Omariniite

Crystal Data: Orthorhombic.  
Point Group: 222.  
as rims or veinlets to 60 μm.

Hardness = 3.5  VHN = 190-215 202 average (100 g load).  D(meas.) = n.d.  
D(calc.) = 4.319

Streak: Reddish brown.  Luster: Metallic.  
Pleochroism and birefringence: Weak.  
R₁-R₂: (400) 22.0-21.9, (420) 20.9-21.5, (440) 20.2-21.0, (460) 19.7-21.0, (480) 19.5-21.0,
(500) 19.4-21.1, (520) 19.75-21.4, (540) 20.4-21.8, (560) 21.2-22.2, (580) 22.1-22.8,
(600) 23.2-23.5, (620) 24.2-24.2, (640) 25.3-25.0, (660) 26.2-25.7, (680) 27.2-26.6, (700) 28.2-27.4

Cell Data: Space Group: I222.  
a = 10.774(1)  b = 5.3921(5)  c = 16.085(2)  
Z = 2

X-ray Powder Pattern: Calculated pattern.
3.1063 (100), 1.9055 (24), 1.9010 (23), 1.9001 (23), 1.6248 (12), 1.6237 (12), 1.6181 (11)

Chemistry:

<table>
<thead>
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<th>Element</th>
<th>Code</th>
<th>Average (1)</th>
<th>Average (2)</th>
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<tbody>
<tr>
<td>Cu</td>
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<td>42.18</td>
<td>41.83</td>
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<tr>
<td>Fe</td>
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<td>9.37</td>
<td>9.19</td>
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<tr>
<td>Zn</td>
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<td>5.17</td>
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<td>In</td>
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<tr>
<td>Ge</td>
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<td>S</td>
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<tr>
<td>Total</td>
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<td>100.34</td>
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</table>

(1) Capillitas deposit, Catamarca Province, Argentina; average of 45 electron microprobe analyses; 
corresponds to Cu₈Fe₂₄ZnGe₂₁₂S₁₂.  (2) Cu₈Fe₂ZnGe₂S₁₂.

Occurrence: In low-temperature, polymetallic, hydrothermal vein mineralization associated with a 
diatreme.

Association: Putzite, catamarcaite, zincobriartite, bornite, chalcocite, digenite, covellite, sphalerite, 
tennantite, luzonite, wittichenite, thalcusite, mawsonite.

Distribution: From near the La Rosario vein of the Capillitas deposit, Catamarca Province, 
Argentina.

Name: Honors Dr. Ricardo Héctor Omarini (1946-2015), Professor, University of Salta, for his 
numerous contributions to the geology of Argentina.

Type Material: Systematic Reference Series, National Mineral Collection of Canada, Geological 
Survey of Canada, Ottawa, Ontario, Canada (NMCC 68096), and the collections of the University of 

References: (1) Bindi, L., H. Putz, W.H. Paar, and C.J. Stanley (2017) Omariniite, Cu₈Fe₂ZnGe₂₁₂S₁₂, 
the germanium analogue of stannoidite, a new mineral species from Capillitas, Argentina. Mineral. 