Sphaerobismoite

Crystal Data: Tetragonal. Point Group: n.d. Crystals tabular, to 20 µm, may show a tetragonal outline, in spherulitic aggregates.


Optical Properties: Semitransparent. Color: Green, pale yellow, or gray. Streak: White. Luster: Adamantine to dull. Optical Class: Uniaxial (+). \( \omega = 2.13(2) \) \( \epsilon = 2.18(2) \)

Cell Data: Space Group: n.d. \( a = 8.08(2) \) \( c = 6.46(2) \) \( Z = 4 \)

X-ray Powder Pattern: Black Forest, Germany. 3.16 (100), 5.73 (70), 1.902 (60), 3.44 (50), 2.02 (50)

Chemistry:

\[
\begin{array}{ll}
\text{Bi}_2\text{O}_3 & 98.40 \\
\text{As}_2\text{O}_3 & 1.78 \\
\text{Total} & 100.18
\end{array}
\]

(1) Black Forest, Germany; by electron microprobe, corresponding to \((\text{Bi}_{1.92}\text{As}_{0.08})\Sigma=2.00\text{O}_3\).

Polymorphism & Series: Dimorphous with bismite.

Occurrence: An oxidation product of wittichenite and emplectite.

Association: Bismutite, mixite, malachite, barite, quartz, “limonite”.

Distribution: From Neubulach, and at Schmiedestollen-Holde, near Wittichen, Black Forest, Germany.

Name: In allusion to the spherical aggregates, and bismuth in its composition.

Type Material: n.d.