

SAFETY DATA SHEET

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

SDS Number: K12 Date of first issue: 21 April 2015 Date of last revision: 21 February 2022

1 - Identification of product

1.1 - Identification of Product

Tradenames: Colle K12, Glue K12,

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

2.1.2 CLASSIFICATION ACCORDING TO DIRECTIVE 1999/45/EC

Not classified

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 K12 is made from a base of 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. 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.

- 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

Information on basic physical and chemical properties	Not applicable
State	Beige paste
Colour	Beige
Odour	None
Odour threshold	Not Applicable
pH	10 - 11
Melting point/freezing point	Not applicable
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	1.9
Solubility(ies)	Not applicable
Partition co-efficient: n-octanol/water	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not Applicable
Viscosity	Not Applicable
Other safety information	- Pyroscopic strength: 1350°C
Particle Characteristics	Not applicable
Explosive properties	Not applicable
Oxidising properties	Not applicable

10 - Stability and Reactivity

10.1 - Reactivity

The product is stable

10.2 - Chemical Stability

Stable under normal temperature conditions.

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

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 - 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

LC₅₀ Poisson : 3185mg product/litre (valeur pour le silicate de soude 35%, RM 3.36)

EC₅₀ Bactérie : > 1000mg product/litre (valeur pour le silicate de soude 35%, RM 3.36)

EC₅₀ 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.