Salzburgite $Cu_{1.6}Pb_{1.6}Bi_{6.4}S_{12}$

Crystal Data: Orthorhombic. *Point Group:* 2/*m* 2/*m* 2/*m.* As elongate crystals to 0.3 mm and as exsolution lamellae.

Physical Properties: *Cleavage:* None. *Fracture*: Uneven. *Tenacity*: Brittle.
Hardness = n.d. VHN = n.d. D(meas.) = n.d. D(calc.) = 6.904

Optical Properties: Opaque. *Color:* Light gray, white with a creamy tint in reflected light.
Streak: Grayish black. *Luster:* Metallic.
Optical Class: n.d. *Pleochroism*: None.
R_1-R_2: (470) 39.15-48.36, (546) 38.26-47.65, (589) 37.23-47.14, (650) 36.55-45.71

Cell Data: Space Group: $Pmc2_1$. a = 4.0074(9) b = 44.81(1) c = 11.513(3) Z = 4

X-ray Powder Pattern: Calculated pattern.
3.631 (100), 2.836 (93.5), 3.136 (92.9), 3.552 (85.8), 4.015 (57.3), 3.156 (56.9), 3.586 (55.3)

Chemistry:

	(1)
Cu	4.67
Fe	0.03
Pb	15.86
Bi	61.90
S	17.87
Total	100.33

(1) Felbertal scheelite deposit, Hohe Tauern, Salzburg province, Austria; average of 19 electron microprobe analyses; corresponds to $Cu_{1.58}Fe_{0.01}Pb_{1.65}Bi_{6.38}S_{12.00}$.

Occurrence: In quartz veins cutting a metamorphosed (upper greenschist to lower amphibolite facies) scheelite deposit.

Association: Gladite-krupkaite, the gustavite-lillianite solid solution, pavonite, makovickyite, cosalite, cannizzarite, tetradymite, native Bi, chalcopyrite, pyrite.

Distribution: From the Felbertal scheelite deposit, Hohe Tauern, about 10 km south of Mittersill, Salzburg province, Austria.

Name: For the province of *Salzburg*, Austria, in which the Felbertal deposit is located.

Type Material: Geological Museum, University of Copenhagen, Denmark and in the reference collection, Mineralogical Institute, University of Salzburg, Austria.

References: (1) Topa, D., E. Makovicky, and T. Balić-Žunić (2005) Mineralogical data on salzburgite and paarite, two new members of the bismuthinite-aikinite series. Can. Mineral., 43, 909-917. (2) (2006) Amer. Mineral., 91, 218 (abs. ref. 1).