

SAFETY DATA SHEET

Following Regulation 1910.1200

SDS Number: 159 Date of first issue: 28 October 2009 Date of last revision: 21 February 2022

1 - Identification of product

a - Product identifier used on the label

Tradenames: Cerox 700

b - Other means of identification

FIRED REFRACTORY SHAPES

c - Recommended use of the chemical and restrictions on use

High temperature structural ceramics

d - Name, address, and telephone number

Morgan Advanced Materials P. O. Box 923; Dept. 300 Augusta, GA 30903-0923 Telephone: 706-796-4200

e - Emergency Phone Number

For Product Stewardship and Emergency Information:

Hotline - 1-800-722-5681 Fax - 706-560-4054

For additional SDSs and to confirm this is the most current SDS for the product, visit our web page www.morganthermalceramics.com or send a request to MT.NorthAmerica@morganplc.com

2 - Hazard Identification

a - Classification of the chemical in accordance with paragraph (d) of §1910.1200

Not classified. Read the entire safety data sheet.

b - Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200

None.

Emergency Overview

These products are classified as articles by OSHA (Standard 1910.1200). No health effects are anticipated from the use of these products.

- c Describe any hazards not otherwise classified that have been identified during the classification process
- d Mixture Rule

Not applicable.

3 - Composition / Information On Ingredients

a - Composition table

COMPONENTS	CAS NUMBER	% BY WEIGHT
Aluminum Oxide	1344-28-1	60 - 65
Kaolin-Aluminum	1332-58-7	5 - 10
Silicate	1302-93-8	25 - 35
Mullite		

b - Common Name

(See Section 8 "Exposure Controls / Personal Protection" for exposure guidelines)

d - Impurities and Stabilizing Additives

Not applicable.

4 - First-Aid measures

a - Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion

Eyes

Flush with large amounts of water for at least 15 minutes. Do not rub eyes.

Skin

Wash affected area gently with soap and water. Skin cream or lotion after washing may be helpful.

Respiratory Tract

Remove affected person to dust free location. See Section 8 for additional measures to reduce or eliminate exposure.

Gastrointestinal

Unlikely route of exposure.

c - Indication of immediate medical attention and special treatment needed, if necessary

5 - Fire-fighting measures

a - Suitable (and unsuitable) extinguishing media and

Use extinguishing media suitable for type of surrounding fire

c - Special Protective Equipment and Precautions for Firefighters

Flammability: 0 Health: 0 Reactivity: 0 Special: 0

b - Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

None

6 - Accidental Release Measures

a - Personal precautions, protective equipment, and emergency procedures

Avoid creating airborne dust. Follow routine housekeeping procedures. If sweeping is necessary, use a dust suppressant and place material in closed containers. Do not use compressed air for clean-up. Personnel should wear gloves, goggles and approved respirator.

b - Methods and materials for containment and cleaning up

Pick up large pieces and dispose in a closed container. Follow precaution stated in above section for clean up.

7 - Handling and storage

a - Precautions for safe handling

Limit use of power tools unless in conjunction with local exhaust. Use hand tools whenever possible. Do not use compressed air for clean-up.

b - Conditions for safe storage, including any incompatibilities

This product is stable under all conditions of storage. Store in original factory container in a dry area. Keep container closed when not in use. Do not reuse the container.

c - empty containers

Product packaging may contain residue. Do not reuse.

8 - Risk Management Measures / Exposures Controls / Personal Protection

a - OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available

EXPOSURE GUIDELINES				
MAJOR COMPONENT	OSHA PEL	ACGIH TLV	MANUFACTURER'S REG	
Aluminum Oxide	15 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)	Not Established	NONE	
Kaolin	15 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)	5 mg/m ³	NONE	

OTHER OCCUPATIONAL EXPOSURE LEVELS (OEL)

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.

b - Appropriate Engineering Controls

Generally not required during product application. Use appropriate control to the surrounding environment. .

c - Individual protection measures, such as personal protective equipment

PPE - Skin

Wear full body clothing, gloves, hat and eye protection.

PPE - Eye

Goggles/safety glasses with sideshields should be worn.

PPE - Respiratory

When it is not possible or feasible to reduce airborne particulate, dust or vapor/mist levels below the PEL or REG through engineering controls, or until they are installed, employees are encouraged to use good work practices together with respiratory protection. Use NIOSH/MSHA approved particulate respirators, in compliance with OSHA Respiratory Protection Standard 29 CFR 1910.134 and 29 CFR 1926.103.

