

Tourmaline

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15 March 2016



General Mineral Formula: $\text{Na}(\text{Mg},\text{Fe},\text{Li},\text{Al})_3\text{Al}_6[\text{Si}_6\text{O}_{18}](\text{BO}_3)_3(\text{O},\text{OH},\text{F})_4$

Mineral Chemical Class: Cyclosilicates

Specific Gravity: 2.9-3.3

Hardness: 7-7.5

Cleavage: 3,2

Luster: Vitreous. Some black specimens may be dull

Streak: White

Characteristic Color(s): Extremely varied in color. Everything.

Crystal System: Hexagonal

Crystal Class: 3m

Crystal Description (common forms, habit, etc.): Usually elongated and prismatic and heavily striated down the side. Also short, stubby, prismatic crystals. Most have rounded, triangular cross section. Aggregates in columnar, radiating, stalactic dense groups of tiny needles. Has a rounded triangle in cross section.

¹Elongated prismatic and heavily striated. Also short, stuby prismatic crystals. Varied in color.

Environment (where you find the material): Elbaite, Schorl, and Liddicoatite and almost exclusively in granite pegmatites.

Common Mineral Associations (in samples, also consult text, notes): Quartz, Microcline, Albite, Lepidolite, Beryl

Scientific Usage/Significance: None

Industrial or Social Use/Significance: Very popular gemstone.

Environmental Significance: None