Stoiberite

\( \text{Cu}_5\text{V}_2^{5+}\text{O}_{10} \)

**Crystal Data:** Monoclinic. *Point Group:* \( \text{2/m} \). As incrustations of polycrystalline aggregates, with crystals, less than 100 \( \mu \text{m} \), platy on \{100\}.

**Physical Properties:** Hardness = n.d. \( D(\text{meas.}) = 5.0 \) (synthetic). \( D(\text{calc.}) = 4.96 \)


**Cell Data:** *Space Group:* \( \text{P2}_1/n \). \( a = 15.654(15) \) \( b = 6.054(4) \) \( c = 8.385(11) \) \( \beta = 102.29(12) \) \( Z = 4 \)

**X-ray Powder Pattern:** Izalco volcano, El Salvador. 7.92 (10), 2.095 (8), 4.797 (7), 2.687 (7), 2.603 (7), 1.956 (7), 2.536 (6)

**Chemistry:**

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \text{V}_2\text{O}_5 )</td>
<td>30.3</td>
<td>31.38</td>
</tr>
<tr>
<td>( \text{CrO}_3 )</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>( \text{CuO} ) 68.1</td>
<td>68.62</td>
<td></td>
</tr>
</tbody>
</table>

Total 99.4 100.00

(1) Izalco volcano, El Salvador; by electron microprobe, average of 20 analyses of 10 crystals, total \( V \) as \( \text{V}_2\text{O}_5 \), \( \text{Cr} \) as \( \text{Cr}_2\text{O}_3 \); corresponding to \( \text{Cu}_{4.98}(\text{V}_{1.94}\text{Cr}_{0.06})\Sigma=2.00\text{O}_{10} \). (2) \( \text{Cu}_5\text{V}_2\text{O}_{10} \).

**Occurrence:** A very rare mineral, deposited in vanadium-bearing sublimates in fumaroles on a basaltic volcanic cone.

**Association:** Shcherbinaite, ziesite, fingerite, bannermanite, chalcocyanite, chalcanthite.

**Distribution:** On Izalco volcano, El Salvador.

**Name:** To honor Dr. Richard Edwin Stoiber (1911–2001), Emeritus Professor of Geology, Dartmouth College, Hanover, New Hampshire, USA, who has studied Central American volcanoes and their mineralogy.

**Type Material:** Department of Earth Sciences, Dartmouth College, Hanover, New Hampshire; National Museum of Natural History, Washington, D.C., USA, 144942.

**References:**


All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the prior written permission of Mineral Data Publishing.