Kermesite

Crystal Data: Triclinic, pseudomonoclinic. Point Group: $\overline{1}$. Crystals elongated $|| [010]$, lath-shaped on {001}, in radiating aggregates to 5 cm, sometimes tufted and hair-like.

Physical Properties: Cleavage: Perfect on {001}; parting on {010}. Tenacity: Sectile, thin splinters flexible. Hardness = 1–1.5 VHN = 30–90 (5 g load). D(meas.) = 4.68 D(calc.) = 4.69


Optical Class: Biaxial (+). Orientation: $Z = b =$ elongation. $\alpha = > 2.72$ $\beta = > 2.72$ $\gamma = > 2.72$ Anisotropism: Very strong to extreme.


Cell Data: Space Group: $C2/m$ (apparent). $a = 10.784$ $b = 4.065$ $c = 10.206$ $\beta = 101^\circ31'$ $Z = 4$

X-ray Powder Pattern: Zimbabwe. (JCPDS 11-91). 2.92 (100), 3.13 (90), 2.69 (70), 4.06 (60), 1.782 (60), 5.29 (50), 2.49 (50)

Chemistry:

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sb</td>
<td>75.2</td>
<td>75.24</td>
</tr>
<tr>
<td>S</td>
<td>19.9</td>
<td>19.82</td>
</tr>
<tr>
<td>O</td>
<td>4.8</td>
<td>4.94</td>
</tr>
<tr>
<td>Total</td>
<td>99.9</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(1) Globe and Phoenix mine, Zimbabwe; by electron microprobe. (2) Sb$_2$S$_2$O.

Occurrence: A secondary mineral, as an alteration of stibnite, in antimony deposits.

Association: Stibnite, antimony, senarmontite, valentinite, cervantite, stibicone.

Distribution: In small amounts in many deposits. At Braunsdorf, near Freiberg, Saxony, Germany. From Pernek, Pezinok, and Příbram, Czechoslovakia. In the Chalances mine, near Allemont, Iseré, France. From the Cetine mine, near Siena, Tuscany, Italy. At Kadamjia, Kirgizia, USSR. In the Santa Cruz and San Francisco mines, Poopó, Oruro, Bolivia. From Broken Hill, New South Wales, Australia. Exceptional radiating groups from the Globe and Phoenix mine, Que Que, Zimbabwe. At Sombrerete, Zacatecas, Mexico. From Canada, in the Lac Nicolet mine, South Ham Township, Wolfe Co., Quebec, and at other localities.

Name: From *kermes* (after Persian *qurmizq*, crimson) for red amorphous antimony trisulfide.