Safety Data Sheet

KLEEN BLAST SELECT North American Garnet

1. PRODUCT AND COMPANY INDENTIFICATION

Trade Name: Kleen Blast Select North American Garnet

Manufacturer:

Servicios Mineros del Noroeste, S.A. deC.V.
Col. Mariana, Guadalupe Victoria
Mexicali, BCN, Mexico
Emergency Phone#: 011 52 (686) 548-7654

Kleen Blast Warehouse Distribution:

Tacoma, WA	**Portland, OR**	**Hayward, CA**	**Chula Vista, CA**	**Rancho Cucamonga, CA**
1448 St. Paul Tacoma, WA 98421 (253) 383-2168 (800) 228-4786 FAX (253) 383-2267	3747 N. Suttle Rd. Portland, OR 97217 (503) 228-3965 (800) 634-8499 FAX (503) 228-6807	30028 Industrial Pky. S.W. Hayward, CA 94544 (510) 471-2100 (800) 227-1134 FAX(510)471-2447	676 Moss St. Chula Vista, CA 91911 (619) 427-4711 FAX (619) 427 4711	9871 8Th St. Rancho Cucamonga, CA 91730 (909) 941-4078 FAX: 909 941 4248

2. HAZARD IDENTIFICATION

Overview: Red, Dark Brown, Pink, Whitish Grains or Powders
This product is not hazardous material based upon current information and testing results.

- This product does not contain substances at levels regulated:
  OSHA under 29 CFR 1910.1200
  USEPA under 40 CFR 302.4 and 40 CFR 355.4
  USEPA under 40 CFR 261.20
  USEPA under40 CFR 116.4

Primary Route(s) of Entry: Inhalation-Yes **Ingestion-**No **Skin-**No **Other**-No

Acute Health Hazards

Eye: Dusts may cause minor irritation, redness and sensitivity. Particulate matter may scratch the cornea or cause other mechanical injury to the eye. May occur during blasting, loading/unloading, processing and packaging. Contact lenses may be dangerous when handling this product increasing the risk of discomfort and injury. **Eye exposure: Flush with large amounts of water, obtain medical assistance if needed.**

Skin: Not absorbed through the skin. May cause abrasion injuries with high velocity, direct exposure to the skin. **Skin exposure: Thoroughly wash exposed area with soap and water.**

Ingestion: Nontoxic/toxic effects will not occur. Ingestion is not anticipated under normal working conditions**: Obtain first aid or medical assistance if needed.**

Primary route(s) of entry: Inhalation, Skin Contact.

Inhalation: Product will act as a nuisance dust. Inhalation of high concentrations of dust may cause coughing and mild, transitory respiratory irritation. May cause slight irritation of mucous membranes. **Remove to fresh air, if breathing is difficult, administer oxygen, and obtain medical assistance if needed.**

Trauma Hazard associated with materials handling equipment or sudden release of large volumes. Abrasion injuries possible during blasting operations or similar exposure.

CHRONIC HEALTH HAZARDS:

Inhalation: Respiratory illness as a result of long-term exposure to particulates is possible. NIOSH-approved particulate respirators should be used during blasting band loading, 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 be conducted by users in accordance with all OSHA regulations**.

Medical Conditions Aggravated by Exposure: Repeated inhalation of dusts over time may aggravate pre-existing respiratory disease. Precautions should be taken to alleviate the pre-existing medical condition.

Target Organs: Lungs, Skin, Eyes

Carcinogenicity: NTP: No, **IARC Monographs:** No, **OSHA Regulated:** No
Teratogenic: No, **Mutagenic:** No

Hazardous polymerization: Will not occur

HAZARD SYMBOLS:

Health	**1***
Flammability	**0**
Physical Hazard	**0**
Protective Equipment	

HMIS PERSONAL PROTECTIVE EQUIPMENT (PPE) RATING:

Industrial Use Situations: A; Safety Glasses and full blasting PPE when blasting abrasive.

CANADIAN WHIMIS SYMBOLS:

Not applicable. This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR.

OSHA REGULATORY STATUS:
While this material is not classified as hazardous under OSHA regulations, this SDS contains valuable information critical to the safe handling and proper use of the product.

PACKAGE SYMBOLS:

Identity (as used on label and list): KleenBlast North American Garnet
Synonym(s): 8-12 (Large), 16, 16-30, 30/40, 30/60, 36, 50/80, 80, 100 150 - numbers indicated are all nomenclature for sizing

3. COMPOSITION/INFORMATION

Common Name: Garnet, Alluvial Garnet / Almandite, Almandine, Alluvial Almandite Garnet, Alluvial Almandine Garnet

Contents: Almandine Garnet< Al2 Fe3(SiO4) 3> CAS : 1302-62-1 95.2- 99.4%
Balance Typical Mixture of:
Iliminte <FeTi O3> CAS:12168-52-4 < 1%
Hornblende<Ca2(Mg,Fe,Al)5(Al,Si)8022(OH)2>
CAS: 12178-42-6 < 1%
Feldspars < NaAlSi3O8 – CaAl2Si2O8> CAS68476-25-5 < 1%
Quartz, Cristobalite, Tridymite < SiO2>Cas :1408-60-7 < 0.3%

