

**Crystal Data:** Orthorhombic. *Point Group:* 2/m 2/m 2/m. As lath-shaped crystals or anhedral grains to 80 μm and in aggregates to 200 μm.

**Physical Properties:** *Cleavage:* n.d. *Fracture:* n.d. *Tenacity:* n.d. *Hardness = n.d.* D(meas.) = n.d. D(calc.) = 6.185

**Optical Properties:** [Opaque.] *Color:* Steel-gray; grayish white in reflected light. *Luster:* Metallic. *Optical Class:* n.d. *Birefractance* and *pleochroism:* Weak with grayish tints.

*Anisotropism:* Weak to medium, gray to bluish gray tints.

R<sub>1</sub>-R<sub>2</sub>: (400) 41.6-39.3, (420) 41.7-39.7, (440) 41.6-39.6, (460) 41.0-39.2, (470) 40.8-39.0, (480) 40.5-38.7, (500) 40.2-38.4, (520) 39.8-38.0, (540) 39.5-37.7, (546) 39.4-37.6, (560) 39.2-37.4, (580) 38.9-37.1, (589) 38.8-37.1, (600) 38.7-37.0, (620) 38.5-36.8, (640) 38.4-36.8, (650) 38.3-36.7, (660) 38.4-36.7, (680) 38.3-36.6, (700) 38.1-36.5

**Cell Data:** Space Group: *Cmcm*. *a* = 4.2539(8) *b* = 13.3094(8) *c* = 19.625(1) *Z* = 4

**X-ray Powder Pattern:** Calculated pattern.

3.382 (100), 2.932 (81), 3.446 (62), 3.035 (45), 2.779 (34), 3.746 (33), 2.127 (29)

Chemistry:	(1)	(2)
Ag	7.02	7.22
Cu	0.05	
Fe	0.05	
Pb	31.09	31.70
Cd	0.10	
Bi	26.62	26.97
Sb	16.01	15.72
Se	0.07	
<u>S</u>	<u>18.66</u>	<u>18.39</u>
Total	99.67	100.00

(1) Staročeské Lode, Kutná Hora district, Central Bohemia, Czech Republic; average of 5 electron microprobe analyses; corresponds to (Ag<sub>0.68</sub>Cu<sub>0.01</sub>)<sub>Σ=0.69</sub>(Pb<sub>1.56</sub>Fe<sub>0.01</sub>Cd<sub>0.01</sub>)<sub>Σ=1.58</sub>(Bi<sub>1.32</sub>Sb<sub>1.37</sub>)<sub>Σ=2.69</sub>(S<sub>6.04</sub>Se<sub>0.01</sub>)<sub>Σ=6.05</sub> or <sup>M3</sup>Pb<sup>M2</sup>(Sb<sub>0.60</sub>Pb<sub>0.26</sub>Bi<sub>0.14</sub>)<sub>Σ=2</sub><sup>M1</sup>(Bi<sub>0.52</sub>Ag<sub>0.36</sub>Sb<sub>0.12</sub>)<sub>Σ=2</sub>S<sub>6</sub>.  
 (2) Ag<sub>0.70</sub>Pb<sub>1.60</sub>(Bi<sub>1.35</sub>Sb<sub>1.35</sub>)<sub>Σ=2.70</sub>S<sub>6</sub>.

**Polymorphism & Series:** Between the lillianite-gustavite series and the andorite series.

**Occurrence:** In a late-stage low-temperature (~100-250 °C), Ag-Pb-Bi-Sb sulfosalt association in a Ag-Pb-Zn hydrothermal quartz vein-type deposit.

**Association:** Gustavite, terrywallaceite, vikingite, treasurite, eskimoite, Bi-rich andorite-group minerals, izoklakeite, cosalite, Bi-rich jamesonite, pyrite, arsenopyrite, stannite, quartz.

**Distribution:** At the medieval mine dumps of the Staročeské pásmo (Old Bohemian Lode), Kutná Hora ore district, 60 km east of Prague, Central Bohemia, Czech Republic.

**Name:** For the locality, *Staročeské Lode*, where the first specimens were collected.

**Type Material:** Department of Mineralogy and Petrology, National Museum, Prague, Czech Republic (PIP 30/2016).

**References:** (1) Pažout, R. and J. Sejkora (2018) Staročeskéite, Ag<sub>0.70</sub>Pb<sub>1.60</sub>(Bi<sub>1.35</sub>Sb<sub>1.35</sub>)<sub>Σ=2.70</sub>S<sub>6</sub>, from Kutná Hora, Czech Republic, a new member of the lillianite homologous series. *Mineral. Mag.*, 82(4), 993-1005. (2) (2020) *Amer. Mineral.*, 105, 1116-1117 (abs. ref. 1).