Örebroite  \( \text{Mn}^{2+}(\text{Sb}^{5+}, \text{Fe}^{3+})(\text{SiO}_4)(\text{O}, \text{OH})_3 \)

© 2001 Mineral Data Publishing, version 1.2

Crystal Data: Hexagonal. Point Group: 3. As fine-grained, polycrystalline intergrowths and massive.


Cell Data: Space Group: \( P3 \) (probable). \( a = 8.183(7) \quad c = 4.756(9) \quad Z = 2 \)

X-ray Powder Pattern: Sjö mine, Sweden. 3.096 (100), 1.778 (90), 2.334 (70), 2.838 (50), 1.550 (50), 2.680 (40), 4.08 (30)

Chemistry:

\[
\begin{array}{cc}
\text{SiO}_2 & 15.2 \\
\text{WO}_3 & 0.0 \\
\text{Al}_2\text{O}_3 & 0.3 \\
\text{Fe}_2\text{O}_3 & 9.2 \\
\text{Sb}_2\text{O}_5 & 15.8 \\
\text{As}_2\text{O}_5 & 1.6 \\
\text{V}_2\text{O}_5 & 0.0 \\
\text{MnO} & 54.6 \\
\text{MgO} & 0.8 \\
\text{H}_2\text{O} & [2.8] \\
\hline
\text{Total} & [100.3]
\end{array}
\]

(1) Sjö mine, Sweden; by electron microprobe. \( \text{H}_2\text{O} \) by analogy to welinite; corresponds to \( \text{Mn}_{3.30}(\text{Fe}^{3+}_{0.40}\text{Sb}_{0.38}\text{Mg}_{0.08}\text{As}_{0.06}\text{Al}_{0.02})\Sigma=1.00\text{Si}_{1.00}\text{[O, (OH)]]}_{\Sigma=\sim 7} \).

Occurrence: A fine-grained aggregate with antimonates.

Association: Calcite, hausmannite, magnetite, dolomite.

Distribution: At the Sjö mine, near Grythyttan, Örebro, Sweden.

Name: For the town of Örebro, Sweden, about 60 km southeast of the Sjö mine.
