidic products.
- Incompatible materials: Not applicable.
- Packaging conditions: The product must be kept in its original packaging.
- Packaging materials: Factory packaging, PP or PE.

### 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

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

### Information on monitoring procedures

### 8.2 - Exposure controls

No engineering controls necessary for this product

#### 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

<b>Information on basic physical and chemical properties</b>	Not applicable
<b>State</b>	Grey paste
<b>Colour</b>	Grey
<b>Odour</b>	None
<b>Odour threshold</b>	Not Applicable
<b>pH</b>	11.0 - 11.5
<b>Melting point/freezing point</b>	> 1650°C
<b>Initial boiling point and boiling point range</b>	Not applicable
<b>Flash point</b>	Not applicable
<b>Evaporation rate</b>	Not Applicable
<b>Flammability (solid, gas)</b>	Not applicable
<b>Upper/lower flammability or explosive limits</b>	Not applicable
<b>Vapour pressure</b>	Not applicable
<b>Vapour density</b>	Not Applicable
<b>Relative density</b>	1.9
<b>Solubility(ies)</b>	Not applicable
<b>Partition co-efficient: n-octanol/water</b>	Not applicable
<b>Auto-ignition temperature</b>	Not applicable
<b>Decomposition temperature</b>	Not Applicable
<b>Viscosity</b>	Not Applicable
<b>Other safety information</b>	No further relevant information available.
<b>Particle Characteristics</b>	Not applicable
<b>Explosive properties</b>	Not applicable
<b>Oxidising properties</b>	Not applicable

## 10 - Stability and Reactivity

### 10.1 - Reactivity

The product is stable

### 10.2 - Chemical Stability

The product is inorganic, stable and inert

### 10.3 - Possibility of Hazardous Reactions

No known hazardous reactions under regular conditions of use. See technical data sheet.

### 10.4 - Conditions to Avoid

Possibility of emission of quartz dust in the case of sand papering or grinding of the product after its solidification.

### 10.5 - Incompatible Materials

Avoid contact with highly concentrated acidic products.

### 10.6 - Hazardous decomposition products

Not Applicable

## 11 - Toxicological information

### Toxicokinetics, metabolism and distribution

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

- High toxicity : Considering available data, classification criteria are not fulfilled.
- Irritation : Could cause skin rashes for people with sensitive skin.  
Product in paste form. Might cause irritation to eyes both through the alkaline nature of the product and mechanical properties.
- Corrosivity: Considering available data, classification criteria are not fulfilled.
- Sensitisation: Considering available data, classification criteria are not fulfilled.
- Mutagenicity: Considering available data, classification criteria are not fulfilled.
- Carcinogenicity: Considering available data, classification criteria are not fulfilled.
- Toxicity for reproduction: Considering available data, classification criteria are not fulfilled.
- Repeated dose toxicity: Considering available data, classification criteria are not fulfilled.

Toxicological data of substances contained in the mixture

Sodium silicate  
Ingestion (rat) DL50 > 3500 mg/kg

## 12 - Ecological information

### 12.1 - Toxicity

When diluted, sodium silicates in the product depolymerize extremely quickly to create molecules that cannot be distinguished from naturally dissolved silica. They react with ions Ca, Mg, Fe, Al and other polyvalent ions to create insoluble compounds that are the same as those that can be found in natural earth. The pH of the product is higher than limits for dumping in surface waters.

Toxicologic data of substances contained in the mixture

Sodium silicate

LC<sub>50</sub> Poisson : 3185mg product/litre (valeur pour le silicate de soude 35%, RM 3.36)

EC<sub>50</sub> Bactérie : > 1000mg product/litre (valeur pour le silicate de soude 35%, RM 3.36)

EC<sub>50</sub> Daphnia : 4857mg product/litre (valeur pour le silicate de soude 35%, RM 3.36)

### 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

## 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

### 16.6 - Revision Summary

Content checked and revision date updated

### 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.