Berndtite

Crystal Data: Hexagonal. Point Group: $\overline{3} 2/m$ (2T) and $6mm$ (4H). Tabular hexagonal crystals, to 0.01 mm, in powdery aggregates.


Cell Data: Space Group: $P\overline{3}m1$ (2T), with $a = 3.639$ $c = 5.868$ $Z = 1$, or Space Group: $P6_3mc$ (4H), with $a = 3.650$ $c = 11.811$ $Z = 2$

X-ray Powder Pattern: Synthetic. 5.89 (100), 2.784 (55), 3.162 (30), 1.824 (30), 2.155 (25), 1.743 (20), 1.669 (8)

Chemistry: Sn and S are major constituents.

Polymorphism & Series: Stacking polytypes 2T and 4H are known.

Mineral Group: Melonite group.

Occurrence: A secondary mineral in tin sulfide ores (Cerro de Potosí, Bolivia); a secondary mineral in a tin-bearing pegmatite (Lagares-do-Estanho tin pegmatite); in a high-temperature deposit, hydrothermally altered (Arandis, Namibia).

Association: Stannite, pyrite, cassiterite, sulfur.


Name: For Dr. Fritz Berndt, German mineralogist, Corporación Minera de Bolivia, Oruro, Bolivia.

Type Material: National Museum of Natural History, Washington, D.C., USA, 114486, C5354A.