Onoratoite

Crystal Data: Triclinic, pseudomonoclinic. Point Group: 1. Needlelike crystals, elongated along [010], flattened || {001}, showing {100}, {201}, {401}, and {412}, to 5 mm. Twinning: May be twinned on {001}.

Physical Properties: Hardness = n.d. D(meas.) = 5.3 D(calc.) = 5.49


Cell Data: Space Group: P\(\overline{1}\). a = 18.92 b = 4.03 c = 10.31 α = ~90° β = ~110° γ = ~90° Z = [2]

X-ray Powder Pattern: Cetine mine, Italy.
3.190 (100), 2.677 (60), 3.041 (50), 2.822 (50), 2.598 (30), 2.544 (30), 1.807 (30)

Chemistry:

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sb(_2)O(_3)</td>
<td>87.90</td>
<td>87.54</td>
</tr>
<tr>
<td>SbCl(_3)</td>
<td>12.10</td>
<td>12.46</td>
</tr>
<tr>
<td>H(_2)O</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

(1) Cetine mine, Italy; by TGA. (2) Sb\(_8\)O\(_{11}\)Cl\(_2\).

Occurrence: An oxidation product of stibnite in an antimony deposit in highly silicified evaporites.

Association: Stibnite, stibiconite, cetineite, peretaite, klebelsbergite, quartz.

Distribution: In the Cetine mine, 20 km southwest of Siena, Tuscany, Italy.

Name: To honor Ettore Onorato (1899–1971), Italian mineralogist.

Type Material: University of Rome, Rome, Italy, 24308.