**SAFETY DATA SHEET**

Following Regulation 1910.1200

SDS Number: DF303 Date of first issue: 02 August 1999 Date of last revision: 21 February 2022

## 1 - Identification of product

**a - Product identifier used on the label**

**Tradenames:** Cerox Baffle Cement

**b - Other means of identification**

ALUMINA BAFFLE CEMENT

**c - Recommended use of the chemical and restrictions on use**

High Temperature Baffle Cement

**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**

Under OSHA HCS 2012, this product is classified as Category 2 skin & eyes irritant.

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

**Hazard Pictograms**

**Hazard Statements**

Causes mild skin irritation

Causes eye irritation

May cause respiratory irritation

May cause temporary irritation to exposed eyes, skin or respiratory tract.

**Precaution Statements**

Do not handle until all safety instructions have been read and understood.

Wear protective gloves, protective clothing, eye protection, and face protection.

If concerned about exposure, get medical advice

Dispose of waste in accordance with local, state and federal regulations.

**Emergency Overview**

No known health effects are associated with this product. However, exposure to fume or dust generated from high temperature burning can cause physical irritations.

**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 | 75-80 |
| Dialuminium Chloride Pentahydroxide | 12042-91-0 | 20-25 |

**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 clean fresh air. Drink water to clear throat, and blow nose to remove dust.

**Gastrointestinal**

Do not induce vomiting; drink plenty of water.

**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**

**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**

Use routine housekeeping procedures. Avoid clean-up procedures that could result in water pollution.

**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**

Do not get in eyes, on skin, or on clothing. Avoid breathing aerosol mist. Wash thoroughly after handling.

**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)<br>5 mg/m$^3$(respirable dust) | None Established | NONE |
| *OTHER OCCUPATIONAL EXPOSURE LEVELS (OEL)*<br>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**

Use in well ventilated area when product is subject to heat.

**c - Individual protection measures, such as personal protective equipment**

**PPE - Skin**

Wear rubber gloves and apron to prevent direct contact with skin.

**PPE - Eye**

Goggles/safety glasses with sideshields should be worn.

**PPE – Respiratory**

Over exposure to any of the chemicals listed in Section 2 is not anticipated. Consult an industrial hygienist for exposure assessment due to abnormal use of this product. If respirators are selected, use NIOSH certified respirators, in compliance with OSHA Respiratory Protection Standard 29 CFR 1910.134 and 29 CFR 1926.103, for the particular hazard or airborne concentrations to be encountered in the work environment.

## 9 - Physical and chemical properties

| | |
|---|---|
| **a - Appearance** | Bright white powder/coating |
| **b -Odor** | Not applicable |
| **c - Odor Threshold** | Not applicable |
| **e- pH** | 3.5 - 4.0 |
| **d - Melting Point** | 2900°F |
| **f- Initial Boiling Point/Range** | Not applicable |
| **g- Flashpoint** | Not applicable |
| **h - Evaporation Rate** | Not applicable |
| **i - Flammability** | Not applicable |
| **j - Upper/Lower Flammability or Explosive Limits** | Not applicable |
| **k - VAPOR PRESSURE** | Not applicable |
| **l - VAPOR DENSITY** | Not applicable |
| **m - Solubility** | Not determined |
| **n - Relative Density** | Not applicable |
| **o - Partition Coefficient: n-Octanol/water** | Not applicable |
| **p - Auto-ignition temperature** | Not applicable |
| **q - Decomposition Temperature** | Not applicable |
| **r - Viscosity** | Not applicable |

## 10 - Stability and Reactivity

**a - Reactivity**

Stable under conditions of normal use.

**b - Chemical Stability**

This is a stable material.

**c - Possibility of Hazardous Reaction**

Will not occur.

**d - Conditions to Avoid**

Powerful oxidizers; fluorine, manganese trioxide, oxygen disulfide

**e - Incompatible Materials**

Powerful oxidizers; fluorine, manganese trioxide, oxygen disulfide

**f - Hazardous decomposition products**

Trace of hydrochloric acid may be released from heating of this product.

## 11 - Toxicological information

**a - TOXICOKINETICS, METABOLISM AND DISTRIBUTION**

**b - Acute Toxicity**

**c - Epidemiology**

**d - Toxicology**

If used properly, no exposure of chemicals from this product is anticipated. However, if the product is heated in an unventilated area, exposure to off gas (hydrogen chloride) fume could cause irritation to skin, eyes, and respiratory track.

- Hydrogen Chloride
In humans, exposure to high concentrations of hydrogen chloride causes necrosis of tracheal and bronchial epithelium, pulmonary edema, atelectasis, emphysema, damage to the pulmonary blood vessels, and damage to the liver and other organs. Hydrogen chloride can also cause pulmonary sensitization.
• LC 50 in rats: 4141 ppm for 1 hour.
• LD 50 in rabbits: 900 mg/kg.

Aluminum metal dust has been shown to present a minimal health hazard, according to results from the McIntyre Foundation's 27-year study of aluminum oxide dust (Patty's Industrial Hygiene and Toxicology, 3rd rev. ed.)

No deleterious lung or systemic effects were observed as a result of exposure to aluminum metal dust having a particle size of 1.2 um at calculated concentrations equivalent to 2 mg/m over an 8-hour work shift. Even much higher concentrations (not further specified) over 10 or 20 minute periods produced no adverse effects (ACGIH).
NIOSH did not conduct an in-depth review of the health evidence for this substance.

**International Agency for Research on Cancer and National Toxicology Program**

## 12 - Ecological information

**c - Bioaccumulative potential**

**d - Mobility in soil**

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

## 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))**

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 CFR372). Sections 311 and 312 apply. There is no specific chemical need to be addressed here.
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: 1*
HMIS Flammable: 0
HMIS Reactivity: 0
HMIS Personal Protective: To be determined by user
NFPA Unusual Hazards: None
*See Section 3 of the MSDS for possible chronic health effects.

**TECHNICAL DATA SHEETS**

Left Blank Intentionally (pending datasheet number)

**Revision Summary**

Update to section 1

**MSDS prepared by**

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

**Disclaimer**

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.