



# QMX

## Red Crushed Garnet

Quick Minerals Group, LLC  
311 East 72nd Street, Suite 12C  
New York, NY 10021  
+888-298-7768  
quickminerals.us

Quick Minerals		485	345	235	160	130
Screen Size Tyler/US	Opening Micron/Inch	20/40 36 30/40	30/40 30/60	60/80	80/100	120
16/18	1000/.0394	0.00				
20/20	850/.0331	0.61				
24/25	710/.0278					
28/30	600/.0234	6.28	0.00			
32/35	500/.0197	69.00	0.75			
35/40	425/.0165	24.11	16.88	0.00		
42/45	355/.0139					
48/50	300/.0117		77.76	18.53	0.00	
60/60	250/.0098		3.87	39.14		
65/70	212/.0083		0.74	32.58	10.54	0.00
80/80	180/.0070			8.09	37.34	
100/100	150/.0059			1.66	34.72	25.00
115/120	125/.0049				15.13	55.00
140/150	106/.0041				2.27	
170/170	90/.0035					20.00
200/200	74/.0029					
Av. Particle Size (Microns):		490	320	240	169	124
Typical Profile (Mils)	Low:	3.6	2.5	2.6	1.8	0.8
	High:	4.0	3.5	3.0	2.2	1.2

CHEMICAL ANALYSIS (TYPICAL %)	
SiO <sub>2</sub>	40.84%
Al <sub>2</sub> O <sub>3</sub>	18.95%
MgO	5.99%
Fe <sub>2</sub> O <sub>3</sub>	13.68%
CaO	10.7%
MnO	0.2%
TiO <sub>2</sub>	1.7%

PHYSICAL CHARACTERISTICS (TYPICAL)	
Bulk Density	140-150 lbs./ft <sup>3</sup>
Specific Gravity	4.1
Hardness (Moh's)	7.5-8.0
Knoop Hardness	>1670 Hk
Grain Shape	Sub-angular grains
Color	Dark Red

OTHER CHARACTERISTICS (TYPICAL)	
Conductivity	<25milliSiemens/meter <sup>2</sup>
Radioactivity	Not detectable above bg
Moisture	<0.10%
Chlorides	1.88 ppm
Free Iron	<0.01%
Copper	<0.01%
Heavy Metals	<0.01%

MINERAL COMPOSITION (TYPICAL)	
Almandine	90-96%
Quartz	<0.1%
Ilmenite	1%
Hornblende	<0.5%
Omphacite	1.5%
Rutile	0.6%

## Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: Jan 1st, 2020

### 1 Identification

- **Product identifier**
- **Trade name:** QMX Red Crushed Garnet
- **Other means of identification:**  
Grit Size: <180  
Grit sizes coarser than 180 do not contain respirable sized particles and are not hazardous according to the Globally Harmonized System (GHS).
- **Recommended use and restriction on use**
- **Recommended use:**  
Raw materials.  
Industrial uses.
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**  
Quick Minerals Group, LLC  
311 East 72nd Street Suite 12C  
New York, NY 10021  
888.298.7768  
sales@quickmineralsgroupllc.com  
www.quickmineralsgroupllc.com
- **Emergency telephone number:** 888.298.7768

### 2 Hazard(s) identification

- **Classification of the substance or mixture**  
The product is not classified as hazardous according to the Globally Harmonized System (GHS).
- **Label elements**
- **GHS label elements** Not regulated.
- **Hazard pictograms:** Not regulated.
- **Signal word:** Not regulated.
- **Hazard statements:** Not regulated.
- **Other hazards** There are no other hazards not otherwise classified that have been identified.

### 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures

- **Components:**

1302-62-1	Almandine garnet		>97.0%
12001-26-2	Mica		<1.5%
14808-60-7	Quartz (SiO <sub>2</sub> )	☠ Carc. 1A, H350	<1.0%
68476-25-5	Feldspar-group minerals	⚠ Eye Irrit. 2A, H319; STOT SE 3, H335	<0.5%
13463-67-7	Titanium dioxide	☠ Carc. 2, H351	<0.5%

- **Additional information:**

Non-classification as a carcinogen is based on non-inhalable form of product. IARC listings for quartz and titanium dioxide note that the substance must be respirable.

(Cont'd. on page 2)

**Safety Data Sheet**

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: Jan 1st, 2020

**Trade name: QMX Red Crushed Garnet**

For the wording of the listed Hazard Statements, refer to section 16.

(Cont'd. of page 1)

**4 First-aid measures****· Description of first aid measures****· After inhalation:**

Respiration of particulates is unlikely during normal usage.

Supply fresh air; consult doctor in case of complaints.

**· After skin contact:**

Brush off loose particles from skin.

Immediately rinse with water.

If skin irritation is experienced, consult a doctor.

**· After eye contact:**

Protect unharmed eye.

Remove contact lenses if worn, if possible.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

**· After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

**· Most important symptoms and effects, both acute and delayed:**

Coughing

Slight irritant effect on skin and mucous membranes.

Slight irritant effect on eyes.

**· Indication of any immediate medical attention and special treatment needed:**

No relevant information available.

