Zhiqinite

Crystal Data: Orthorhombic. Point Group: 2/m 2/m 2/m. As tabular grains to 2 μm.


Cell Data: Space Group: Fddd. \( a = 8.18(16) \) \( b = 4.85(10) \) \( c = 8.42(17) \) \( Z = 8 \)

X-ray Powder Pattern: Calculated pattern.
2.265 (100), 2.081 (78), 2.130 (43), 1.810 (39), 2.935 (31), 3.702 (9), 2.055 (9)

Chemistry:

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Si</td>
<td>57.61</td>
<td>53.99</td>
</tr>
<tr>
<td>Ti</td>
<td>42.39</td>
<td>46.01</td>
</tr>
<tr>
<td>Total</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

(1) Cr-11 orebody, Luobusha ophiolite, near Kangjinla, Tibet, China; average energy dispersive X-ray spectroscopic analysis; corresponds to Ti_{0.905}Si_{2.095}. (2) TiSi₂.

Occurrence: In podiform ophiolite. In a polymineralic spheroid 20 μm across inferred to have crystallized from a droplet of Ti-Si-P intermetallic melt.

Association: Corundum, badengzhuite.

Distribution: In laboratory-concentrated separates from the Cr-11 orebody, Luobusha ophiolite, near Kangjinla, ~200 km east southeast of Lhasa, Tibet, China.

Name: Honors Chinese structural geologist Xu Zhiqin (b. 1941), an academician of the Chinese Academy of Sciences.

Type Material: Chinese Geological Museum, Beijing, People’s Republic of China (M13817).