

# Tremolite & Actinolite

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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

**Luster:** Vitreous, silky

<sup>1</sup>tremolite

<sup>2</sup>actinolite ex 1

<sup>3</sup>actinolite ex 2

**Streak:** Colorless

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

**Crystal System:** Monoclinic

**Crystal Class:**

**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.

**Common Mineral Associations (in samples, also consult text, notes):** Albite, Barite, Chlorite, Epidotite, Muscovite

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

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

**Environmental Significance:**