

TECHNICAL DATA & PHYSICAL CHARACTERISTICS FOR GARNET ABRASIVES

CHEMICAL COMPOSITION %

Al ₂ O ₃ ZrO ₂	21
SiO ₂	40
FeO	26
Fe ₂ O ₃	2.9
TiO ₂	1.0
ZrO ₂	0.01
P ₂ O ₅	0.03
Cr ₂ O ₃	0.04
Th+U	200 ppm

PHYSICAL CHARACTERISTICS

Hardness	7.5 - 8.0 (Mohs scale)
Chloride	Below 25 ppm
pH	> 7
Average bulk density	2.34 g/cm ³
Specific Gravity	4.1
Melting Point	1260 °C
Grain Shape	Sub-Angular

MINERALOGICAL COMPOSITION

Garnet (Almandine) Fe ₃ Al ₂ (SiO ₄) ₃	97.2 %
Ilmenite FeTiO ₃	1.8 %
Quartz SiO ₂	0.2 %
Zircon ZrSiO ₄	0.2 %
Calcium Carbonate CaCO ₃	0.1 %
Rutile	0.1 %

OTHER CHARACTERISTICS

Radioactivity	Not detectable above background
Moisture absorption	Non-hygroscopic, Inert.
Free Iron	< 0.01 %
Copper	< 0.01 %
Sulphur	< 0.01 %
Other Heavy Metals	< 0.01 %

Note : 1. Ozone Garnet meets all known current chemical limits for Free silica and Heavy toxic metals including ISO 11126-10: E2000. Ozone Garnet is a natural mineral and variation in typical Analysis above is expected.