

**HEADQUARTERS**

2600 Old Crow Canyon Rd., Suite 200  
 San Ramon, CA 94583  
 (925) 831-9800  
 (800) 356-7323  
 FAX (925) 831-9183

# KLEEN BLAST

## ABRASIVES

Wholesale Equipment, Parts, and Supplies  
 A Division of CanAm Minerals Inc..

**WAREHOUSES**

1448 St. Paul Ave.  
 Tacoma, WA 98421  
 (253) 383-2168  
 (800) 228-4786  
 FAX (253) 383-2267

3650 N.W. Yeon Ave.  
 Portland, OR 97120  
 (503) 228-3965  
 (800) 634-8499  
 FAX (503) 228-6807

30028 Industrial Pkwy. S.W.  
 Hayward, CA 94544  
 (510) 471-2100  
 (800) 227-1134  
 FAX (510) 471-2447

**Material Safety Data Sheet**

Complies with ANSI Z400.1 Draft Standard  
 for the Preparation of Material Safety Data Sheets,  
 Copyright 1991, Chemical Manufacturers Association

**U.S. Department of Labor**

Complies with OSHA Hazard Communication  
 Standard 29 CFR 1910.1200

**Section 1: CHEMICAL PRODUCT AND CHEMICAL IDENTIFICATION**

Identity (as used on label and list):

Synonym(s): 8-12 (Large), 16, 16-30, 35, 30-60 (Fine)  
 (numbers indicated are all nomenclature for sizing)

**Kleen Blast**

Manufacturer's Name:  
 Emergency Telephone:  
 Information Telephone:  
 Address:

**CanAm Minerals, Inc.**  
**(925) 831-9800**  
**(925) 831-9800**  
**2600 Old Crow Canyon Rd., Suite 200**  
**San Ramon, CA 94583**

Prepared by:  
 Date Prepared:

Environmental Health & Safety Department  
 26 December 1993  
 Revised: April, 2004

**Section 2: COMPOSITION/INFORMATION ON INGREDIENTS**

Contents: Vitreous Smelter Slag 99% - 100% C.A.S. #67711-92-6

Formula: Not Applicable

Chemical Family: Iron-Calcium-Silicate (complex silicate) with fused oxides of Si, Fe, Ca, Al, Mg.

Typical Chemical Composition: 38.1% SiO<sub>2</sub>; 27.4% Fe<sub>2</sub>O<sub>3</sub>; 22.8% CaO; 5.7% Al<sub>2</sub>O<sub>3</sub>; 3.9% MgO; other fused oxides @ <1.0%. Chemical composition shown is typical, elemental concentrations may vary slightly between lots.

Note: Kleen Blast contains < 0.1% crystalline silica. All U.S. EPA RCRA metals and the 17 California regulated metals are either reported in analysis as non-detect or below these regulatory limits, as well as the lower limits specified by the U.S. Navy in their MIL-A-22262A (SH) specification for blasting abrasives. TCLP, TTLC and STLC analytical results of metal contents supporting this claim are available upon request. Trace levels in the ppm range of heavy metal contaminants may be present in Kleen Blast so users need to determine employee exposures in accordance with appropriate OSHA requirements.

Permissible Exposure Limits OSHA PEL:  
 Total Nuisance Dust: 10 mg/m<sup>3</sup>  
 Respirable Dust: 5 mg/m<sup>3</sup>

## Section 3: HAZARDS IDENTIFICATION

This product does not contain substances at levels regulated:

- by OSHA under 29 CFR 1910.1200
- by USEPA under 40 CFR 302.4 and 40 CFR 355.4
- by USEPA under 40 CFR 261.20
- by USEPA under 40 CFR 116.4

This product is not hazardous material based upon current information and testing results.

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.

### Appearance and Odor:

Black angular to sub-angular granules with no apparent odor.

### Health Hazards (acute):

*Trauma* hazard associated with handling equipment, or sudden release of large volumes (engulfment). Abrasion injuries are possible during abrasive blasting operations or during similar exposures.

### Health Hazards (chronic):

*Respiratory* illness as a result of long-term exposure to any particulates is possible. NIOSH-approved respiratory equipment should be used during blasting operations. PEL testing for regulated heavy metals was performed under controlled conditions. This monitoring indicated no overexposures to regulated metals in the blasting environment occurred. However, job specific heavy metal PEL testing needs to be conducted by users in accordance with all OSHA regulations.

### Physical/Chemical Characteristics

Boiling Point	NA	Specific Gravity (H <sub>2</sub> O=1)	2.8
Vapor Pressure (mm Hg)	NA	Melting Point	2400 F
Vapor Density (Air=1)	NA	Evaporation Rate	None
Solubility in Water	None	(Butyl Acetate=1)	None

## Section 4: First Aid Measures

Specialized medical treatment required: No

**Toxicity Data:** Not toxic to mammals or aquatic environments. Not persistent in the environment. Freshwater and saltwater bioassays performed according to protocols developed by the State of California and Washington are available upon request.