**5 Fire-fighting measures****· Extinguishing media****· Suitable extinguishing agents:**

The product is not flammable.

Use fire fighting measures that suit the environment.

**· For safety reasons unsuitable extinguishing agents: None.****· Special hazards arising from the substance or mixture** No relevant information available.**· Advice for firefighters****· Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

**6 Accidental release measures****· Personal precautions, protective equipment and emergency procedures**

Use respiratory protective device against the effects of fumes/dust/aerosol.

Ensure adequate ventilation.

Avoid formation of dust.

Do not breathe dust.

Use personal protective equipment as required.

**· Environmental precautions** No special measures required.

(Cont'd. on page 3)

## Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: Jan 1st, 2020

Trade name: QMX Red Crushed Garnet

(Cont'd. of page 2)

· **Methods and material for containment and cleaning up**

Pick up mechanically.  
Send for recovery or disposal in suitable receptacles.

· **Reference to other sections**

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

· **Handling**

· **Precautions for safe handling:**

Use only in well ventilated areas.  
Prevent formation of dust.  
Any deposit of dust which cannot be avoided must be regularly removed.  
Do not breathe dust.  
Use personal protective equipment as required.

· **Conditions for safe storage, including any incompatibilities**

· **Requirements to be met by storerooms and receptacles:**

Storage area should be dry and well-ventilated.

· **Information about storage in one common storage facility:** Store away from foodstuffs.

· **Specific end use(s)** No relevant information available.

### 8 Exposure controls/personal protection

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

**12001-26-2 Mica**

PEL (USA)	Long-term value: 20 mppcf ppm <1% crystalline silica
REL (USA)	Long-term value: 3* mg/m <sup>3</sup> *respirable dust; containing < 1% quartz
TLV (USA)	Long-term value: 3* mg/m <sup>3</sup> *as respirable fraction
EL (Canada)	Long-term value: 3 mg/m <sup>3</sup>
EV (Canada)	Long-term value: 3(D) mg/m <sup>3</sup> respirable
LMPE (Mexico)	Long-term value: 3* mg/m <sup>3</sup> *fracción respirable

**14808-60-7 Quartz (SiO<sub>2</sub>)**

PEL (USA)	Long-term value: 0.05* mg/m <sup>3</sup> *resp. dust; 30mg/m <sup>3</sup> /SiO <sub>2</sub> +2
REL (USA)	Long-term value: 0.05* mg/m <sup>3</sup> *respirable dust; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.025* mg/m <sup>3</sup>

(Cont'd. on page 4)

## Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: Jan 1st, 2020

**Trade name: QMX Red Crushed Garnet**

(Cont'd. of page 3)

EL (Canada)	*as respirable fraction Long-term value: 0.025 mg/m <sup>3</sup> ACGIH A2; IARC 1
EV (Canada)	Long-term value: 0.10* mg/m <sup>3</sup> *respirable fraction
LMPE (Mexico)	Long-term value: 0.025* mg/m <sup>3</sup> A2, *fracción respirable
<b>13463-67-7 Titanium dioxide</b>	
PEL (USA)	Long-term value: 15* mg/m <sup>3</sup> *total dust
REL (USA)	See Pocket Guide App. A
TLV (USA)	Long-term value: 10 mg/m <sup>3</sup>
EL (Canada)	Long-term value: 10* 3** mg/m <sup>3</sup> *total dust; **respirable fraction; IARC 2B
EV (Canada)	Long-term value: 10 mg/m <sup>3</sup> total dust
LMPE (Mexico)	Long-term value: 10 mg/m <sup>3</sup> A4

· **Exposure controls**

· **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Avoid breathing dust.

Avoid contact with the eyes.

Avoid close or long term contact with the skin.

· **Engineering controls:** No relevant information available.

· **Breathing equipment:**

Wear appropriate NIOSH respirator when ventilation is inadequate and occupational exposure limits are exceeded.

Use respiratory protection when grinding or cutting material.

Particulate mask should filter at least 99% of airborne particles.

· **Protection of hands:**

Wear gloves for the protection against mechanical hazards according to OSHA and NIOSH rules.

· **Eye protection:**



Safety glasses

· **Body protection:** Protective work clothing

· **Limitation and supervision of exposure into the environment**

No relevant information available.

· **Risk management measures** No relevant information available.

## 9 Physical and chemical properties

(Cont'd. on page 5)

## Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: Jan 1st, 2020

Trade name: QMX Red Crushed Garnet

(Cont'd. of page 4)

### · Information on basic physical and chemical properties

#### · Appearance:

Form: Granulate

Color: Dark red

· Odor: Odorless

· Odor threshold: Not determined.

· pH-value: Not applicable.

· Melting point/Melting range: 1315 °C (2399 °F)

· Boiling point/Boiling range: Not determined.

· Flash point: Not applicable.

· Flammability (solid, gaseous): Product is not flammable.

· Auto-ignition temperature: Not applicable.

· Decomposition temperature: Not determined.

· Danger of explosion: Product does not present an explosion hazard.

#### · Explosion limits

Lower: Not determined.

