



GMA GARNET GROUP

when your abrasive matters!

Product Data Sheet - GMA Garnet™ for Waterjet Cutting

Average Chemical Composition (Typical)

SiO ₂ *	36%
Al ₂ O ₃	20%
FeO	30%
Fe ₂ O ₃	2%
MgO	6%
CaO	2%
TiO ₂	1%
MnO	1%

Mineral Composition (Typical)

Garnet (Almandine)	97-98%
Ilmenite	1-2%
Zircon	0.20%
Quartz (free silica)	<0.5%
Others	0.25%

*Refers to SiO₂ bound within the lattice of the homogeneous garnet crystal (not free silica)

Physical Characteristics (Typical)

Bulk Density	2.3T/m ³
Specific Gravity	4.1
Hardness (moh)	7.50-8.0
Melting Point	1250°C
Shape of Natural Grains	Sub-Angular

Other Characteristics (Typical)

Conductivity	10-15mS/m (max25mS/m)
Radioactivity	Non-detectable above background
Moisture Absorption	Non-hygroscopic, Inert
Total Chlorides	10-15ppm (max 25ppm)
Lead	< 0.002%*
Copper	< 0.005%*
Ferrite (free iron)	< 0.01%*
Other Heavy Metals	< 0.01%*
Sulphur	< 0.01%*

*Generally below detectable levels

Product Range (typical weight % retained)

US Mesh	Mesh Microns	50# 600-200	60# 400-200	80# 300-150	120# 200-100
30	600	-	-	-	-
35	500	2	-	-	-
40	425	14	0.2	-	-
45	355	45	10	2	-
50	300	85	35	20	-
60	250	92	60	50	0.2
70	212	97	85	80	25
80	180	99	95	95	75
90	150	-	99	99	92
115	125	-	-	-	98
150	106	-	-	-	99.9
170	90	-	-	-	-
pan	-90	-	-	-	-

Packaging

- ◆ 25kg (55lb) paper bags shrink wrapped onto a 1000kg (2200lb) or 2000kg (4400lb) pallet.
- ◆ Loose bulk form in 1000kg (2200lb) or 2000kg (4400lbs) bulk bag with an inner plastic liner on a pallet.

For more information, write to:

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www.garnetsales.com