

SAFETY DATA SHEET

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

SDS Number: 107 Date of first issue: 18 December 2019 Date of last revision: 21 February 2022

1 - Identification of product

1.1 - Identification of Product

Tradenames: Firemaster Marineflex Adhesive,

The above mentioned product is a high temperature adhesive

1.2 - Use of Product

Applications for this product include high temperature adhesive, product should be applied by means of a paint brush or roller

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

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

3 - Composition / Information On Ingredients

This product is a thick, sticky, paste material. Once dried out it may generate dust.

COMPONENT	%	CAS Number	REACH Registration Number	Hazard Classification according to CLP
Kaliwasserglas 28/30	54.5	1312-76-1	Not yet available	Not classified
Mica	27.3	12001-26-2	Not yet available	Not classified

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 is 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.

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

5 - Fire-fighting measures

5.1 - Extinguishing media

Non-combustible products. Fire protection class: 0

Packaging and surrounding materials could be combustible.

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

Where abnormally high dust concentrations occur, provide the workers with appropriate protective equipment as detailed in section 8. Restore the situation to normal as quickly as possible.

6.2 - Environmental precautions

Remove bulk into marked container, Wash excess residue with large amounts of water.

Check for local regulations, which may apply.

6.3 - Methods and materials for containment and clean up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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 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

Keep containers tightly closed. Store in cool, dry conditions. Only use containers permitted for the substance: steel, polyolefines. Do not store together with acids Protect from Frost

7.3 - Specific end use

Please refer to your local Morgan Thermal Ceramics' supplier.

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.

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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

8.2.1 APPROPRIATE ENGINEERING CONTROLS Review your applications in order to identify potential sources of dust exposure. Local exhaust ventilation, which collects dust at source, can be used. For example down draft tables, emission controlling tools and materials handling equipment. Keep the workplace clean. Use a vacuum cleaner. Avoid brushing and compressed air.

If necessary, consult an industrial hygienist to design workplace controls and practices. The use of products specially tailored to your application(s) will help to control dust. Some products can be delivered ready for use to avoid further cutting or machining. Some could be pretreated or packaged to minimise or avoid dust release during handling. Consult your supplier for further details

8.2.2 - Personal Protective Equipment

Skin protection:

Use of gloves and work clothes is recommended.

Soiled clothes should be cleaned before being taken off (e.g. use vacuum cleaning, not compressed air).

Eye protection:

As necessary wear goggles or safety glasses with side shields.

Respiratory protection:

For dust concentrations below the exposure limit value, RPE is not required but FFP2 respirators may be used on a voluntary basis. For short-term operations where excursions are less than ten times the limit value use FFP2 respirators. In case of higher concentrations or where the concentration is not known, please seek advice from your company and/or local Thermal Ceramics' supplier.

INFORMATION AND TRAINING OF WORKERS

Workers should be trained on good working practices and informed on applicable local regulations

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 State Colour Odour Odour threshold рΗ Melting point/freezing point Initial boiling point and boiling point range Flash point **Evaporation rate** Flammability (solid, gas) Upper/lower flammability or explosive limits Vapour pressure Vapour density **Relative density** Solubility(ies) Partition co-efficient: n-octanol/water Auto-ignition temperature **Decomposition temperature** Viscosity Other safety information **Particle Characteristics Explosive properties Oxidising properties** 10 - Stability and Reactivity

Not Applicable Brown (viscous) liquid Not appicable None Not Applicable 1100-1300 kg/m³ Miscible with water Not applicable Not applicable Not Applicable Not Applicable No further relevant information available. Not appicable Not applicable Not applicable

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

Not Applicable

11 - Toxicological information

Toxicokinetics, metabolism and distribution

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.

Prolonged or repeated contact with skin or mucous membranes may cause irritation symptoms including reddening and dermatitis.

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

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

Not classified as dangerous goods under relevant international transport regulations (Australian DG Code, ADR, RID, IATA, and IMDG). Ensure that dust is not windblown during transportation.

UN Number None Allocated DG Class None Allocated Subsidiary risk(s) None Allocated Packing Group None Allocated Hazchem Code None Allocated

Definitions:

ADR Transport by road, council directive 94/55/EC IMDG Regulations relating to transport by sea RID Transport by rail, Council Directive 96/49/EC ICAO/IATA Regulations relating to transport by air ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

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.ecfia.eu/ http://echa.europa.eu/chem_data/authorisation_process/candidate_list_obligations_en.asp

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

New Safety Data Sheet

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.