## MATERIAL SAFETY DATA SHEET

MATERIAL SAFETY DATA SHEET - Complies with ANSI Z400.1 Draft Standard for the Preparation of Material Safety Data Sheets, Copyright 1991, Chemical Manufacturers Association. May be used to comply with U.S. Department of Labor OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standards must be consulted for specific requirements.

Date : 06/28/2001

# Kleen Blast, Kleen Blast Division Blasting Abrasive

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Kleen Blast CHEMICAL NAME: Copper Slag COMPANY IDENTIFICATION Kleen Blast Division 2400 Old Crow Canyon Rd. No. A2 San Ramon, CA 94583

#### EMERGENCY / TECHNICAL NUMBERS

(206) 383-2168 (510) 831-9800 <u>CHEMTREC:</u> (800) 424-9300

PRODUCT INFORMATION: MSDS Requests and Product Information: (510) 831-9800 SPECIAL NOTES:

#### 2. COMPOSITION / INFORMATION INGREDIENTS

<u>COMPONENTS</u>	CAS No.	OSHA Exposure	ACGIH Recommended	Percent
		Limits (PEL)	Limits (TLV)	<u>by Weight</u>
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	1309-37-1	5 mg/m³	5 mg/m³	23.0
Silicon (SiO <sub>2</sub> )	7440-21-3	10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	45.0
Free Silica	7631-86-9	0.1 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>	<0.1
Alumina (Al <sub>2</sub> O <sub>3</sub> )	7429-90-5	10 mg/m³	10 mg/m <sup>3</sup>	7.0
Calcium (CaO)	1305-78-8	2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	19.0

#### **COMPOSITION COMMENTS:**

Other trace metals and oxides comprise 5.9%.

#### **3. HAZARDS IDENTIFICATION**

EMERGENCY OVERVIEW: This product **does not** contain substances at levels regulated by OSHA under 29 CFR 1910.1200, USEPA under 40 CFR 302.4 and 40 CFR 355.4, USEPA under 40 CFR 261.20, USEPA under 40 CFR 116.4.

#### POTENTIAL HEALTH EFFECTS

EYE: Abrasion injuries possible if safety glasses are not worn. Contact lens use may be dangerous when handling this product.

SKIN: Trauma hazard associated with handling equipment or sudden release of large volumes. Abrasion injuries possible during blasting operations or similar exposure, with high velocity direct exposure to skin.

INGESTION: Toxic effects will not occur.

INHALATION: Fine particulates (PM-10) in the form of dust during loading/unloading, processing and packaging.

<u>CHRONIC EFFECTS</u>: Respiratory illness as a result of long-term exposure to particulates is possible. NIOSH-approved particulate respirators should be used during blasting operations. Existing disorder increases risk of discomfort and injury.

## 4. FIRST AID MEASURES

No specialized medical treatment required. No toxic chemicals are present in this product. Health hazards are non-chemical.

SIGNS AND SYMPTOMS OF EXPOSURE

EYE: Redness, watering. <u>SKIN:</u> Redness, tender to the touch <u>INGESTION:</u> Unknown <u>INHALATION:</u> Coughing, shortness of breath

<u>FIRST AID PROCEDURES</u> (likely only in extreme and unusual conditions) <u>EYE:</u> Flush thoroughly with cool running water. <u>SKIN:</u> Follow procedures appropriate to abrasion or trauma injuries. <u>INGESTION:</u> Not likely. If swallowed, seek medical attention. <u>INHALATION:</u> Follow procedures appropriate to dust inhalation.

### **5. FIRE FIGHTING MEASURES**

 FLAMMABLE PROPERTIES: Nonflammable

 FLASH POINT / METHOD USED: None

 AUTOIGNITION: None

 FLAMMABILITY LIMITS (% by volume in air):
 LEL: N/A

 PYROPHORIC, OXIDIZER, ORGANIC PEROXIDE: No

 EXTINGUISHING MEDIA: N/A

 NFPA RATINGS: Health 0; Flammability 0; Reactivity 0.

