**Stistaite**

**SnSb**

**Crystal Data:** Cubic. **Point Group:** n.d. As well-formed cubic crystals, to 0.15 mm, and as aggregates in tin.

**Physical Properties:** Tenacity: Malleable. Hardness = > 2 VHN = 103–127, 115 average. D(meas.) = n.d. D(calc.) = 5.59

**Optical Properties:** Opaque. Color: Pale gray; in polished section, creamy white.

R: (400) —, (420) —, (440) —, (460) 78.0, (480) 79.3, (500) 80.5, (520) 81.2, (540) 81.6, (560) 81.5, (580) 81.3, (600) 81.5, (620) 81.8, (640) 82.0, (660) 82.5, (680) —, (700) —

**Cell Data:** Space Group: n.d. a = 4.15 Z = 1

**X-ray Powder Pattern:** Elkiaidai River, Uzbekistan.

3.09 (10), 2.19(10), 1.374 (8), 1.253(7), 1.022 (6), 1.779 (4), 1.537 (4)

**Chemistry:**

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sn</td>
<td>56.9</td>
<td>55.55</td>
<td>56.38</td>
</tr>
<tr>
<td>Cu</td>
<td>0.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sb</td>
<td>43.1</td>
<td>44.33</td>
<td>44.13</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>[100.00]</td>
<td>100.51</td>
</tr>
</tbody>
</table>

(1) Elkiaidai River, Uzbekistan; by electron microprobe; corresponds to Sn$_{1.15}$Sb$_{0.85}$. (2) Rio Tamaná, Colombia; by electron microprobe, recalculated to 100% from an original total of 93.84%; corresponds to Sn$_{1.12}$Sb$_{0.87}$. (3) Baimka placer, Russia; by electron microprobe, corresponds to Sn$_{1.13}$Sb$_{0.87}$. (4) SnSb.

**Occurrence:** In concentrates from placer deposits from a region of Silurian shaly-sandy sediments (Elkiaidai River, Uzbekistan); in concentrates from precious metal placers (Rio Tamaná, Colombia).

**Association:** Tin, zircon, “leucoxene”, rutile, apatite, barite, celestine, scheelite, cinnabar (Elkiaidai River, Uzbekistan); tin, sorosite, herzenbergite, cassiterite, lead (Baimka placer, Russia)

**Distribution:** From the Elkiaidai River, eastern margin of the Northern Nuratau Range, western Uzbekistan [TL]. At the Baimka gold-PGE placer, western Chukotka, Russian Far East, Russia. In the Rio Tamaná, the Department of Chocó, Cauca, Colombia.

**Name:** For the composition, from Greek STIbium, antimony, and STAnnum, tin.

**Type Material:** n.d.