



# OneGarnet™

Premium Garnet Abrasives

JadeCut®

OneGarnet™

Product Data Sheet

# Product Portfolio

Engineered with precision from premium hard rock almandine garnet, OneGarnet is developed for the most demanding industrial applications, featuring sharp angular grains, exceptional hardness and toughness, and the highest safety standards. We deliver consistent performance and reliability you can trust, every time.

BLAST ABRASIVE



**OneGarnet™**

Preferred Choice for Premium Abrasives

BLAST ABRASIVE



**JadeCut®**

Exclusively Engineered by OneGarnet

WATERJET CUTTING ABRASIVE



**OneGarnet™**

Gold Standard for Clean, Efficient Cutting

## Major Industries/Applications



Oil & Gas



Marine & Shipbuilding



Infrastructure & Maint.



Military & Defense



Petrochemical



Industrial Mfg. & Maint.

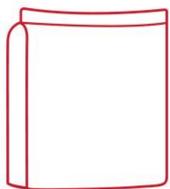


Heavy-Duty Equipment

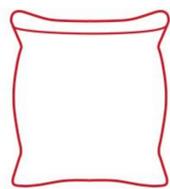


Foundry Industry

## Standard Packaging



Paper Bags



PP Woven Bags



Bulk Bags  
(1,000 kg)



Bulk Bags  
(2,000 kg)

- ◆ 25 kg paper bags shrink-wrapped onto a 1,000 kg (2,205 lbs) or 2,000 kg (4,409 lbs) pallet
- ◆ 25 kg PP woven bags in a 1,000 kg (2,205 lbs) bulk bag
- ◆ Loose bulk in a 1,000 kg (2,205 lbs) or 2,000 kg (4,409 lbs) bulk bag
- ◆ Other packaging on request

# OneGarnet™

## Hard Rock Almandine Garnet

Hard, sharp, pure with precise particles and ultra-low salt meeting top international standards for faster, cleaner, longer-lasting results



### Superior Surface Cleanliness

Surface Preparation Grade: Sa3 (White Metal) *ISO 8501-1*  
 Surface Dust Quantity & Size: Level 1 *ISO 8502-3*

### Ultra-Low Soluble Salt & Conductivity

Total Chlorides: <3 ppm (0.0003%)  
 Soluble Salt Content: <20 mg/m<sup>2</sup> *ISO 8502-6/9*  
 Conductivity: <100 µS/cm *ASTM D4940-25*

### Surface Roughness

Range: 25 - 115 µm

### Health & Safety Assurance

No Radioactivity and Heavy Metals  
 Free Silica (Quartz) Content: ≤0.5%



## Chemical Composition

Fe <sub>2</sub> O <sub>3</sub> .....	35%
Al <sub>2</sub> O <sub>3</sub> .....	21%
SiO <sub>2</sub> * .....	32%
CaO .....	4%
MgO .....	4%
TiO <sub>2</sub> .....	1%
MnO .....	0.3%

\*Refers to SiO<sub>2</sub> bound within the lattice of the homogeneous garnet crystal (not free silica)

## Physical & Other Characteristics

Hardness (Mohs) .....	7.5 - 8.0
Hardness (KNOOP) .....	1654.8
Specific Gravity .....	4.0
Grain Shape .....	Sharp, Angular
Bulk Density .....	2.2 t/m <sup>3</sup> (140 lbs/ft <sup>3</sup> )
Melting Point .....	1250°C (2282°F)
Moisture Absorption .....	Non-hygroscopic, Inert

