

Trade Name: RockRidge Garnet

1 IDENTIFICATION

Product Identifier:	RockRidge Garnet, various grades	
Synonyms:	Garnet	
CAS No. / EC No.:	Mixture (See Section 3 for more information)	
Recommended Use:	Product is intended for use in blasting and abrasive jet cutting applications.	
Use(s) Advised Against:	Contact manufacturer if using product outside of recommended use cases.	
Manufacturer/Supplier:	GNPGraystar 37 John Glenn Dr. Amherst, NY 14228 Ph: 716-759-6600	GNPGraystar 9 Simonsville Road Bluffton, SC 29910 Ph: 843-815-5600

Emergency Telephone No.: CHEMTREC (US): 1-800-424-9300

All other regions contact your local poison control center or local chemical authority.

2 HAZARD(S) IDENTIFICATION

Classification of the substance or mixture:

Classification has been determined in accordance with United States OSHA HCS (29 CFR 1910.1200) requirements and any corresponding Globally Harmonized System (GHS) classification parameters.

Additional Information: No additional information available at time of document authoring.

LABEL ELEMENTS

GHS Label Elements Product is not determined to be hazardous per OSHA/GHS standards.

Pictograms: None

Signal Word: None

Hazard-determining components of labeling: See Section 3 for more information.

Hazard Statements: N/A

Precautionary Statements: N/A

HMIS Ratings (scale 0-4):

Health:	0
Fire:	0
Reactivity:	0
PPE:	

NFPA Ratings (scale 0-4):

Health:	0
Fire:	0
Reactivity:	0
Specific Hazard:	

Legend	4 - Extreme
	3 - Serious
	2 - Moderate
	1 - Slight
	0 - Minimal

* Indicates a long term health hazard from repeated or prolonged exposures

Other Hazards:

This material is not considered hazardous during normal use but the following potential hazards should be recognized:

Dust - Inhalation (See Section 8 for more details)

Noxious fumes evolved during fire (See Section 5 for more details)

3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization: Mixture

Identifier	Chemical Name/Description	GHS Hazard(s)	Wt. %
CAS No.: 1302-62-1 EC No.: 640-374-8	Almadine (Fe ₃ Al ₂ (SiO ₄) ₃)	Not classified as hazardous.	> 90
CAS No.: 12765-06-9 EC No.: 235-801-6	Omphacite (silicic acid, calcium magnesium salt)	Not classified as hazardous.	< 3
CAS No.: 12168-52-4 EC No.: 235-334-8	Ilmenite (FeTiO ₃)	Not classified as hazardous.	< 2

Trade Name: RockRidge Garnet

CAS No.: 1317-80-2 EC No.: 215-282-2	Rutile (TiO ₂)	Not classified as hazardous.	< 1
CAS No.: 1317-65-3 EC No.: 215-279-6	Limestone (calcium carbonate, CaCO ₃)	Not classified as hazardous.	< 0.5
CAS No.: 14808-60-7 EC No.: 238-878-4	Crystalline Silica (quartz form), SiO ₂	Carcinogenicity, Cat. 1A	< 0.1

Exact chemical identifier(s) or percentage(s) may be withheld as a trade secret, or due to batch-by-batch variation in product. Product may contain hazardous chemicals below reportable concentrations; for mixtures, the overall hazard classification may be less severe than that of individual components.

4 FIRST AID MEASURES

General Information:	No acute symptoms expected during normal usage of product.
After inhalation:	Supply fresh air. Get medical help if symptoms occur.
After contact with eyes:	Irrigate with large quantities of water for at least 10 minutes. Remove contact lenses if present and easy to do so. Seek medical help if persistent irritation or tissue damage occur.
After skin contact:	Wash thoroughly with soap and water. Seek medical advice if any symptoms occur.
After swallowing:	If swallowed, rinse mouth with plenty of water if affected person is fully conscious. Do not give anything by mouth or induce vomiting in an unconscious person. Seek medical advice.
Key symptoms and effects, both acute and delayed:	Intense coughing, gastric or intestinal disorders, breathing difficulty.
Indication(s) of need for immediate medical help:	Any indication of tissue damage, respiratory distress, or distress of the digestive system from exposure.

