

Technical Data & Physical Characteristics ADIRONDACK® HPX® Garnet Abrasives

MINERAL COMPOSITION

Garnet
Almandine, Pyrope & Grossular..92–96%

Other Minerals
Magnetite, Hornblende, Feldspar,
Mica, Other4–8%

Non-Respirable Free
Crystalline Silica< 1%

CHEMICAL COMPOSITION

Almandine..... $\text{Fe}_3\text{Al}_2(\text{SiO}_4)_3$
Pyrope..... $\text{Mg}_3\text{Al}_2(\text{SiO}_4)_3$

PHYSICAL PROPERTIES

Specific Gravity.....3.9–4.1 g/cm³
Hardness (Mohs).....7.5–8.5
Strength.....Friable to tough
Particle Shape.....Sharp, angular,
irregular
Color.....Red to pink
Crystallization.....
Cubic (isometric) system as rhombic
dodecahedrons or tetragonal

OTHER CHARACTERISTICS

Conductivity< 290 ms/cm
Radioactivity.....Diffuse NORM
Moisture AbsorptionNon-hygroscopic
Chlorides< 25 ppm
Free Crystalline Silica< 1%
Respirable Free Quartz< 0.1%
Melting Point1,315° C
Reactivity.....Inert
MagnetismSlightly magnetic
(Volume susceptibility = 9.999375)
Electrostatic Properties
Mineral conductivity–18,000 volts
Non-reversible

Garnet is a natural product; therefore, its chemical analysis will vary. 2021-01