

Technical Specification

PHYSICAL PROPERTIES

Specific weight	4.1 g/cm ³
Average bulk density	2.4 g/cm ³
Hardness	8.0 (mohs scale)

Other Characteristics

Crystal system	Cubic
Habit	Dodecahedron with occasional Trapezohedron
Fracture	Sub-conchoidal
Durability	Very good
Free flow	97% minimum
Susceptibility to acid	None
Moisture absorption	Non-hygroscopic Inert.
Magnetism	Very slightly magnetic
Conductivity	10 microsiemens per meter
Radioactivity	Not detectable above background
Pathological effects	None
Free silica content	None

CHEMICAL COMPOSITION

Alumina (as Al₂O₃)	21.0%
Iron (as Fe₂O₃)	31.0%
Silica (as SiO₂)	35.0%
Magnesium (as MgO)	8.0%
Calcium (as CaO)	1.5%
Titanium (as TiO₂)	1.0%
Lead (as PbO₂)	0.05%
Manganese (as MnO)	0.5%
Zircon (as ZrO₂)	Traces

Technical Specification

Chloride content	Less than 25 ppm
pH of aqueous medium	6.93
Gypsum content	Nil
Moisture content	Less than 0.5%
Carbonate content	Traces
Loss on ignition	Nil
Metal content(specifically free iron, free copper and other heavy metals)	Traces

Note : 1. Garnet being a natural Product, its Chemical Analysis is expected to vary

MINERALOGICAL COMPOSITION

Garnet (Almandine)	97-98%
Ilmenite	1-2%
Quartz	0.5%
Other	0.5%