 FIRE FIGHTING INSTRUCTIONS: None

 SPECIAL FIRE FIGHTING PROCEDURES: None

 COMBUSTION PRODUCTS: None

### 6. ACCIDENTAL RELEASE MEASURES

<u>PERSONAL PRECAUTIONS</u>: Respiratory protection: NIOSH-approved respiratory equipment for abrasive blast environments. Personal protection: NIOSH-approved garments and head gear during blasting operations. See Section 8.

<u>CLEANUP MEASURES</u>: A release that is smaller than the RQ (11,952 tons) will pose a housekeeping problem. Material should be swept or vacuumed into appropriate containers.

### 7. HANDLING AND STORAGE

NORMAL STORAGE: General dry storage, ambient air temperature and pressure.

HANDLING: Follow good housekeeping practices to reduce airborne emissions. Use approved respiratory protection and clothing in abrasive blast environments.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>ENGINEERING CONTROLS</u>: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposures below PELs or TLVs during loading and unloading. Mechanical exhaust may be appropriate during processing. Special exhaust may be appropriate during normal abrasive blasting operations.

RESPIRATORY PROTECTION: Recommended if PELs or TLVs are exceeded. Use NIOSH/MSHA approved respirators.

EYE AND FACE PROTECTION: Use safety glasses with side shields. If there is potential for exposure to particles which could cause mechanical injury to the eye, wear goggles.

SKIN AND HAND PROTECTION: Gloves as desired by user.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION:Black Angular to Sub-Angular GranulesODOR:OdorlessFVAPOR PRESSURE (mm Hg):N/AVBOILING POINT:2400°FFMELTING POINT:NoneSSPECIFIC GRAVITY (H,O = 1):2.8p

<u>FLASH POINT</u>: None <u>VAPOR DENSITY (AIR = 1)</u>: N/A <u>EVAPORATION RATE (BUTYL ACETATE = 1)</u>: N/A <u>SOLUBILITY</u>: Insoluble in water <u>pH</u>: N/A

## **10. STABILITY AND REACTIVITY**

<u>CHEMICAL STABILITY:</u> Stable. <u>CONDITIONS TO AVOID:</u> None <u>INCOMPATIBILITY WITH OTHER MATERIALS:</u> None <u>HAZARDOUS DECOMPOSITION PRODUCTS:</u> None <u>HAZARDOUS POLYMERIZATION:</u> Polymerization will not occur.

#### **11. TOXICOLOGICAL INFORMATION**

CARCINOGENICITY: None	<u>NTP:</u> No
IARC MONOGRAPHS: None	OSHA REGULATED: No
TERATOGENIC: No	MUTAGENIC: No

#### **12. ECOLOGICAL INFORMATION**

Not toxic to mammals or aquatic environments. Not persistent in the environment.

### **13. DISPOSAL CONSIDERATIONS**

If the grit remains uncontaminated per the Resource Recovery and Conservation Act (RCRA), then the material meets the definition of a solid waste and may be disposed of per local, state and federal regulations.

If the spent grit contains contaminates at levels above those specified under RCRA, then the waste is defined as hazardous and must be managed per federal or state regulations governing hazardous waste.

### **14. TRANSPORTATION INFORMATION**

<u>NAME OF CONTENTS:</u> Abrasive Grit <u>CONSTITUENTS:</u> No hazardous substances at regulated levels <u>UN/NA NUMBER:</u> N/A <u>EMERGENCY RESPONSE NUMBER:</u> (206) 383-2168 REPORTABLE QUANTITY: 11,952 tons HAZARD CLASS: N/A POISON INHALATION HAZARD: N/A

### **15. REGULATORY INFORMATION**

The SARA Title III / CERCLA reportable quantity (RQ) for this product is 11,952 tons.

Originally prepared by: Health & Environment, Kleen Blast Division, 26 December 1993.

Kleen Blast has prepared this material safety data sheet in order to provide product information which will assist our customers in complying with all state and federal waste and hazard minimization laws as well as all state and federal transportation laws.