Minerals

Anorthite

$CaAl_2Si_2O_8(An_{90\text{-}100})$ (Feldspar Group) (see also Plagioclase)

Crystallography:

Triclinic; $\bar{1}$. Crystals usually prismatic parallel to c-axis; twinning as in albite. Commonly massive, cleavable, with granular or coarse lamellar structure.

Physical Properties:

Cleavage: {001} perfect, {010} good. Fracture uneven to conchoidal; brittle.
Hardness: 6.0.
Specific Gravity: 2.76.
Luster: Vitreous to pearly.
Color: Colorless, white gray; sometimes reddish. Transparent to translucent.
Streak: White.

Composition/Features:

Anorthite is the calcium end-member of a feldspar solid solution series from albite (Na end-member) to anorthite. It is characterized by twinning striations on basal cleavages and its relative hardness. Fuses at 5 to a colorless glass. Possesses higher specific gravity and greater solubility in HCl than other group members. Accurate identification is done by chemical, X-ray, or optical tests.

Occurrence/Use:

Rarer than the more sodic plagioclases, anorthite occurs in basic igneous rocks rich in dark minerals and in granular limestones of contact metamorphic deposits.