Nepheline

Benjamin Bass 24 February 2016



General Mineral Formula: $(Na_K)AlSiO_4$

Mineral Chemical Class: Technosilicates

Specific Gravity: 2.5-2.6

Hardness: 5.5-6.0

Cleavage: 2,3

Luster: Vitreous or Greasy

Streak: White

Characteristic Color(s): Colorless, white, gray, cream, brown

Crystal System: Hexagonal

Crystal Class: 6

Crystal Description (common forms, habit, etc.): Crystals are uncommon but prysmatic, tabular, and have a good hexagonal shape. Often intergrown or stacked. Most often massive or grainy.

Environment (where you find the material: Alkali-rich, silicon-poor plutonic and volcanic igneous rocks. With the feldpathoids.

Common Mineral Associations (in samples, also consult text, notes: K-feldspar, Na-rich plagioclase, biotite.

Scientific Usage/Significance: None

Industrial or Social Use/Significance: Crushed and Fe-Mg bearing minerals are magnetically removed. Used in glass and ceramic making. Extender and filler in paints, plastics, and foam rubber.

Environmental Significance: Nepheline may alter to clay minerals.