

Technical Data & Physical Characteristics ADIRONDACK® HPX® Garnet Abrasives

MINERAL COMPOSITION

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

Other Minerals
Magnetite, Hornblende, Feldspar,
Mica, Other 4–8%

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
trisoctahedrons (trapezohedrons) or
in combinations of the two.

OTHER CHARACTERISTICS

Conductivity <290 ms/cm

Radioactivity..... Diffuse NORM

Moisture Absorption Non-hygroscopic

Chlorides..... <25 ppm

Free Crystalline Silica <1%

Respirable Free Quartz..... <0.1%

Melting Point..... 1,315° C

Reactivity Inert

Magnetism..... Slightly 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.
2019-06