



# GMA GARNET

## The Natural Water Jet Abrasive Product Data Sheet

### Chemical Composition (Typical)

*SiO <sub>2</sub>	36%
Al <sub>2</sub> O <sub>3</sub>	20%
FeO	30%
Fe <sub>2</sub> O <sub>3</sub>	2%
TiO <sub>2</sub>	1%
CaO	2%
MgO	6%

\*Refers to SiO<sub>2</sub> bound within the lattice of the homogenous garnet crystal

### Physical Characteristics (Typical)

Bulk Density	≈ 2.2T/m <sup>3</sup> **
Specific Gravity	4.10
Hardness (Mohs)	7.50-8.0
Melting Point	1250°C
Shape of natural grains	sub-angular

### Other Characteristics (Type)

Conductivity	10-15 ms/m* (max 25 ms/m)*
Radioactivity	Not detectable above background
Moisture Absorption	Non-hygroscopic, inert
Total Chlorides	10-15 ppm (max 25 ppm)
Free Iron	less than 0.01%*
Copper	less than 0.01%*
Other Heavy Metals	less than 0.01%*

\* Generally below detectable levels

\*\* Small variations according to size

### Mineral Composition (Typical)

Garnet	97-98%
Ilmenite	1-2%
Zircon	<0.2%
Quartz (free silica)	<0.5%
Others	<0.25%

### Water Jet Grade Sizing (Typical)

Microns	US Mesh	% retained (typical)			
		50#	60#	80#	100/120
+600	30	-	-	-	-
+425	40	2-12	-	-	-
+300	50	60-80	20-40	2-7	0-0.5
+250	60	8-20	20-40	25-45	0-0.5
+180	80	2-12	20-45	40-60	40-65
+150	100	0-0.5	0-5	2-10	20-50
+125	120	-	0-1	0-1	6-14
+106	140	-	-	0-1	1-4
PAN		-	-	-	0-1

### Packing

- 80 x 25kg multilayer paper bags shrinkwrapped to 2MT pallets, or
- 80 x 25kg multilayer paper bags packed into 2 T bulks bags or
- 2,000kg top and bottom spouted bulk bags with internal bags or
- Loose bulk
- Other packing on request

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