

SAFETY DATA SHEET

Alumina Silicate Castable

Date of Preparation: 06/05/2014

SDS #: 004-05109-00MSDS

SECTION 1: IDENTIFICATION

Product Identification: Alumina Silicate Castable

CAS Number: Not Applicable

Chemical Formula: Gamma Aluminum Oxide

Volumes: Not Available

Other Designations: Not Available

Recommended Use: For laboratory use only.

Restrictions: For laboratory use only.

Supplier Information:

Micromeritics Instrument Corp.

4356 Communications Drive

Norcross, GA 30093-2901 USA

Contact: Human Resources

Phone: (770) 662-3636

Fax: (770) 662-3696

Manufacturer: Norton Chemical Process Products Corp. PO Box 350, Akron, OH 44309
(216) 673-5860, (800) 424-9300

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification: Not Applicable

Signal word: Not Applicable

Hazard Statement:

H305: May be harmful if swallowed and enters airways

H316: Causes mild skin irritation

Pictograms:



Precautionary Statements:

P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray

P280 - Wear eye protection/ face protection

P285 - In case of inadequate ventilation wear respiratory protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

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P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

Potential Health Effects

Target Organs:

Acute Effects

Inhalation: If dust is created there is the possibility of breathing in irritant powders. Prolonged (years) exposure to silica can lead to silicosis. Silica may also be carcinogen. Respiratory passage may feel dry.

Eye: Dust may cause irritation.

Skin: Dust may cause a feeling of dryness. Roughness may cause minor abrasion.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name	CAS Number	% wt
Aluminum Oxide (alumina)	1344-28-1	99.7-99.9
Silicon Dioxide (silica)	14808-60-7	0.1-0.2
Ferric Oxide (iron oxide)	1309-37-1	0.1

Trace Impurities:

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
	TWA	STEL	TWA	STEL	TWA	STEL	IDLH
Aluminum Oxide	10 mg/m ³	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Silicon Dioxide	0.1 mg/m ³	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Ferric Oxide	10 mg/m ³	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.

SECTION 4: FIRST-AID MEASURES

Inhalation: For acute exposure remove victim to fresh air. Call for medical assistance.

Eye Contact: Irrigate eyes with clean water for at least 15 minutes. If irritation continues, get medical assistance.

Skin Contact: Wash affected areas with clean water.

Ingestion: N/A

After first aid, get appropriate in-plant, paramedic, or community medical support.

Note to Physicians:

Special Precautions/Procedures:

SECTION 5: FIRE-FIGHTING MEASURES

Flammability Classification: Not Applicable

Extinguishing Media: Not Applicable

Unusual Fire or Explosion Hazards: Not Applicable

Hazardous Combustion Products: Not Applicable

Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Spill /Leak Procedures:

Small Spills: Landfill in accordance with local, state and federal regulations. Be guided by presence of chemicals to which these articles may have been exposed in user's process.

Large Spills

Containment: Do not release into sewers or waterways.

Cleanup: Minimize dust, sweep, shovel or vacuum. Watch footing if particles fall onto walkways.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

SECTION 7: HANDLING AND STORAGE

Handling Precautions: Minimize dust, sweep, shovel or vacuum. Watch footing if particles fall onto walkways.

Storage Requirements: Avoid rough handling.

Regulatory Requirements: Not available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls:

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per

OSHA eye and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Flash Point: Not Applicable

Flash Point Method: Not Applicable

Burning Rate: Not Applicable

Autoignition Temperature: Not Applicable

LEL: Not Applicable

UEL: Not Applicable

Physical State: Not Applicable

Appearance and Odor: White shapes - odorless.

Odor Threshold: Not Applicable

Vapor Pressure: Not Applicable

Vapor Density (Air=1): Not Applicable

Formula Weight: Not Applicable

Density: Not Applicable

Specific Gravity (H₂O=1, at 4 °C): 1.0 - 1.2

pH: Not Applicable

Water Solubility: Insoluble

Other Solubilities: Not Applicable

Boiling Point: Not Applicable

Freezing/Melting Point: Not Applicable

Viscosity: Not Applicable

Refractive Index: Not Applicable

Surface Tension: Not Applicable

% Volatile: Not Applicable

Evaporation Rate: Not Applicable

SECTION 10: STABILITY AND REACTIVITY

Stability: Alumina Silicate Castable is stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization cannot occur.

Chemical Incompatibilities: None

Conditions to Avoid: Place in dry, clean area. Do not over stack cartons.

SECTION 11: TOXICOLOGICAL INFORMATION

Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

Disposal Regulatory Requirements: As sold these articles are inert and non-hazardous. If customer's processing introduces hazardous (toxic) materials to the articles be guided by their nature. Minimize dust when handling these articles.

Container Cleaning and Disposal: Not listed.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not Applicable

Environmental Fate: Not Applicable

Environmental Degradation: Not Applicable

Soil Absorption/Mobility: Not Applicable

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal: The dust from this material is not considered a hazardous waste as defined by 40 CFR 261. However, used product may be contaminated with other hazardous substances from the particular application (for example, metals). Therefore, appropriate waste analysis may be necessary to determine proper disposal. A qualified environmental professional in accordance with applicable federal, state, and local regulations should determine waste characterization and disposal/treatment methods.

Disposal Regulatory Requirements: Not Applicable

Container Cleaning and Disposal: Not Applicable

SECTION 14: TRANSPORT INFORMATION

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Not regulated

Shipping Symbols: Not Applicable

Hazard Class: Not regulated

ID No.: Not regulated

Packing Group: Not Applicable

Label: Not Applicable

Special Provisions (172.102):

Not Applicable

Packaging Authorizations

a) **Exceptions:** Not Applicable

b) **Non-bulk Packaging:** Not Applicable

c) **Bulk Packaging:** Not Applicable

Quantity Limitations

- a) **Passenger, Aircraft, or Railcar:** Not Applicable
- b) **Cargo Aircraft Only:** Not Applicable

Vessel Stowage Requirements

- a) **Vessel Stowage:** Not Applicable
- b) **Other:** Not Applicable

Canadian TDG Hazard Class & PIN – Not regulated

SECTION 15: REGULATORY INFORMATION

EPA Regulations:

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)

RCRA Hazardous Waste Classification (40 CFR 261.): Not classified

SARA Toxic Chemical (40 CFR 372.65): Not listed

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed, Threshold Planning Quantity (TPQ)

OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

OSHA Specifically Regulated Substance (29CFR 1910.)

SECTION 16: OTHER INFORMATION

Prepared By: Zuniga, A.

Revision Notes: Not Applicable

Additional Hazard Rating Systems: Not Applicable

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