5 FIREFIGHTING MEASURES

Flash point: N/A	UEL: N/A	LEL: N/A
Auto-ignition temperature:	N/A	
Extinguishing media:	Use any suitable media for the environment in which the fire or conflagration is taking place. Be mindful of any surrounding flammable/combustible materials.	
Hazardous decomposition products:	Metal oxide smokes may be generated if fire is burning directly adjacent to product.	
Firefighting instructions:	Firefighters and other involved individuals should wear self-contained breathing apparatuses and be aware of any other flammable/combustible substances involved in the fire.	

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:	Avoid dust inhalation; observe occupational exposure limits detailed in Section 8. If presence of product dust is expected, wear a NIOSH-approved N95 particulate mask or other appropriate dust-blocking respirator.
Environmental precautions:	Prevent from entering drains or water courses. Do not allow to enter soil.
Methods and material for containment and cleanup:	Ventilate the area thoroughly. Vacuum or sweep up material and place into suitable container for recycling or disposal. Avoid kicking up dust.



SDS (Safety Data Sheet)

acc. to OSHA HCS (29 CFR 1910.1200)

Trade Name: RockRidge Garnet

Other information: See Section 7 for additional information on safe handling.
See Section 8 for additional information on personal protective equipment.
See Section 13 for additional information on disposal.

7 HANDLING AND STORAGE

Precautions for safe handling: Avoid formation of dust. Use only in well-ventilated areas. Wear personal protective clothing and wash hands/face before breaks and after work.

Information about protection against explosions and fires: No special measures required.

Requirements for storerooms and receptacles: Storage should occur in cool, dry, well-ventilated areas.

Information regarding storage in common storage facility: Store away from strong acids, bases, and oxidizing agents.

Further information about storage conditions: No additional information available.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Applicable component occupational exposure limits requiring monitoring at the workplace:

Nuisance Dusts

OSHA PEL, TWA (8-hr):	15 mg/m ³ (total), 5 mg/m ³ (respirable)
California: CAL/OSHA PEL, TWA (8-hr):	10 mg/m ³ (total), 5 mg/m ³ (respirable)

Titanium Dioxide (CAS No. 13463-67-7)

OSHA PEL, TWA (8-hr):	15 mg/m ³ (total dust)
ACGIH TLV, TWA (8-hr):	0.2 mg/m ³ (nanoscale particles), 2.5 mg/m ³ (finescale particles)
California: CAL/OSHA PEL, TWA (8-hr):	10 mg/m ³ (total), 5 mg/m ³ (respirable)

Note: Inclusion of this chemical is due to potential for evolution of free Titanium Dioxide during blasting applications.

Crystalline Silica, Quartz Form (SiO₂), CAS# 14808-60-7

OSHA PEL, TWA (8-hr):	50 µg/m ³ (25 µg/m ³ Action Level)
NIOSH REL, TWA (≤ 10-hr):	0.05 mg/m ³
ACGIH TLV, TWA (8-hr):	0.025 mg/m ³ (respirable particulate matter)
California: CAL/OSHA PEL, TWA (8-hr):	0.05 mg/m ³

Note: 50 µg/m³ = .05 mg/m³

Additional limit information: No additional relevant information available at time of document creation.

Engineering controls: For blasting applications: Product should be used in a blast cabinet containing dust collectors or in a closed-circuit blast cleaning system. If a blast room is used, it must have a dust extraction system to maintain dust levels below occupational exposure limits. For optimal ventilation, a minimum of 75 air changes per hour should occur.

Risk management: No special measures recommended.

