



Material Safety Data Sheet

Section 1 - Product Identification and Use

Product Identifier: **GARNET SAND**

Description: Pink to purple in colour

Product Use: Water filtration & treatment

Manufacturer's Name:
Emerald Creek Garnet Ltd.
PO Box 190
Fernwood, ID USA 83830

Supplier's Name:
Anthratech Western Inc.
4450 – 46 Avenue, SE
Calgary, Alberta T2B 3N7

Emergency Phone: [208] 666-6000

Emergency Phone: [403] 255-7377

* Garnet Sand is manufactured by Emerald Creek Garnet Ltd. and is distributed by AWI.

Section 2 - Hazardous Ingredients

Garnet Sand is a natural mixture of Almandite Garnet $Fe_3 Al_3 (Si_{10}O_{43})_3$ with Mg and Mn in particle substitution for Fe in the formula, and other minerals. It is suitable for use as a low free silica blast cleaning media. The following substances are present and regulated by OSHA or ACGIH limits: CAS #1302-62-1

<u>Substance</u>	<u>WT%</u>	<u>OSHA/ACGIH limit in use*</u>	
Nuisance dust	N/A	15 mg/cu.m.	*If these levels are exceeded respiratory protection must be employed
Respirable dust	N/A	5 mg/cu.m.	
Crystalline silica	<0.5%	0.10 mg/cu.m.	

Section 3 - Physical Data

Melting Point: Circa 1315 °C Specific gravity (H₂O = 1): 4.0 - 4.1
Solubility in water: Insoluble Appearance and odour: Deep red to pink colour; no odour

Section 4 - Fire and Explosion Data

Flash point (method used): Material is a non-flammable solid
Extinguishing media: Use extinguishing media appropriate for the surrounding fire
Special fire fighting procedures: As appropriate to surrounding fire. Fire fighters should be protected from nuisance dust.
Unusual fire and explosion hazards: None

Section 5 - Reactivity Data

Stability:	Stable-no special handling
Conditions to avoid:	Almandite garnet is an inert, stable solid needing no special handling in normal use
Material to Avoid:	None known
Incompatibility (materials to avoid):	None known
Hazardous Decomposition By-Products:	None known
Hazardous Polymerization:	Will not occur

Section 6 - Toxicological Properties

Route of Entry:	Inhalation - Possible, Skin - None, Ingestion - None
Health Hazard:	(Acute and Chronic) None known use care to limit possible exposure to nuisance Dust during blast cleaning.
Carcinogen:	Crystalline silica (quartz) - IARC Monographs = #42 - OSHA regulations = 0.1 mg/m ³
Signs & Symptoms of Exposure:	Exposure to nuisance dust may cause eye, throat or lung irritation, coughing, or shortness of breath, medical conditions generally aggravated by exposure: chronic bronchitis, emphysema and other lung diseases may be aggravated by exposure to nuisance dust
Eye Contact:	Wash with water to flush out dust particles
Skin Contact:	Wash with soap and water

Section 7 - Preventative Measures

Clean Up:	Sweep up for disposal and clean area to control unnecessary dust
Waste Disposal:	Local and federal standards for inert, non-hazardous solid waste Material contaminated in use may require special handling!
Handling and Storage:	None - Use good housekeeping practices to reduce dust; use approved hand, eye, and respiratory protection when handling material.
Other Precautions:	Use material ONLY for the purposes intended and incorporate methods of dust control to maintain airborne dust within federal or local TLV limits.

Section 8 - First Aid

Respiratory:	Wear approved dust and mist respirator NIOSH/OHSA
Eyes:	Approved safety glasses with side shields must be worn at all times
Protective Gloves:	Leather or equivalent - in use
Ventilation:	Use local ventilation to reduce dust concentration to permissible exposure limits
Clothing:	Proper work clothing to be worn to prevent skin contact
Hygiene:	Maintain clean environment

Section 9 - Preparation & Date of MSDS

Prepared by:	Kellsie Donaldson (Safety Officer) AWI, 4450 - 46 Ave SE; Calgary, AB T2B 3N7
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Date Prepared:	January 21, 2010

The information contained herein is accurate to the best of our knowledge. However, data, safety standards and government regulations are subject to change, and conditions of handling, use or misuse of this product are beyond our control. Users should satisfy themselves that they are aware of all of the current data relevant to their particular use.