Ankangite \( \text{Ba}(\text{Ti}, \text{V}^{3+}, \text{Cr}^{3+})_8\text{O}_{16} \)

©2001-2005 Mineral Data Publishing, version 1

Crystal Data: Tetragonal. Point Group: \( 4/m \). Crystals, euhedral to subhedral, prismatic, with \{100\} and \{110\}, to 1 mm.


\( D(\text{meas.}) = 4.44 \quad D(\text{calc.}) = 4.389 \)


\( R_1-R_2: (589) 12.8-20.1 \)

Cell Data: Space Group: \( I4/m \). \( a = 10.139(4) \quad c = 2.961(2) \quad Z = 1 \)


Chemistry:

<table>
<thead>
<tr>
<th>Element</th>
<th>Formula</th>
<th>Mass Fraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>TiO_2</td>
<td></td>
<td>54.0891</td>
</tr>
<tr>
<td>V_2O_3</td>
<td></td>
<td>22.3242</td>
</tr>
<tr>
<td>Cr_2O_3</td>
<td></td>
<td>2.0792</td>
</tr>
<tr>
<td>BaO</td>
<td></td>
<td>20.5927</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>99.0852</td>
</tr>
</tbody>
</table>

(1) Ankang Co., China; by electron microprobe, \( \text{V}^{3+} \) verified by X-ray photoelectron spectroscopy; corresponding to \( \text{Ba}_{1.09}(\text{Ti}_{5.48}\text{V}_{2.41}\text{Cr}_{0.22})\Sigma=8.11\text{O}_{16} \).

Mineral Group: Cryptomelane group.

Occurrence: In a quartz vein.

Association: Barite, barytocalcite, roscoelite, diopside.

Distribution: From the Shiti barite deposit, Ankang Co., Shaanxi Province, China.

Name: For Ankang Co., Shaanxi Province, China, where it occurs.

Type Material: n.d.