Ingersonite

Crystal Data: Hexagonal, pseudocubic. Point Group: 32. As crystals with imperfect hexagonal cross sections or as laths, to 0.4 mm; in massive aggregates.


R₁[R₂: (400) 11.16-11.40, (420) 10.94-11.13, (440) 10.74-10.88, (460) 10.52-10.66, (480) 10.34-10.48, (500) 10.18-10.32, (520) 10.05-10.19, (540) 9.96-10.09, (560) 9.91-10.04, (580) 9.89-10.01, (600) 9.89-10.02, (620) 9.90-10.03, (640) 9.90-10.03, (660) 9.91-10.03, (680) 9.91-10.03, (700) 9.91-10.03

Cell Data: Space Group: P3121. a = 7.28(2) c = 17.604(4) Z = 3


2.965 (100), 1.549 (60), 1.820 (50), 1.810 (50), 2.565 (40), 1.543 (40), 0.9894 (30)

Chemistry:

<table>
<thead>
<tr>
<th>Element</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
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<tbody>
<tr>
<td>Sb₂O₅</td>
<td>74.7</td>
<td>72.6</td>
<td>72.03</td>
<td>73.01</td>
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<tr>
<td>FeO</td>
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<td>0.3</td>
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<tr>
<td>MnO</td>
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<td>9.1</td>
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<tr>
<td>MgO</td>
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<td>0.21</td>
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<tr>
<td>CaO</td>
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<td>19.9</td>
<td>18.50</td>
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<td>F</td>
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<tr>
<td>O = F₂</td>
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<td>0.14</td>
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<tr>
<td>Total</td>
<td>100.2</td>
<td>102.2</td>
<td>99.94</td>
<td>100.00</td>
</tr>
</tbody>
</table>

(1-2) Långban, Sweden; by electron microprobe, F present between 1.4% and 3%, total not corrected for O = F₂; (2) corresponds to Ca₃Mn₀.99(Sb₃.86Mn₀.09Mg₀.06Fe₀.04)₂₋₃.99O₁₃.7₀₂X. (3) Do.; average electron microprobe analysis; corresponds to [Ca₂.9₃Mn₂.₅₋₁.₀₆Fe²⁺₀.₀₁][Sb₅⁺₃.₉₅Mg₀.₀₅]F₀.₁₅O₁₃.₈₅. (4) Ca₃MnSb₄O₁₄.

Occurrence: In dump material from a metamorphosed Fe-Mn orebody.

Association: Filipstadite, jacobsite, calcite, clinohumite (?).

Distribution: At Långban, Värmland, Sweden.

Name: Honors Dr. Fred Earl Ingerson (1906-1993), geochemist with the U.S. Geological Survey and Emeritus Professor, University of Texas, Austin, Texas, USA.
