



MILLERS AND PROCESSORS OF BASE MINERALS

Date: 16 May 2019
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Pages: 1 of 1
Doc No: DS082
Rev No: 01

DATA SHEET

Garnet
Abrasive Grade
Use: Waterjet cutting, sandblasting, aluminium polishing and powder coating



Chemical Analysis (%):

Typical:	SiO ₂	28.56%	Al ₂ O ₃	21.8%	CaO	3.2%	TiO ₂	2.44%
	Fe ₂ O ₃	31.2%	MnO ₂	0.7%	MgO	3.57%		

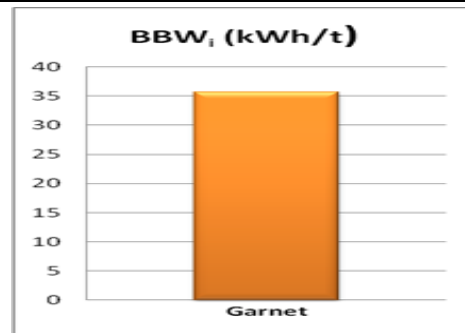
Physical Properties:

Particle Size:

- f300-600 micron-sandblasting, waterjet cutting & aluminium polishing
- -300 micron waterjet cutting, powder coating

Garnet is a natural mineral reddish/pink in colour, predominantly almandite consisting of subangular particles mined from an alluvial resource.

Hardness	7.8 – 8 Moh
Specific Weight	approx. 4.1 g/cm ³
Dry Bulk Density	approx. 2.3 kg/l
Free Silica	< 1%
Chlorides	<30ppm
Conductivity	<50mS/m ISO 11127
Uniformity Coefficient	1.41
Effective Size	0.43mm
Bondwork Index	17.9(kWh/mt) (imperial) 19.7(kWh/mt) (metric)



The Bond Work Index is measured in Kw/hr per metric ton to indicate the materials resistance to being ground. Higher values will typically indicate the materials grinding resistance to a product size of 80% passing 100 microns. The test is undertaken using steel balls in a lab mill, size 305mmx305mm. As an indication TALC(very soft) has1-5 Kw/mt and hard Gold Quartzite 20-22 Kw/mt. African Pegmatite's Garnet can, therefore, be regarded as very hard and durable as well as being chemically resistant.

Application:

Non toxic and inert over wide pH range, good abrasion and chemical resistance.
Waterjet cutting, sandblasting, aluminium polishing and powder coating

Packaging:

Packed in 25kg bags

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