

Tremolite

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General Mineral Formula: $Ca_2(Mg, Fe)_5(Si, Al)_8O_{22}(OH)_2$

Mineral Chemical Class: Inosilicates : clinoamphibole : double chain

Specific Gravity: 2.9 - 3.2

Hardness: 5-6

Cleavage: 2,2 prismatic, fibrous and brittle.

Luster: Vitreous, silky

Streak: White

Characteristic Color(s): White, light to dark grey

Crystal System: Monoclinic

Crystal Class: $2/m$

Crystal Description (common forms, habit, etc.): Elongated prismatic crystals in bladed groups. Columnar or fibrous. Can occur in radiating, as wheat sheaf or thin hairlike masses and tough, interlocking fibers.

Environment (where you find the material): In contact metamorphic rocks in hornfels and skarns, and serpentine deposits. Commonly in marble. Can occur in metamorphized calcite and a secondary mineral in igneous basalt.

¹Pure Mg tremolite is white. Use color to diff from hornblend. Mg-rich environment to form.

Common Mineral Associations (in samples, also consult text,
notes: Albite, Barite, Clorite, Epidotie, Muscovite

Scientific Usage/Significance: Finely fibrous variety used in industrial asbestos.

Industrial or Social Use/Significance: Flame retardant component of housing insulation.

Environmental Significance: None