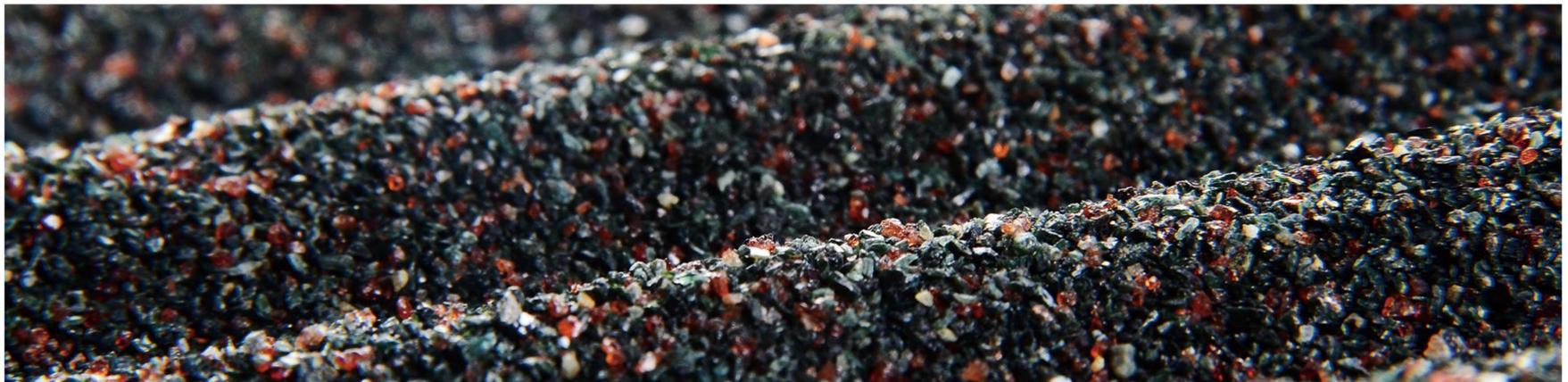
Product		Range(µm)	Performance
Extra Coarse	20/40 #	350 - 850	For heavy duty maintenance applications or for very rough anchor profile of 75 - 115 µm (3 - 4.5 mils)
Regular	30/60 #	200 - 600	For maintenance applications or anchor profile of 51 - 75 µm (2.0 - 3.0 mils)
Medium	80 #	180 - 355	For mill scale or light-to-medium coating removal, achieving an anchor profile of 25 - 64 µm (1.0 - 2.5 mils)
Fine	120 #	80 - 180	For mill scale or very light coating removal, achieving an anchor profile of 13 - 38 µm (0.5 - 1.5 mils)

Note: OneGarnet™ is a naturally occurring mineral; slight data variations may be expected. Not intended to serve as a technical specification.

# JadeCut®

## Exclusive Hard Rock Abrasive Blend

The smarter abrasive choice: Omphacite and almandine garnet blend for near-premium garnet performance with 30 - 50% cost savings



### Superior Surface Cleanliness

Surface Preparation Grade: Sa2½ - Sa3 ISO 8501-1  
 Surface Dust Quantity & Size: Level 1 ISO 8502-3

### Ultra-Low Soluble Salt & Conductivity

Total Chlorides: <3 ppm (0.0003%)  
 Soluble Salt Content: <20 mg/m² ISO 8502-6/9  
 Conductivity: <100 µS/cm ASTM D4940-25

### Surface Roughness

Range: 25 - 115 µm

### Health & Safety Assurance

No Radioactivity and Heavy Metals  
 Free Silica (Quartz) Content: ≤0.5%



### Chemical Composition

SiO <sub>2</sub> *	43%
Al <sub>2</sub> O <sub>3</sub>	16%
Fe <sub>2</sub> O <sub>3</sub>	20%
CaO	8%
MgO	4%
TiO <sub>2</sub>	7%
MnO	0.3%

\*Refers to SiO<sub>2</sub> bound within the lattice of the homogeneous garnet crystal (not free silica)

### Physical & Other Characteristics

Hardness (Mohs)	7.0 - 7.5
Hardness (KNOOP)	1297.5
Specific Gravity	3.5 - 3.6
Grain Shape	Sharp, Angular
Bulk Density	1.8 t/m <sup>3</sup> (115 lbs/ft <sup>3</sup> )
Melting Point	1250°C (2282°F)
Moisture Absorption	Non-hygroscopic, Inert

Product		Range(µm)	Performance
Extra Coarse	20/40 #	350 - 850	For heavy duty maintenance applications or for very rough anchor profile of 75 - 115 µm (3 - 4.5 mils)
Regular	30/60 #	200 - 600	For maintenance applications or anchor profile of 51 - 75 µm (2.0 - 3.0 mils)
Medium	80 #	180 - 355	For mill scale or light-to-medium coating removal, achieving an anchor profile of 25 - 64 µm (1.0 - 2.5 mils)
Fine	120 #	80 - 180	For mill scale or very light coating removal, achieving an anchor profile of 13 - 38 µm (0.5 - 1.5 mils)

Note: JadeCut® is a naturally occurring mineral; slight data variations may be expected. Not intended to serve as a technical specification.

