

CMS Industries, Inc.



MATERIAL SAFETY DATA SHEET

TRADE NAME: ~~FLUE TITE~~ HEAT STOP

SECTION I: MANUFACTURER'S DATA

Manufacturer: CMS INDUSTRIES, INC.
4524 Route 104
Williamson, NY 14589

Telephone: (315) 589-4131
Emergency Telephone: (315) 589-4141

Description: Air setting high heat duty refractory cement

SECTION II: INGREDIENTS

Al ₂ O ₃	9.8
SiO ₂	84.6
TiO ₂	0.6
Fe ₂ O ₃	0.8
MgO	0.1
CaO	2.0
K ₂ O	2.0

SECTION III: PHYSICAL DATA

Melting point, F	+2800°F
Solubility in water, g/1000cu cm	Insoluble
Specific gravity	1.60
Percentage volatile (by weight)	52.9
Appearance	Gray

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

Flash point	None
Extinguishing media	n/a

SECTION V: HEALTH HAZARD DATA

See attached information from *Working Manual for Occupational Safety and Health in the Refractories Industry*, by the Refractories Institute, Pittsburgh, PA (copyright 1979).

SECTION VI: REACTIVITY DATA

See attached	
Stability	Stable
Conditions to avoid	None known

SECTION VII: SPILL OR LEAK PROCEDURES

Refer to technical information further on in this leaflet.

SECTION VIII: SPECIAL PROTECTION INFORMATION

Respirator Protector

Use OSHA approved respirator when cleaning used mortar prior to application of FLUE TITE as a mortar patch.

Ventilation

Use in ventilated area

Protective Gloves

Use rubber gloves

Eye Protection

Use OSHA approved safety glasses

SECTION IX: SPECIAL PRECAUTIONS

For handling and storing keep in dry area. Keep from freezing. Date issued: October 28, 1985.

HIGH-ALUMINA RAW MATERIALS Al₂O₃

Related Designations

Bauxite, calcined alumina, tabular alumina, fused alumina, burley, diaspor, calcined bauxitic kaolin, kyanite.

Characteristics

Bauxites consist of gibbsite (Al(OH)₃) with varying amounts of kaolinite and impurities. Calcined bauxite consists mainly of corundum or alumina (Al₂O₃) and mullite (3Al₂O₃•2SiO₂).

General Use in the Refractories Industry

Major raw material in high-alumina refractories. Used in bulk or bagged form.

Personal Protective Equipment

Use protective eyeglasses to prevent eye injuries. No specific recommendations have been made by NIOSH/OSHA.

Respiratory Protective Equipment

Where exposure to silica exists, NIOSH/OSHA recommendations for respirator usage should be followed.

First Aid

Eyes: Irrigate immediately
Breathing: Fresh air

Medical Surveillance

Target organs are the respiratory system, particularly the lungs.

Nature of Potential Exposure

Considerable concentrations of respirable dust can be generated during crushing, grinding, screening, and mixing. Bag breaking often generates dust.

Regulation of Exposure

Permissible exposure level of 5 mg/m³ for respirable dust and 15 mg/m³ for total dust. Some state OSHA programs use 10 mg/m³ as the standard for exposure to total nuisance dust. The presence of free silica may lower the permissible exposure level.

PRECAUTIONS FOR USE

- Avoid inhalation of dust.
- Provide good housekeeping and ventilation.
- Use respirators where respirable dust levels are high
- Provide medical surveillance of the respiratory system using chest X-ray and pulmonary function tests.

Potential Health Effects

Benign or inert pneumoconioses may result from exposure to nuisance dusts. This condition is generally asymptomatic and non-disabling.

Response to Spills

Spills of alumina materials lead to generation of respirable dust. Spills should be cleaned up and not allowed to accumulate.

SODIUM SILICATE

Related Designations

Various forms from Na₂O•3.75 SiO₂ to 2Na₂O•SiO₂; also sodium aluminosilicate, sodium silica fluoride.

Characteristics

White powders or thick liquids. Hazard - our Incompatibilities are not apparent.

General Use in the Refractories Industry

Additive for binding refractory products.

Nature of Potential Exposure

Considerable amounts of respirable dust can be generated during bag breaking and mixing. Liquid silicates may be ingested.

Regulation of Exposure

Silicates with more than 1% SiO₂ are regulated under the crystalline silica standard. Otherwise, solid sodium silicate may be considered a nuisance dust.

PRECAUTIONS FOR USE

- Avoid inhalation of dust.
- Provide protective eyeglasses.
- Provide good housekeeping ventilation.

Potential Health Effects

Prolonged inhalation of dust may lead to pulmonary fibrosis. High levels of free silica may be a hazard.

Response to Spills

Spills of solid silicates lead to generation of respirable dust. Spills should be cleaned up and not allowed to accumulate.

Personal Protective Equipment

Protective eyeglasses should be worn to prevent eye injuries. No recommendations have been made by NIOSH/OSHA.