Minerals

Hornblende

$(Ca,Na)_{2-3}$ $(Mg,Fe,Al)_5$ $Si_6(Si,Al)_2O_{22}(OH)_2$ (Amphibole Group)

Crystallography:

Monoclinic: *2/m*. Crystals prismatic usually terminated by {011}. May be columnar to fibrous; coarse-to fine-granular.

Physical Properties:

Cleavage: {110} perfect. Angles at 56° and 124°. Fracture subconchoidal, uneven; brittle.
Hardness: 5.0-6.0.
Specific Gravity: 3.0-3.4.
Luster: Vitreous, fibrous; fibrous varieties often silky.
Color: Dark green, brown to black; usually translucent to opaque.
Streak: White.

Composition/Features:

The mineral hornblende is in reality a complex amphibole of wide compositional range with variations in the ratios of its major components. Two principal varieties, ferrohornblende and magnesiohornblende, represent iron-and magnesium-rich variants on this compositional scale. Hornblende is distinguished by its dark color, crystal form, and cleavage angles. Fusible at 4.

Occurrence/Use:

An important rock-forming mineral, occurring in both igneous and metamorphic rocks. Especially common in medium-grade metamorphic rocks known as amphibolites. Also a common constituent of syenites and diorites.