Barioperovskite

Crystal Data: Orthorhombic. Point Group: mm2. As irregular grains, to 10 μm, and tabular (at times, approaching dendritic) crystals to 8 μm.


Cell Data: Space Group: Amm2. a = 3.9874 b = 5.6751 c = 5.6901 Z = 2

X-ray Powder Pattern: Calculated pattern PDF 81-2200.
2.830 (100), 2.845 (30), 2.009 (28), 2.312 (23), 2.316 (20), 1.637 (19), 4.018 (18)

Chemistry:

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BaO</td>
<td>65.46</td>
<td>65.74</td>
</tr>
<tr>
<td>TiO2</td>
<td>34.57</td>
<td>34.26</td>
</tr>
<tr>
<td>SiO2</td>
<td>0.89</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100.92</td>
<td>100.00</td>
</tr>
</tbody>
</table>

(1) Benitoite Mine, San Benito County, California, USA; average electron microprobe analysis supplemented by Raman spectroscopy; corresponds to Ba0.97Ti0.98Si0.03O3. (2) BaTiO3.


Occurrence: As inclusions in a benitoite crystal in natrolite veins in blueschist bodies within serpentinite.

Association: Benitoite.

Distribution: From the Benitoite Mine (formerly the Dallas Gem Mine), near Santa Rita Peak, New Idria District, San Benito Mountains, San Benito County, California, USA.

Name: Prefix, bario, identifies the Ba-dominant member of the perovskite group.