### Health Hazard Data (non-chemical)

**Target Organs:** Lungs, eyes, skin.

### Route(s) of Entry:

Inhalation	Skin	Eyes	Ingestion
Fine particulates in the form of dust can occur during abrasive blasting, loading/unloading, processing and packaging.	Abrasion injuries with high velocity, direct exposure to skin.	Abrasion injuries possible if safety glasses are not worn. Contact lens use may be dangerous when handling this product.	Toxic effects will not occur.

<b>Carcinogenicity</b> None	<b>NTP</b> No	<b>IARC Monographs</b> None	<b>OSHA-Regulated</b> No
--------------------------------	------------------	--------------------------------	-----------------------------

<b>Teratogenic</b> No	<b>Mutagenic</b> No
--------------------------	------------------------

**Special Note:** Engineering controls should be used to prevent exposures above the PEL. When engineering controls are insufficient, NIOSH approved respirators should be used. Additional health hazards may be encountered during abrasive blasting operations while removing paints, coatings, rust, etc. Specific health hazards and environmental concerns must be properly assessed by the user and/or potential waste generator.

### Signs and symptoms of exposure – *likely only in extreme and unusual conditions:*

Inhalation	Skin	Eyes	Ingestion
Coughing, shortness of breath	Redness, sensitivity	Redness, watering	Unknown

### Medical conditions aggravated by exposure – *likely only in extreme and unusual conditions:*

Inhalation	Skin	Eyes	Ingestion
Existing disorder increases risk of discomfort and injury.	Existing disorder	Contact lens use increases risk of discomfort and injury	Unknown

## **Emergency and first aid procedures – likely only in extreme and unusual conditions:**

Trunk/torso/limbs:	Follow procedures appropriate to abrasion or trauma injuries
Skin:	Follow procedures appropriate to abrasion injuries.
Eyes:	Flush thoroughly with cool running water.
Inhalation:	Follow procedures appropriate to dust inhalation.
Ingestion:	Not likely.

**Note to physicians:** No overtly toxic substances are present in this product.

## **Section 5: FIRE AND EXPLOSION HAZARD**

Flash Point (Method Used):	NA
Flammable Limits:	LEL: NA      UEL: NA
Pyrophoric, oxidizer, organic peroxide:	No
Pressurized during shipment:	No
Extinguishing Media:	NA
Special Fire Fighting Procedures:	NA
Unusual Fire/Explosion Hazards:	NA

### **Reactivity Data**

Stability:	Stable
Conditions to avoid:	None
Materials to avoid (incompatibility):	None
Hazardous decomposition or by-products:	None
Hazardous polymerization:	Will not occur

## **Section 6: ACCIDENTAL RELEASE MEASURES**

**Loading/unloading:** A release will pose a housekeeping problem. Material should be swept or vacuumed into appropriate containers.

**Waste disposal method:** If the spent 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 regulations.

If the spent grit material has been used in a manner that accumulates 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.

**Handling Precautions:** Follow good housekeeping practices by promptly cleaning up spills. This reduces airborne emissions and unintended releases into storm drains and other bodies of water.

**Exposure Controls:**

Respiratory protection: NIOSH-approved respiratory equipment for abrasive blast environments. Personal protection: NIOSH-approved garments and head gear during blasting operations.

**Engineering controls:**

Always use engineering controls to limit exposures to

**Local Exhaust**

During loading/Unloading

**Mechanical Exhaust**

May be appropriate during processing.

**Special Exhaust**

May be appropriate during normal abrasive blasting operations.

**Other**

May be required during unusual abrasive blasting operations.

**DEPARTMENT OF TRANSPORTATION REQUIREMENTS**

Name of Contents:

Abrasive grit

Constituents:

No hazardous substances present at regulated levels

Hazard Class:

Not applicable

UN/NA Number:

Not applicable

**Average Trace Metal Analytical**

Analyte	Total Metal	Method Limit	TCLP Level	Method Limit
Antimony (Sb)	1.0	1.0		
Arsenic (As)	9.3	0.5	0.07	0.01
Barium (Ba)	343	5.0	1.34	0.10
Beryllium (Be)	0.4	0.5		
Cadmium (Cd)	0.9	0.5	0.01	0.01
Chromium (Cr)	35.7	0.5	0.02	0.01
Copper (Cu)	1458.6	1.0		
Lead (Pb)	3.3	0.5	0.07	0.01
Mercury (Hg)	0.1	0.1	0.01	0.01
Nickel (Ni)	17.5	2.5		
Selenium (Se)	1.0	1.0	0.06	0.10
Silver (Ag)	1.0	1.0	0.06	0.02
Thallium (Ti)	1.0	1.0		
Zinc (Zn)	79.0	0.5		

Based upon lab work performed during years 2000, 2001, 2002