Upper: Not determined.

· Oxidizing properties: Non-oxidizing.

· Vapor pressure: Not applicable.

#### · Density:

Relative density: 3.9-4.1

Bulk density: 2.0-2.3 g/cm<sup>3</sup> (16.69-19.19 lbs/gal)

Vapor density: Not applicable.

Evaporation rate: Not applicable.

#### · Solubility in / Miscibility with

Water: Insoluble.

· Partition coefficient (n-octanol/water): Not applicable.

#### · Viscosity

Dynamic: Not applicable.

Kinematic: Not applicable.

· Other information: Hardness (MOHs): 9.0

## 10 Stability and reactivity

· **Reactivity:** The product is non-reactive under normal conditions of use, storage and transport.

· **Chemical stability:**

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

· **Possibility of hazardous reactions** No dangerous reactions known.

· **Conditions to avoid**

Prevent formation of dust.

(Cont'd. on page 6)

## Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: Jan 1st, 2020

Trade name: QMX Red Crushed Garnet

(Cont'd. of page 5)

Moisture.

- **Incompatible materials** No relevant information available.
- **Hazardous decomposition products** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **LD/LC50 values that are relevant for classification:** None.
- **Primary irritant effect:**
- **On the skin:** Slight irritant effect on skin and mucous membranes.
- **On the eye:** Slight irritant effect on eyes.
- **Sensitization:** No sensitizing effects known.

#### · IARC (International Agency for Research on Cancer):

14808-60-7	Quartz (SiO <sub>2</sub> )	1
13463-67-7	Titanium dioxide	2B

#### · NTP (National Toxicology Program):

14808-60-7	Quartz (SiO <sub>2</sub> )	K
------------	----------------------------	---

#### · OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

#### · Probable route(s) of exposure:

Ingestion.  
Eye contact.  
Skin contact.

#### · Repeated dose toxicity:

Long-term inhalation of silica dusts may cause obstructive pulmonary disease including silicosis.

#### · Germ cell mutagenicity:

Based on available data, the classification criteria are not met.

#### · Carcinogenicity:

Contains known or suspect carcinogens when inhaled. Product is in non-inhalable form and is nonclassifiable as a carcinogen.

#### · Reproductive toxicity:

Based on available data, the classification criteria are not met.

#### · STOT-single exposure:

Based on available data, the classification criteria are not met.

#### · STOT-repeated exposure:

Based on available data, the classification criteria are not met.

#### · Aspiration hazard:

Based on available data, the classification criteria are not met.

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity** No relevant information available.
- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** No relevant information available.
- **Mobility in soil:** No relevant information available.
- **Additional ecological information**
- **General notes:** Generally not hazardous for water.
- **Other adverse effects** No relevant information available.

(Cont'd. on page 7)

## Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: Jan 1st, 2020

Trade name: QMX Red Crushed Garnet

(Cont'd. of page 6)

### 13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Contact waste processors for recycling information.

Smaller quantities can be disposed of with household waste.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- **Uncleaned packagings**

- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- **UN-Number**

- DOT, ADR/RID/ADN, IMDG, IATA

Not regulated.

- **UN proper shipping name**

- DOT, ADR/RID/ADN, IMDG, IATA

Not regulated.

- **Transport hazard class(es)**

- DOT, ADR/RID/ADN, IMDG, IATA

- Class

Not regulated.

- **Packing group**

- DOT, ADR/RID/ADN, IMDG, IATA

Not regulated.

- **Environmental hazards**

- Marine pollutant:

No

- **Special precautions for user**

Not applicable.

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

- United States (USA)

- SARA

- **Section 302 (extremely hazardous substances):**

None of the ingredients are listed.

- **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

- **Section 313 (Specific toxic chemical listings):**

(Cont'd. on page 8)

## Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: Jan 1st, 2020

**Trade name: QMX Red Crushed Garnet**

(Cont'd. of page 7)

None of the ingredients are listed.

· **TSCA (Toxic Substances Control Act)**

All ingredients are listed or exempt.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

Reference to quartz and titanium dioxide is based on unbound respirable particles and is not generally applicable to product as supplied.

14808-60-7	Quartz (SiO <sub>2</sub> )
13463-67-7	Titanium dioxide

· **Chemicals known to cause developmental toxicity for females:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity for males:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

· **EPA (Environmental Protection Agency):**

None of the ingredients are listed.

· **IARC (International Agency for Research on Cancer):**

Reference to chemical component(s) listed below are based on unbound respirable particles and are not generally applicable to product as supplied.

14808-60-7	Quartz (SiO <sub>2</sub> )	1
13463-67-7	Titanium dioxide	2B

· **Canadian Domestic Substances List (DSL):**

All ingredients are listed or exempt.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Carc. 1A: Carcinogenicity – Category 1A

Carc. 2: Carcinogenicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· **Sources**

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

(Cont'd. on page 9)

## Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: Jan 1st, 2020

**Trade name: QMX Red Crushed Garnet**

(Cont'd. of page 8)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

SDS Prepared by:

ChemTel Inc.

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: [www.chemtelinc.com](http://www.chemtelinc.com)