Trade Name: RockRidge Garnet

PERSONAL PROTECTIVE EQUIPMENT

Breathing equipment:	Blasting operatives should use a Type CE abrasive-blast supplied-air respirator in accordance with OSHA/NIOSH requirements. All other individuals should wear a NIOSH N95-type particulate mask if dust exposure is anticipated.
Hand protection:	Wear gloves for protection against mechanical hazards per OSHA/NIOSH requirements.
Eye protection:	See "Breathing equipment" for blasting environment requirements. Otherwise wear safety glasses/goggles for protection against physical hazards per OSHA/NIOSH requirements.
Body protection:	Wear hearing protection in blasting environments or other high-noise environments in accordance with OSHA/NIOSH requirements. Blasting operatives should wear heavy-duty coveralls or a purpose-designed suit.

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Granules
Color:	Red / Brown (typical coloration of mixture)
Odor:	Odorless
Odor threshold:	Not applicable
pH:	Not applicable
Melting/Freezing point:	2,372°F (1,300°C)
Initial boiling point:	Not applicable
Boiling point range:	Not applicable
Flash point:	Not applicable
Flammability:	Product is not flammable
Upper explosive limit:	Not applicable
Lower explosive limit:	Not applicable
Auto-ignition temperature:	Not applicable
Evaporation rate:	Not applicable
Vapor pressure:	Not applicable
Vapor density:	Not applicable
Relative density:	3.5 - 4.0, Water = 1.00 at 68°F (20°C)
Water solubility:	Insoluble in water
Partition coefficient:	No data available
Kinematic viscosity:	Not applicable
Particle characteristics:	Granule size: various

10 STABILITY AND REACTIVITY

Thermal decomposition / conditions to be avoided:	No decomposition anticipated under standard use, transport and storage conditions. May separate into individual chemical components under extreme heat.
Hazardous reaction potential:	No hazardous reactions anticipated.
Incompatible materials:	Reacts with strong acids, oxidizing agents, and strong bases.
Hazardous decomposition products:	May produce metal oxide smoke in the event of fire.
Other Information:	No additional information available at time of document authoring.

Trade Name: RockRidge Garnet

11 TOXICOLOGICAL INFORMATION

Component LC₅₀/LD₅₀ values relevant for classification: None

Probable routes of exposure: Inhalation, accidental ingestion, direct skin/eye contact.

Effects on skin: Dusts may cause irritation to susceptible individuals.

Effects on eye: Dusts may cause eye irritation comparably to other inert detritus.

Inhalation effects: Dusts may cause irritation to respiratory tract.

Ingestion effects: Ingestion of granules may lead to digestive tract discomfort, or digestive tract distress is consumed in large quantities.

Sensitization effects: Dusts may cause a sensitization reaction in susceptible individuals.

Subacute/chronic toxicity: Long-term exposure to free respirable crystalline silica has been demonstrated to cause silicosis, cancer, and other respiratory illnesses in humans. Free respirable silica is present in product at concentrations below hazard classification levels.

Carcinogenicity:

NTP Listing Status: Silica dust, crystalline - Listed as a known human carcinogen

IARC Listing Status: Silica dust, crystalline - Category 1 (Carcinogenic to humans)

OSHA Listing Status: Silica dust, crystalline - Listed as a carcinogen

Cell mutagenicity: No data available.

Reproductive effects: No data available.

12 ECOLOGICAL INFORMATION

Aquatic toxicity: Product not determined to be toxic to the aquatic environment.

Persistence and degradability: Inorganic product, not eliminable from water by biological means.

Results of PBT assessment: No data available

Results of vPvB assessment: No data available

LogK_{ow} , BCF values: No data available

Bioaccumulative potential: No significant accumulation in organisms.

Mobility in soil: No relevant information available at time of document authoring.

Other adverse effects: No relevant information available at time of document authoring.

Additional information: No relevant information available at time of document authoring.