# OneGarnet™

## Hard Rock Almandine Garnet

Hard, sharp, pure with precise particles for smooth, vertical cuts, clog-free operation, and minimal dust with 10 - 15% lower consumption



### Strictly Screened

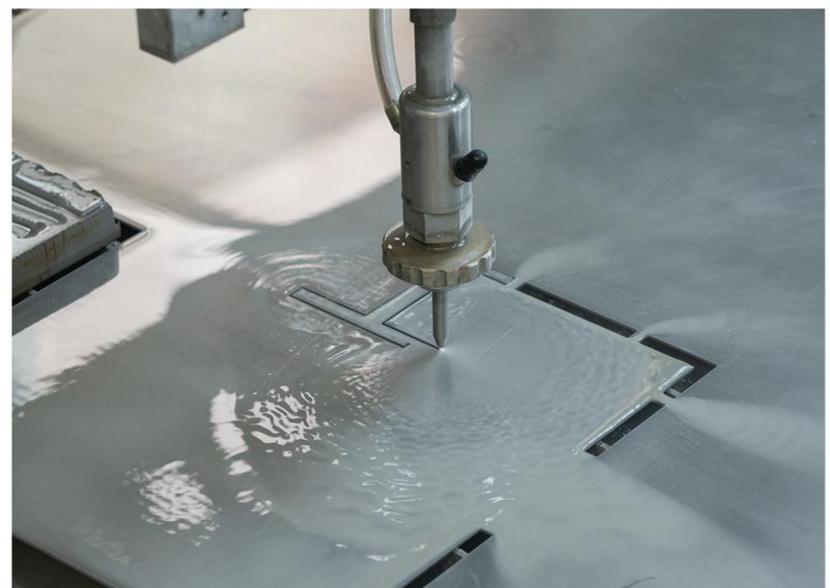
- No oversized particles to clog nozzles
- No inefficient fine grains to slow down cutting efficiency
- No dust for easy post-cut cleanup

### Optimized Grades

- Engineered to fit any focusing tube and orifice
- Versatile options for diverse cutting applications
- High purity and superior hardness for consistent performance

### Health & Safety Assurance

- No Radioactivity and Heavy Metals
- Free Silica (Quartz) Content: ≤0.5%



### Chemical Composition

Fe <sub>2</sub> O <sub>3</sub> .....	35%
Al <sub>2</sub> O <sub>3</sub> .....	21%
SiO <sub>2</sub> * .....	32%
CaO .....	4%
MgO .....	4%
TiO <sub>2</sub> .....	1%
MnO .....	0.3%

\*Refers to SiO<sub>2</sub> bound within the lattice of the homogeneous garnet crystal (not free silica)

### Physical & Other Characteristics

Hardness (Mohs) .....	7.5 - 8.0
Specific Gravity .....	4.0
Grain Shape .....	Sharp, Angular
Bulk Density .....	2.2 t/m <sup>3</sup> (140 lbs/ft <sup>3</sup> )
Melting Point .....	1250°C (2282°F)
Moisture Absorption .....	Non-hygroscopic, Inert
Total Chlorides .....	<3 ppm (0.0003%)
Conductivity .....	<100 µS/cm

Performance	Product	Range (µm)	Focusing Tube	Orifice
High Speed Cutting	60 #	425 - 200	0.040" (1.02 mm)	0.014 - 0.015" (0.356 - 0.381 mm)
Precision Edge (Industry Standard)	80 #	350 - 150	0.030 - 0.040" (0.762 - 1.02 mm)	0.010 - 0.014" (0.254 - 0.356 mm)
High Precision Edge	120 #	200 - 100	0.020 - 0.030" (0.508 - 0.762 mm)	0.007 - 0.010" (0.178 - 0.254 mm)
Fine Precision Edge	150 #	53 - 150	0.020 - 0.030" (0.508 - 0.762 mm)	0.007 - 0.010" (0.178 - 0.254 mm)
	200 #	45 - 125	0.020 - 0.030" (0.508 - 0.762 mm)	0.007 - 0.010" (0.178 - 0.254 mm)
	240 #	45 - 106	0.015 - 0.020" (0.381 - 0.508 mm)	0.007" (0.178 mm)

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At OneGarnet  
We Deliver Peak Performance with Optimal Value



 [www.OneGarnet.com](http://www.OneGarnet.com)

 [info@onegarnet.com](mailto:info@onegarnet.com)

 +86 153 3633 6622

