



Safety Data Sheet

(Information provided in this SDS has been prepared by competent and appropriately qualified and trained persons in accordance with The Morgan Crucible Company plc compliance procedures. It meets the requirements of the following standards and regulations: American National Standard ANSI Z400.1-2004, Australia National Code of Practice NOHSC:2011(2003), European Council Regulation (EC) 1907/2006 Annex II, United Nations Globally Harmonized System for Classification and Labelling of Chemicals Annex 4 (2005), and USA OSHA Hazard Communication Standard.)

Molten Metal Systems

SDS No: E1
PROCOATING

Date of First Issue: 31/01/2005
Date of Last Revision: 05/02/2010

Section 1 – Products and Suppliers

Product Name: Pro-Coating

Application: Refractory product for coating and repair

Suppliers and emergency contact information:

Morgan Molten Metal Systems GmbH	Morganite Crucible Inc	Morganite Crucible (India) Ltd	Morganite Brasil Ltd	Diamond Crucible Co Ltd	Morgan Molten Metal Systems (Suzhou) Co. Ltd.
Noltinastrasse 29	22 North Plains	Works B-11, MIDC	Av do Taboão, 3265	212-C, GIDC	No. 108, Tongsheng Rd Shengpu
D-37297	Ind. Estate, Unit 1	Waluj 431 136	São Bernardo do Campo	Mehsana 384 002	Suzhou Industrial Park
Berkatal	Wallingford	Aurangabad	São Paulo	Gujarat	Suzhou
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SDS enquiry dedicated email address:

SDS@morganplc.com

Section 2 – Hazard Identification

Emergency overview:	not applicable
Chronic health effects:	not applicable
Short-term exposure effects:	not applicable
Physical hazards:	not applicable

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system

The classification is according to the latest editions of the EU-lists, and extended by company and literature data

Section 3 – Hazardous Components

Description: White coloured unshaped product for refractory use

Composition:

Component	Concentration	CAS Registry No.	EINECS No.
aluminium oxide non-fibrous	80-100%	CAS: 1344-28-1	EINECS: 215-691-6
water	2.5-5.0%	CAS: 7732-18-5	EINECS: 215-113-2
Glycerol	1.5-2.5%	CAS: 56-81-5	EINECS: 200-289-5
Monoaluminiumphosphate	5.0-10 %	CAS: 13530-50-2	EINECS: 236-875-2
phosphoric acid	2.5-5.0%	CAS: 7664-38-2	EINECS: 231-633-2

Dangerous components:

Monoaluminiumphosphat	Xi; R 36/38	5.0-10%
phosphoric acid	C; R 34	2.5-5.0%

Additional information Unspecified number defines CAS number
For the wording of the listed risk phrases refer to section 16.

Free SILICA not applicable - contains less than 2.5% free silica

Section 4 – First Aid Measures

Inhalation:

Symptoms of Exposure: Dryness in throat or coughing due to exposure to respirable dust.

First Aid measures: Remove to fresh air, if symptoms persist seek medical attention.

Skin Contact:

Symptoms of Exposure: Drying of the skin after contact with wet material. Mechanical irritation to skin due to exposure to dust.

First Aid measures: Remove contaminated clothing. Wash area of contact thoroughly with water. Seek medical attention.

Eye Contact:

Symptoms of Exposure: Mechanical irritation to eyes due to exposure to wet material or dust.

First Aid measures: Wash eyes immediately with large amounts of water. Do not rub eyes. Seek medical attention.

Ingestion:

Symptoms of Exposure: Possible stomach problems due to ingestion of wet material or dust.

First Aid measures: Seek medical attention.

Section 5 – Fire-fighting Measures

These products are non-flammable.

Suitable extinguishing agents CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Protective equipment: No special measures required.

Section 6 – Accidental Release Measures

Person-related safety precautions:	Not required.
Measures for environmental protection:	No special measures required.
Measures for cleaning/collecting:	Dispose of the material collected according to regulations.
Additional information:	No dangerous substances are released.

Section 7 – Handling and Storage

Handling Information for safe handling:	No special measures required.
Information about fire and explosion protection:	The product is not flammable
Storage Requirements to be met by storerooms and receptacles:	No special requirements.
Information about storage in one common storage facility:	Not required.
Further information about storage conditions:	None.

Section 8 – Exposure Controls and Personal Protection

Exposure limits and guidelines (many jurisdictions have exposure limits and control guidelines for substances not listed elsewhere as hazardous - consult and comply with local regulations where they exist):

Exposure Limit Values:

Industrial hygiene standards and occupational exposure limits vary between countries and local jurisdictions. Check which exposure limits apply to your facility. In the absence of exposure information, or if no regulatory dust or other standards apply, the manufacturer recommends the control of respirable dust exposures to the UK limit for nuisance dusts of 4 mg/m³/8hour time weighted average (TWA) or less.

Exposure Controls:

Review your working practices in order to identify potential sources of dust exposure. If necessary conduct personal air monitoring. Where technically and economically feasible, use engineering controls. These may include local exhaust ventilation & equipment to remove airborne dust or materials.

Personal Protective Equipment:

- Respiratory Protection:** Wear approved respirator when dust or spray concentrations may be above the exposure limit.
- Hand Protection:** Wear protective gloves.
- Eye Protection:** Wear chemical resistant glasses with side shields or other appropriate forms of eye protection.
- Skin Protection:** Wear safety shoes and appropriate work overalls when working with the product.

Section 9 – Physical and Chemical Properties

- Appearance:** White coloured unshaped product
- Odour:** None
- pH:** None
- Boiling Point:** None
- Flash Point:** Non-flammable
- Density Range:** None
- Water Solubility:** Miscible with water

Section 10 – Stability and Reactivity

- Chemical Stability:**
Stable under conditions of normal use.
- Conditions to Avoid:**
Rapid heating of damp material from incomplete or inadequate dry out during commissioning on porous substrate.
- Materials to Avoid:**
Strong oxidizing agents, strong acids, strong bases.

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Hazardous Decomposition Products:

None

Section 11 – Toxicological Information

Inhalation: No known effect.

Skin Contact: No known effect.

Eye Contact: No known effect.

Ingestion: No known effect.

Section 12 – Ecological Information

These products are inert materials, which remain stable over time.

No ecological concerns have been identified or are anticipated.

Section 13 – Disposal Considerations

Check local, regional, state or provincial regulations to identify all applicable disposal requirements.

Contamination during use or chemical additions to the product may alter the disposal requirements.

Section 14 – Transport Information

Not classified as dangerous goods under IMDG (sea), ADR (road), RID (rail), or ICAO/IATA (air) regulations. Consult local, regional, state or provincial regulations.

Section 15 – Regulatory Information

There are no known local, national or international regulations or restrictions that apply to the manufacture, use or disposal of these products. Consult local authorities if additional information is required.

Section 16 – Other Information

For best performance & recommended handling & storage practices refer to the relevant product datasheet, available from the manufacturer.

Reasonable care has been taken in the preparation of information contained in this Safety Data Sheet, and the information is provided in good faith. Morgan Carbon Division assumes no responsibility as to the accuracy of information drawn from the stated sources. No warranty, expressed or implied, is made.