

MATERIAL SAFETY DATA SHEET

TRADE NAME: Blast Furnace Slag

SYNONYMS: Air Cooled, ACBF, BF Slag

I. PRODUCT AND COMPONENT DATA

Component(s):	CAS Registry	% (Approx.)	ACGIH TLV-TWA
Blast Furnace Slag	65996-69-2	100	None Known

Composition of BF Slag Normal Range

SiO₂: 32 - 42%
Al₂O₃: 7 - 11%
CaO: 35 - 45%
MgO: 7 - 15%
FeO: 0.1 - 0.7%
S: 1.0 - 2.5%

These constituents usually exist as an isomorphous mixture with the following general formula: $Ca_2(MgFeAl)(SiAl)_2O_7$

This formula represents the melilite mineral series.

Some of the constituents may also occur as separate compounds such as those listed below:
 $CaCO_3$, CaS , Fe , Fe_2O_3 , $CaSO_4 \cdot 2H_2O$

II. PHYSICAL DATA

SOLUBILITY: CaS , $CaCO_3$ FLASH POINT: None

STABILITY: Stable FLAMMABLE LIMITS: None

SPECIFIC GRAVITY: 2.3-2.4 Air Cooled

APPEARANCE & ODOR: Grayish, vesicular, stony material, may have slight sulfurous odor when exposed to heat greater than 200 degrees F.

III. PERSONAL PROTECTION AND CONTROLS

RESPIRATORY: If airborne concentrations exceed recommended exposure limits, a suitable NIOSH/MSHA approved filter respirator should be worn. General ventilation or local exhaust is normally adequate to control dust emissions, if not engineering controls should be utilized.

EYE: Safety glasses with side shields should be worn as minimum protection from impact. Dust goggles should be worn when excessively dusty conditions are present or anticipated.

GENERAL: The use of hard hats and hard toed shoes is recommended. Gloves may be worn to protect from abrasion.

IV. FIRST AID

INHALATION: Remove to fresh air. *

SKIN: Wash with soap and water.

EYE: Flush with water immediately. *

*Note: If irritation is aggravated or persists, contact a physician.

V. HEALTH HAZARDS

EXPOSURE LIMITS: ACGIH TLV's
Total Dust: 10mg/M3 < 1% quartz
Respirable dust: 5mg/M3 < 1% quartz

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:
Exposure to dust may cause irritation to the skin, eyes, or respiratory system or may aggravate existing skin, eye, or respiratory system disease.

ROUTE OF EXPOSURE: Inhalation

ACUTE TOXICITY: Exposure to dust may irritate the respiratory system, eyes, or skin.

CHRONIC TOXICITY: Blast furnace slag is not listed on the NTP, IARC, or OSHA lists of carcinogens.

VI. STORAGE AND SPECIAL PRECAUTIONS

Respirable dust may be generated during processing, handling, and storage. Use personal protective equipment as noted in Section III.

VII. SPILL, LEAK, AND DISPOSAL METHODS

Pick up mechanically or by hand tools and reuse or dispose of as a common non-hazardous material in accordance with applicable Federal, State, and local laws. Wetting the material prior to cleanup may be necessary to suppress dust; use personal protective equipment as

described in Section III.

VIII. TRANSPORTATION

DOT Hazard Classification and placard not required. Some areas require the use of tarps on trucks for containment of dust.

IX. FOR FURTHER INFORMATION

Contact: Edw. C. Levy Co.
8800 Dix Avenue
Detroit, MI 48209

Business phone: 313-429-2200

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SUPERCEDES: January 2002

DISCLAIMER:

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