9 - Physical and chemical properties

a - Appearance Pressed molded shapes

b -Odor Not applicable c - Odor Threshold Not applicable

Not applicable e- pH d - Melting Point Up to 3100°F f- Initial Boiling Point/Range Not applicable g- Flashpoint Not applicable

Not applicable h - Evaporation Rate i - Flammability Not applicable j - Upper/Lower Flammability or Explosive Limits Not applicable

k - VAPOR PRESSURE Not applicable I - VAPOR DENSITY Not applicable m - Solubility Not soluble in water

n - Relative Density 2.5 - 3.0 o - Partition Coefficient: n-Octanol/water Not applicable Not applicable p - Auto-ignition temperature q - Decomposition Temperature Not applicable r - Viscosity Not applicable

10 - Stability and Reactivity

a - Reactivity

None.

b - Chemical Stability

Stable under conditions of normal use.

c - Possibility of Hazardous Reaction

d - Conditions to Avoid

e - Incompatible Materials

None

f - Hazardous decomposition products

None

11 - Toxicological information

- a TOXICOKINETICS, METABOLISM AND DISTRIBUTION
- b Acute Toxicity
- c Epidemiology
- d Toxicology

Aluminum Oxide

Low health risk by inhalation, generally considered to be biologically inert. Inhalation in high concentration may cause transient respiratory irritation.

Oral LD50 Rat: >5000 mg/kg.

Kaolin

Inhalation of excessive quantities of Kaolin dust may irritate the respiratory tract. Prolonged exposure to respirable Kaolin dust could adversely affect respiratory functions, including fibrogenic

International Agency for Research on Cancer and National Toxicology Program

Not applicable

12 - Ecological information

These products are not reported to have any ecotoxicity effects.

c - Bioaccumulative potential

No information for the product.

d - Mobility in soil

No information for the product.

e - Other adverse effects (such as hazardous to the ozone laver

No adverse effects of this material on the environment are anticipated.

13 - Disposal Considerations

Waste Management and Disposal

Comply with federal, state and local regulations.

Method of disposal: Landfill. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate, or otherwise inappropriate.

Additional information

This product, as manufactured, is not classified as a listed or characteristic hazardous waste according to U. S. Federal regulations (40 CFR 261). Any processing, use, alteration or chemical additions to the product, as purchased, may alter the disposal requirements. Under U. S. Federal regulations, it is the waste generator's responsibility to properly characterize a waste material, to determine if it is a "hazardous" waste. Check local, regional, state or provincial regulations to identify all applicable disposal requirements.

14 - Transport information

a - UN number.

Hazard Class: Not Regulated United Nations (UN) Number: Not Applicable Labels: Not Applicable North America (NA) Number: Not Applicable Placards: Not Applicable Bill of Lading: Product Name

b - UN proper shipping name

Not applicable.

c - Transport hazard class(es)

Not applicable.

d - Packing group, if applicable

Not applicable

e - Environmental hazards (e.g., Marine pollutant (Yes/No))

f - Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

Not regulated.

g - Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises

Not applicable.

International

INTERNATIONAL

Canadian TDG Hazard Class & PIN: Not regulated

Not classified as dangerous goods under ADR (road), RID (train), IATA (air) or IMDG (ship).

15 - Regulatory information

15.1 - United States Regulations

UNITED STATES REGULATIONS

SARA Title III: This product does not contain any substances reportable under Sections 302, 304, 313

(40 CFR 372). Sections 311 and 312 apply.
OSHA: Comply with Hazard Communication Standards 29 CFR 1910.1200 and 29 CFR 1926.59 and Respiratory Protection Standards 29 CFR 1910.134 and 29 CFR 1926.103. Components of this product are considered to be hazardous as defined by the OSHA Hazard Communication Standard. TSCA: All substances contained in this product are listed in the TSCA Chemical Inventory [Section 8(b)].

15.2 - International Regulations

N/A

16 - Other Information

initial statement

Devitrification

Product Stewardship Program

Morgan Thermal Ceramics www.morganthermalceramics.com

HMIS HAZARD RATING

HMIS Acute Health: 0

HMIS Flammable: 0

HMIS Reactivity: 0

HMIS Personal Protective: To be supplied by user depending upon use

NFPA Unusual Hazards: None

TECHNICAL DATA SHEETS

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Revision Summary

In May 2015 this SDS has been updated to GHS format in comformance with US OSHA HCS 2012 (29CFR 1910.1200) and Canada Hazardous Products Act and the Hazardous Products Regulations.

MSDS prepared by

SDS Prepared By: MORGAN THERMAL CERAMICS ENVIRONMENTAL, HEALTH & SAFETY DEPARTMENT

The information presented herein is presented in good faith and believed to be accurate as of the effective date of this Safety Data Sheet. Employers may use this SDS to supplement other information gathered by them in their efforts to assure the health and safety of their employees and the proper use of the product. This summary of the relevant data reflects professional judgment; employers should note that information perceived to be less relevant has not been included in this SDS. Therefore, given the summary nature of this document, Morgan Thermal Ceramics does not extend any warranty (expressed or implied), assume any responsibility, or make any representation regarding the completeness of this information or its suitability for the purposes envisioned by the user.