13 DISPOSAL CONSIDERATION

Waste treatment methods:

The product must be disposed of in accordance with local, regional, and national regulations. Do not dispose of in sewage or other liquid waste systems. Spent blasting media should be collected in a dry drum, free of contamination or other garbage/refuse. Avoid escape of dust or small particulates. Spent blasting media will likely contain material removed from blasting target. Obtain a representative sample of the waste blasting media and conduct Toxicity Characteristic Leaching Procedure testing or otherwise determine its hazard status. If hazardous, coordinate with an organization certified in hazardous waste removal. If non-hazardous, waste material can typically be disposed of in a sanitary landfill using standard solid waste disposal procedures. Before disposing of waste material as non-hazardous, inform the disposal site of the possible presence of free Titanium dioxide or respirable crystalline Silica to ensure that that any additional precautions or regulations are followed.

Contaminated packaging: No special provisions for product packaging.

Trade Name: RockRidge Garnet

Additional information: Refer to Section 8 for exposure controls, personal protective equipment

14 TRANSPORT INFORMATION

DOT (US) Not regulated for transport.

IMDG/IMO Not regulated for transport.

IATA Not regulated for transport.

General Information: No additional information.

15 REGULATORY INFORMATION

SARA 355 Components: Not listed

SARA 313 Components: Not listed

TSCA listing status: Listed

Determinations of carcinogenic status:

California Prop. 65: Crystalline silica, quartz form (CAS No. 14808-60-7) is known to the state of California to cause cancer when present as airborne, unbound particles of respirable size.

EPA: No component listed

IARC: Silica dust, crystalline - Cat. 1 (Carcinogenic to humans)

ACGIH: Silica, crystalline - α -Quartz - Cat. A2 (Suspected human carcinogen)

NIOSH: Silica, crystalline quartz, potential occupational carcinogen

State right-to-know listings: Minnesota: Crystalline silica, quartz form (CAS No. 14808-60-7)
New Jersey: Crystalline silica, quartz form (CAS No. 14808-60-7)

Information pertaining to Canadian regulations:

Canadian Domestic Substances List: All product components are listed.

Other regulations, limitations, and prohibitive regulations: This product has been classified in accordance with hazard criteria of the Hazardous Products Regulations, SOR/2015-17.

16 OTHER INFORMATION

All information provided is based on GNPGraystar's present knowledge and understanding of this product and any applicable regulations and data. Any information provided does not constitute a guarantee for specific product features nor does it establish a legally valid contractual relationship.

Abbreviations and acronyms:

ACGIH American Conference of Governmental Industrial Hygienists

CAS Chemical Abstracts Service

DOT (US) Department of Transportation (United States)

EPA Environmental Protection Agency (United States)

HMIS Hazardous Materials Identification System (United States)

IARC International Agency for Research on Cancer

IATA International Air Transport Association

IMDG/IMO International Maritime Dangerous Goods/International Maritime Organization

NFPA National Fire Protection Association (United States)

NIOSH National Institute for Occupational Safety and Health (United States)

NTP National Toxicology Program (United States)

OSHA Occupational Safety and Health Administration (United States)

PEL Permissible Exposure Limit

SARA Superfund Amendment and Reauthorization Act



SDS (Safety Data Sheet)

acc. to OSHA HCS (29 CFR 1910.1200)

Trade Name: RockRidge Garnet

TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time-Weighted Average

NOTICE: This safety data sheet complements technical data sheets but does not replace them. The information contained within is based on our present knowledge of the product on the document revision date. All information provided is done so in good faith. Product users should be warned about the risks associated with using the product for a different purpose than that for which it was intended as stated within this safety data sheet and any associated technical data sheets. GNPGraystar does not provide advice or indicate qualification for giving advice for uses outside of stated intended use cases. Statements regarding applicable regulations are provided to help users meet their regulatory obligations when using this product. Statements are not exhaustive of all potential regulatory parameters a user may be bound by and does not exempt users from ensuring their own compliance with applicable regulations regarding handling, use, and storage of the product, for which they are solely responsible.

Date of Preparation: June 8, 2023

