

Hanson Slag Cement

MSDS Material Safety Data Sheet

OSHA 29 CFR 1910.1200

Product Names: CAMCEM™ – Ground Granulated Blast-Furnace Slag (GGBFS)
Granulated Blast-Furnace Slag (GBFS)

Section I – Identification

Manufacturer Name and Address: Hanson Slag Cement
575 Cargo Road
Cape Canaveral, FL 32920

Emergency Telephone: Chemtrec (800)424-9300
Informational Telephone: (321)783-0373
Date Prepared: July 21, 2004

Section II – Components

Component	%	CAS #	OSHA PEL TWA	ACGIH TLV TUL
Ground granulated blast-furnace slag	100	65996-69-2	15mg/m3 (total dust) 5mg/m3 (respirable dust)	10 mg/m3 (total dust) 3 mg/m3 (respirable dust)
Amorphous Silica	30-50	7631086-9	80mg/m3/%SiO2	10 mg/m3
Crystalline Silica	0-15	14808-60-7	30mg/m3/(%SiO2 +2)	0.05 mg/m3

Major ingredient is a glassy calcium silicate. Blast furnace slag is a coproduct of the iron making industry produced by adding limestone flux to iron ore to remove non-ferrous contaminants. As such, it may contain small quantities of hazardous heavy metals usually in a solution in glassy silicates.

Section III- Hazards Identification

Emergency Overview

GGBFS is a light grey/ off white or tan powder that poses little immediate hazard. GBFS is sand-sized particles. A single short-term exposure to these materials are not likely to cause serious harm. However, exposure of sufficient duration to wet materials can cause serious, potentially irreversible tissue (skin or eye) destruction in the form of chemical (caustic) burns including third degree burns. The same type of tissue destruction can occur if wet or moist areas of the body are exposed for sufficient duration to dry GGBFS.

Potential Health Effects

Inhalation: Breathing dust may cause nose, throat or lung irritation and choking. The described effect depends on the degree of exposure. Prolonged or repeated exposure may cause lung injury including



silicosis. This product may contain crystalline silica. Crystalline silica has been classified by IARC as a known human carcinogen. Some human studies indicate potential for lung cancer from crystalline silica exposure. Risk of injury depends on duration level of exposure

Eye contact (acute/chronic): May cause eye irritation burns and damage to cornea

Skin contact: May cause dry skin, redness, discomfort, irritation. Thickening of the skin (scleroderma) may be associated with exposure to high levels of crystalline silica

Ingestion: Ingestion of large amounts may cause intestinal distress. GBFS or GGBFS should not be eaten

Carcinogenic potential: NTP, OSHA or IARC has not listed GBFS or GGBFS as a carcinogen. It may contain trace amounts of substances listed as carcinogens

Section IV – First Aid Measures

Inhalation: Move person to fresh air. Seek medical attention for discomfort

Eye contact: Rinse thoroughly with water. Continue flushing for at least 15 minutes including under lids to remove particles. Seek medical attention.

Skin contact: Wash with soap and water

Section V – Fire and Explosive Data

Flashpoint	None
Lower Explosive Limit	None
Upper Explosive Limit	None
Auto Ignition Temperature	Not Combustible
Extinguishing Media	Not Combustible
Firefighting Procedures	Treat adjacent material
Hazardous Combustion Products	none

Section VI – Accidental Release Measures

General: Collect dry material using a scoop. If wet, allow material to dry before disposal. Avoid inhalation of dust and contact with skin. Wear appropriate personal protective equipment as described in Section 8. Dispose of waste material according to local, state and federal regulations.

Section VII – Handling and Storage

General: Avoid accidental release. Dispose of empty containers according to local, state and federal regulations.

Section VIII – Exposure Control and Personal Protection

Respiratory Protection: Use local or general ventilation to control exposures below applicable exposure limits. Use NIOSH/MSHA-approved under 42 CFR 84 in workplaces with poor ventilation and dusty conditions

Eye Protection: Wear glasses or safety goggles to prevent contact with eyes. Wearing contact lenses when using this product under dusty conditions is not recommended

Skin protection: Wear impervious gloves, shoes and protective clothing to prevent skin contact. GBFS particles may have sharp edges associated with them.

Section IX – Physical and Chemical properties

Vapor Pressure:	Not measurable
Vapor Density:	Not applicable
Specific Gravity:	2.7-3.0
Solubility in water:	Negligible
Evaporation rate:	Not measurable
Boiling point:	> 1000 degree C
pH in water:	10.5 to 12.7

Section X – Stability and Reactivity

Product is stable

Hazardous decomposition: None

Conditions to avoid: Dissolves in hydrofluoric acid producing silicon tetrafluoride. In general wet GBFS or GGBFS is alkaline and in general is incompatible with acids.

Section XIII – Disposal

Dispose in landfill in accordance with all applicable regulations

Section XIV – Transportation

Not a hazardous material under U.S. Department of Transportation regulations

Section V – Other Regulatory Information

OSHA Hazard Communication Rule, 29 CFR 1910.1200: Some constituents identified in this product are considered by OSHA to be hazardous and should be included in the employer's hazard communication program.

CERCLA/superfund, 40 CFR 117 and section 302: not list

CERCLA/ superfund, section 311 & 312: GBFS or GGBFS qualifies as a "hazardous substance" with delayed health effects

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