



Minerals

Nepheline



Crystallography:

Hexagonal; 6. Rarely in small prismatic crystals with base; more commonly massive, compact, and in embedded grains.

Physical Properties:

Cleavage: {10 $\bar{1}$ 0} distinct. Fracture subconchoidal; brittle.

Hardness: 5.5-6.0.

Specific Gravity: 2.6-2.65.

Luster: Vitreous to greasy in massive varieties.

Color: Usually colorless, white, or yellowish; when massive sometimes gray, greenish, or brown. Transparent to opaque.

Streak: White.

Composition/Features:

Nepheline is one of a number of anhydrous framework silicate minerals that are chemically similar to the feldspars, but contain only about 2/3 as much silica. Massive nepheline varieties characterized by greasy luster. Readily soluble in HCl and forms a silica gel on evaporation. Fusible at 4.

Occurrence/Use:

A rock-forming mineral found in silica-deficient intrusive and extrusive rocks. Pure phases used in the manufacture of glass and ceramics.