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

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

KLEEN BLAST
ABRASIVES

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

Material Safety Data Sheet

Complies with ANSI Z400.1 Draft Standard
for the Preparation of Material Safety Data Sheets,

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):	**Kleen Blast**
Synonym(s): 8-12 (Large), 16, 16-30, 35, 30-60 (Fine) (numbers indicated are all nomenclature for sizing)	
Manufacturer's Name:	**CanAm Minerals dba Kleen Blast**
Emergency Telephone:	**(925) 831-9800**
Information Telephone:	**(925) 831-9800**
Address:	**2600 Old Crow Canyon Rd., Suite 200 San Ramon, CA 94583**
Prepared by:	Health & Safety
Date Prepared:	26 December 1993 Revised: August, 2007

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_2; 27.4% Fe_2O_3; 22.8% CaO; 5.7% Al_2O_3; 3.9% MgO; other fused oxides @ <1.0%. Chemical composition shown is typical, elemental concentrations may vary slightly between batches or lots.

Note: Kleen Blast contains < 0.1% crystalline silica. All of the U.S. EPA RCRA 8 metals, the 17 California listed metals listed metals are either nondetected or below the regulatory limits, as well as the lower limits as specified by the U.S. Navy under MIL-A-22262A (SH), specifications for blasting abrasives. TCLP, TTLC and STLC analytical results of metal contents are available upon request. Trace levels in the ppm range of heavy metal contaminants may be present so users need to determine employee exposures in accordance with OSHA regulations.

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

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. Abrasion injuries possible during blasting operations or similar exposure.

Health Hazards (chronic): *Respiratory* illness as a result of long-term exposure to particulates is possible. NIOSH-approved particulate respirators should be used during blasting operations. Company testing indicates no PEL exposures in the blasting environment of any trace metal contaminants. Job specific trace heavy metal PEL testing needs to conducted by users in accordance with all OSHA regulations.

Physical/Chemical Characteristics

Boiling Point	NA	Specific Gravity (H20=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 the States California and Washington available upon request.

Health Hazard Data (non-chemical)

Target Organs: Lungs, eyes, skin.

Route(s) of Entry:

Inhalation	Skin	Eyes	Ingestion
Fine particulates (PM-10) in the form of dust possible during 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.

Carcinogenicity	NTP	IARC Monographs	OSHA-Regulated
None	No	None	No

Teratogenic	Mutagenic
No	No

Special Note: Engineering controls should be used to prevent exposures above the PEL. When engineering controls are insufficient, NIOSH approved respirators and/or supplied air 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 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.

Precautions to be taken in handling and storing: Follow good housekeeping practices to reduce practices to reduce airborne emissions. Use approved respiratory protection and clothing in abrasive blast environments.

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	Mechanical Exhaust	Special Exhaust	Other
During loading/Unloading	May be appropriate during processing.	May be appropriate during normal abrasive blasting operations.	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