

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