

Minerals

Augite

(Ca,Na) (Mg,Fe,Al,Ti) (Si,Al), O₆ (Pyroxene Group)

Crystallography:

Monoclinic; 2/m. Commonly prismatic crystals with rectangular cross-sections, or in granular crystalline masses.

Physical Properties:

Cleavage: {110}, at 87° and 93°, imperfect. Frequently parting on {001}.

Hardness: 5.0-6.0. Specific Gravity: 3.2-3.4.

Luster: Vitreous.

Color: Dark green to black; transparent to translucent.

Streak: White

Composition/Features:

A clinopyroxene in which some Na substitutes for Ca, some Al substitutes for both Mg (or Fe) and Se, and in which Fe and Mg are higher than in diopside or hedenbergite. Characterized by crystal form and cleavage direction. Insoluble in acids. Fusible at 3.

Occurrence/Use:

Augite is the most common pyroxene and a key rock-forming mineral. Found chiefly in dark-colored igneous rocks, such as basaltic lavas and intrusives, gabbros, peridotites, and andesites.