Permissible Exposure Limits OSHA PEL:
Total Nuisance Dust: 10 mg/m3 **Respirable Dust:** 5 mg/m3

4. FIRST AID INFORMATION

Likely only in extreme conditions:
Ingestion: Not likely. Do not induce vomiting.
Inhalation: Remove to fresh air and follow procedures for dust inhalation.
Skin: Follow procedures appropriate to abrasion injuries.
Eyes: Flush thoroughly with cool running water or fluids from eye wash station.
Trunk/Torso/Limbs: Follow procedures appropriate to abrasion or trauma.
Note to physician: No toxic substances are present in the product itself.

5. FIRE-FIGHTING MEASURES

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

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 and unloading	May be appropriate during processing	May be appropriate during normal abrasive blasting operations	May be required during unusual abrasive blasting operations

7. HANDLING & STORAGE

Handling: Minimize dust generation and accumulation. Use with adequate ventilation, and avoid breathing dusts.
Storage: Store in a dry place

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION PPE

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.

Ventilation and Engineering Controls: Use with adequate ventilation. Local exhaust ventilation is preferred, and should be designed by a professional industrial hygienist. Proper exhaust equipment pertinent to the job should be used.

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance: Red, Pink, Whitish Grains or Powder **Structure:** 99% Angular Crystal **Odor:** None **pH:** N/A **Melting Point:** 1,315 *C, 2,399 *F **Initial Boiling point:** N/A **Boiling Range:** N/A **Flash Point:** N/A **Evaporation rate:** N/A **Flammability:** N/A **Upper/Lower Flammability:** N/A	**Explosive limits:** N/A **Auto-ignition temperature:** N/A **Vapor pressure (mm Hg)**: NA **Solubility Partition coefficient:** N/A **Vapor Density (Air=1)**: N/A **Viscosity:** N/A **Specific Gravity:** 4.1 **Hardness (Mohs scale):** 7.2-7.5 **Magnetic:** No **Water:** None

10. STABILITY & REACTIVITY

Material is stable. No known conditions causing instability. There are no known incompatible materials.

11. TOXICOLOGICAL INFORMATION

Material is non-toxic and poses little or no immediate hard. This material is stable.

12. ECOLOGICAL INFORMATION

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 on request.

13. DISPOSAL CONSIDERATIONS (non mandatory)

Follow Local, State and US law when disposing of this product.
Consider the material being removed may render the mix hazardous.
Contact Kleen Industrial Services at 800-356-7323 www.kleenindustrial services.com
For Recycling/ Disposal Quotation

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14. TRANSPORT INFORMATION (non mandatory)

Department of Transportation Requirements

NAME OF CONTENTS: Garnet, Almandine Alluvial Garnet
CONSTITUENTS: No Hazardous substances present at regulated Levels
HAZARD CLASS: N/A

UN/NA NUMBE: N/A

AVERAGE TRACE METAL ANALYTICAL

Total Threshold Limit Concentration Analysis Method / Ernviro Chem Labs 09/2017

Mg/ KG=PPM

Inorganic Substances	Mg/ KG	TTLC Level Limits (mg/Kg - wet weight)
Antimony (and/or Sb compounds)	ND	500
Arsenic (and/or As compounds)	1.23	500
Asbestos	0	1%
Barium (and/or Ba compounds)	51.1	10,000
Beryllium (and/or Be compounds)	ND	75
Cadmium (and/or Cd compounds)	ND	100
Chromium VI compounds	ND	500
Chromium (and/or Cr III compounds)	7.41	2500
Cobalt (and/or Co compounds)	ND	8000
Copper (and/or Cu compounds)	15.0	2500
Fluoride salts	0	18000
Lead (and/or Pb compounds)	2.92	1000
Mercury (and/or Hg compounds)	ND	20
Molybdenum (and/or Mo compounds)	ND	3500
Nickel (and/or Ni compounds)	9.8	2000
Selenium (and/or Se compounds)	ND	100
Silver (and/or Ag compounds)	ND	500
Thallium (and/or Tl compounds)	ND	700
Vanadium (and/or V compounds)	11.2	2400
Zinc (and/or Zn compounds)	14.0	5000

15. REGULATORY INFORMATION (non mandatory)

Judgments as to the suitability of the information herein are for purchaser's purposes and are necessarily purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, CanAm dba Kleen Blast makes no representations and assumes no responsibility as to the accuracy or suitability of such information for application to purchasers intended purposes or for consequences of its use.

Complies with ANSI Z400.1 Draft Standard Complies with OSHA Hazard Communication or the Preparation of Safety Data Sheets, Standard 29 CFR 1910.1200

Safety Data Sheet U.S. Department of Labor

The information set forth herein is believed to be accurate but is not warranted with respect to the accuracy of the information or recommendations. Recipients are advised to confirm in advance of need that the information is current and applicable to their circumstances and usage.