

**Crystal Data:** Triclinic. *Point Group:*  $\bar{1}$ . As acicular crystals elongated on [100], to 4 mm.

**Physical Properties:** *Cleavage:* n.d. *Fracture:* n.d. *Tenacity:* Brittle. *Hardness* = n.d.  
D(meas.) = n.d. D(calc.) = 5.898 [ideal formula]

**Optical Properties:** Opaque. *Color:* Black; white with red internal reflections on grain edges in reflected light. *Streak:* Black. *Luster:* Metallic. *Anisotropism:* Weak, brown to dark blue.

**Cell Data:** *Space Group:*  $P\bar{1}$ .  $a = 4.1192(3)$   $b = 17.4167(14)$   $c = 19.1664(16)$   $\alpha = 96.127(6)^\circ$   
 $\beta = 90.015(7)^\circ$   $\gamma = 91.229(7)^\circ$   $Z = 2$

**X-ray Powder Pattern:** Ceragiola area, near Seravezza, Apuan Alps, Italy.  
3.381 (vs), 3.649 (s), 3.416(s), 3.820 (ms), 2.857 (ms), 2.814 (ms), 1.897 (ms)

Chemistry:	(1)	(2)
Pb	46.42	46.94
Sb	32.29	32.59
As	0.41	
S	20.19	20.47
Cl	0.03	
Total	99.34	100.00

(1) Ceragiola area, near Seravezza, Apuan Alps, Italy; electron microprobe analysis; corresponding to  $\text{Pb}_{10.87}(\text{Sb}_{12.86}\text{As}_{0.26})_{\Sigma=13.13}\text{S}_{30.56}\text{Cl}_{0.04}$ . (2)  $\text{Pb}_{11}\text{Sb}_{13}\text{S}_{31}$ .

**Occurrence:** In pockets with high sulfur fugacity during hydrothermal alteration of marble.

**Association:** Boulangerite, calcite, sphalerite.

**Distribution:** From a marble quarry in the Ceragiola area, near Seravezza, Apuan Alps, Italy.

**Name:** For the relationship to *dadsonite* and the presence of the *disulfide* ion in the crystal structure.

**Type Material:** Museum of Natural History, University of Pisa, Italy (# 19442).

**References:** (1) Orlandi, P., C. Biagioni, Y. Moëlo, and E. Bonaccorsi (2013) Lead-antimony sulfosalts from Tuscany (Italy). XIV. Disulfodadsonite,  $\text{Pb}_{11}\text{Sb}_{13}\text{S}_{30}(\text{S}_2)_{0.5}$ , a new mineral from the Ceragiola marble quarry, Apuan Alps: Occurrence and crystal structure. *European Journal of Mineralogy*, 25, 1005-1016. (2) (2014) *Amer. Mineral.*, 99, 1808 (abs. ref. 1).