## Titanite (Sphene)

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General Mineral Formula:  $CaTiOSiO_5$ 

Mineral Chemical Class: Neosilicates

Specific Gravity: 3.4-3.6

Hardness: 5-5.5 Cleavage: 2,2

Luster: High Adamantine, greasy

Streak: White

Characteristic Color(s): tan to dark brown, can be yellowish-green, olive-green.

Crystal System: Monoclinic

Crystal Class: 2/m

Crystal Description (common forms, habit, etc.): Crystals are usually sharply angled, wedge-shaped crystals. May be flattened and tabular in form. Also prismatic. Twinning common as repeated twins. Crystals are sometimes striated.

**Environment (where you find the material)**: In metamorphic rocks such as marble, gneiss, schist, and skarns. Especially in contact zones. Also in hydrothermal replacement deposits.

 $<sup>^{1}</sup>$ Tan Brown color, high luster, wedge shaped crystals.

 $<sup>^2 {\</sup>rm found}$  in metamorphic rocks such as marble, especially in contact zones

Common Mineral Associations (in samples, also consult text, notes: Diopside, Scapolite, Calcite, Phlogopite, Apatite, Epidote

Scientific Usage/Significance: Minor Ore of titanium.

Industrial or Social Use/Significance: Minor Ore of titanium.

Environmental Significance: None