

Crystal Data: Tetragonal. *Point Group:* $4/m\ 2/m\ 2/m$. Known only as a single grain of maximum dimension 50 μm .

Physical Properties: Hardness = 1.6 VHN = 12 (100 g load). D(meas.) = n.d. D(calc.) = 11.96

Optical Properties: Opaque. *Color:* Silver-white; yellowish white in reflected light. *Luster:* Strong metallic. *Pleochroism:* Weak, bluish gray to pale bluish gray. R₁-R₂: n.d.

Cell Data: *Space Group:* $I4/mmm$. $a = 3.545(16)$ $c = 4.525(20)$ $Z = \text{n.d.}$

X-ray Powder Pattern: Shiaonanshan, China.

1.49 (vs), 1.40 (vs), 2.49 (m), 2.25 (m), 1.78 (m), 1.68 (m), 2.78 (w)

Chemistry:	(1)	(2)	(3)
Hg	33.03	31.48	32.62
Pb	66.96	68.42	67.38
Total	99.99	99.90	100.00

(1-2) Shiaonanshan, China; by electron microprobe. (3) HgPb₂.

Occurrence: In heavy concentrates of crushed ores from a platinum-bearing Cu-Ni sulfide deposit.

Association: Gersdorffite, pyrite, chalcopyrite, violarite, millerite, galena, stibnite, argentian gold, niggliite, sperrylite, iridosmine, platinum, merenskyite, kotulskite, chromite, ilmenite, magnetite.

Distribution: From Shiaonanshan, Inner Mongolia, China [TL].

Name: For the composition, by analogy to mercury-silver amalgam.

Type Material: n.d.

References: (1) Chen Keqiao, Yang Huifang, Ma Letian, and Peng Zhizhong (1981) The discovery of two new minerals- γ -gold amalgam and lead amalgam. *Dizhi Pinglun [Geological Review (Peking)]*, 27, 107-115 (in Chinese with English abs.). (2) (1985) *Amer. Mineral.*, 70, 215-216 (abs. ref. 1).