



Material Safety Data Sheet

(complies with 29 CFR 1910.1200)

IDENTITY (as used on label and list)

Western Garnet® garnet abrasive grains

SECTION I – Company Identification

Manufacturer/Supplier Name

WGI Heavy Minerals, Inc

Address (Street, City, State, Zip Code)

810 Sherman Av., Coeur d'Alene, ID 83814

Emergency Telephone Number

(208) 666-6000

Product Information

(208) 666-6000

W.W. Meyerholtz

12/02/08

SECTION II – Chemical Identity and Information on Ingredients

Specific Chemical Identity:

Western Garnet® is a natural mixture of ALMANDINE GARNET, having a chemical composition of $Fe_3Al_2(SiO_4)_3$ with Mn and Mg in partial substitution for Fe in the formula, and other minerals. CAS No.: 1302-62-1 (Almandine).

Hazardous Ingredients:

The following substances are present and regulated by OSHA and ACGIH limits:

SUBSTANCE	WT.%	OSHA/ACGIH LIMIT IN USE*
Nuisance Dust	na	15 mg/m ³
Respirable Dust	na	5 mg/m ³
Crystalline Silica	<1.0%	0.10 mg/m ³

*If these levels are exceeded, adequate respiratory protection must be employed.

SECTION III – Physical and Chemical Characteristics

Melting Point

Circa 1315°C

Specific Gravity (H₂O = 1.0)

3.9 – 4.1

Solubility in Water

Insoluble

Appearance and Odor

Reddish-brown color; no odor

SECTION IV – Fire and Explosion Hazard Data

Flash Point (method used)

Material is a non-flammable solid

Flammable Limits

not applicable

LEL

na

UEL

na

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 V – Reactivity Data

Stability () Unstable

(x) Stable INERT

Hazardous Decomposition or Byproducts: None known

Hazardous Polymerization () May Occur (x) Will Not Occur

Incompatibility (materials to avoid): None known

Conditions to Avoid: None known. Almandine Garnet is an inert, stable solid needing no special handling in normal use.

WGI Heavy Minerals Inc. Corporate Office: 810 Sherman Avenue, Coeur d'Alene, ID 83814 USA
+1-208-666-6000 or +1-888-5GARNET Fax +1-208-666-4000
European Sales: +31-78-6820672 Fax +31-78-6812391
Kominex Sales: +49 (0) 6155-6077-11 Fax +49 (0) 6155-6077-30
Middle East Sales: +9714-88-13067 Fax +9714-88-13068

SECTION VI – Health Hazard Data

Route(s) of Entry	Inhalation	Skin	Ingestion
	Possible	None	None

Health Hazards (acute and chronic due to overexposure)

Inhalation: Dust may cause irritation of nasal and respiratory tract or coughing.

Eyes: Dust may cause irritation.

Skin: May cause abrasions. Dust may cause irritation.

Ingestion: No known effects, however ingestion not recommended.

Carcinogenicity	NTP	IARC Monographs	OSHA Regulations
Crystalline Silica (quartz)	--	No. 42	0.1 mg/m ³
Contains less than 1.0%	--	na	

Radioactivity

This product contains very low levels of naturally occurring radioactive elements of the uranium and thorium series, as do many mineral products. Primary exposure potential is internal via inhaled dust. This material is exempt from NRC regulations for source material per 10CFR40 since it is below 0.05% uranium/thorium by weight.

Medical Conditions Generally Aggravated by Exposure

Chronic bronchitis, emphysema and other lung diseases may be aggravated by exposure to nuisance dust.

Emergency and First Aid Procedures

EYE CONTACT: Wash eyes with water to flush out dust particles.

SKIN CONTACT: Wash affected area with soap and water.

INHALATION: Remove from source of dust and obtain other medical assistance.

INGESTION: Obtain medical assistance, if needed.

SECTION VII – Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled

NO SPECIAL PRECAUTIONS ARE NECESSARY. Sweep or vacuum material for disposal. Prevent generation of dust during clean up.

Waste Disposal Methods

Follow local, state and federal guidelines for disposal of inert solid waste.

MATERIAL CONTAMINATED IN USE MAY REQUIRE SPECIAL HANDLING.

Precautions to be Taken in 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 VIII – Control Measures

Respiratory Protection

NIOSH/MSHA approved filters and air supplied hoods for blasters.

Ventilation	Local Exhaust	Mechanical (general)	Special	Other
Yes	Use when blast cleaning	Meet dust TLV	None	None

Protection Gloves

Leather, or equivalent – in use

Eye Protection

Safety glasses with side shields

Other Protective Clothing or Equipment

Hearing protection when working near blast cleaning operations.

Work/Hygienic Practices

Maintain a clean and safe work environment and monitor work practices.

SECTION IX – Special Precautions and Comments

Some information presented in this MSDS was obtained from sources other than direct test data on the product. The information provided is believed to be accurate and represents the best information currently available to WGI. However, WGI makes no warranty of merchantability or other warranties, express or implied, with respect to such information and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

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