

**Crystal Data:** Monoclinic. *Point Group:*  $2/m$ . Commonly as thick crystals, to 1 cm, tabular on {001}, {100}, or  $\{\bar{1}01\}$ ; striations  $\parallel$  [010] and  $[0\bar{1}1]$ ; massive. *Twinning:* Polysynthetic twinning observed in polished section.

**Physical Properties:** *Cleavage:* Imperfect on {010}; rare on {100} and {101}.  
*Fracture:* Subconchoidal. Hardness = 2.5 VHN = n.d. D(meas.) = 5.25 D(calc.) = 5.29

**Optical Properties:** Nearly opaque; translucent in thin fragments. *Color:* Iron-black to steel-gray; in polished section, white with raspberry-red internal reflections in oil, seldom seen in air; deep cherry-red in transmitted light. *Streak:* Cherry-red. *Luster:* Metallic adamantine. *Optical Class:* Biaxial (+). *Pleochroism:* In reflected light, distinct, in whites and pale grays.  $\beta = > 2.72$  (Li). *Anisotropism:* Strong.

R<sub>1</sub>–R<sub>2</sub>: (400) 38.0–41.5, (420) 37.2–40.4, (440) 36.3–39.2, (460) 35.4–38.4, (480) 34.6–37.5, (500) 33.8–36.6, (520) 32.9–35.8, (540) 32.0–34.9, (560) 31.2–34.1 (580) 30.4–33.2, (600) 29.7–32.4, (620) 29.0–31.5, (640) 28.3–30.7, (660) 27.6–29.9, (680) 27.0–29.3, (700) 26.6–28.9

**Cell Data:** *Space Group:*  $C2/c$ .  $a = 12.862(3)$   $b = 4.409(1)$   $c = 13.218(3)$   
 $\beta = 98.48(2)^\circ$   $Z = 8$

**X-ray Powder Pattern:** Synthetic.

2.892 (100), 3.440 (80), 2.748 (70), 2.013 (40), 3.186 (30), 3.101 (30), 1.791 (25)

Chemistry:	(1)	(2)	(3)
Ag	37.06	36.71	36.72
Fe		trace	
Sb	41.13	41.15	41.45
As	0.79		
S	21.50	21.68	21.83
Total	100.48	99.54	100.00

(1) St. Andreasberg, Germany. (2) Příbram, Czech Republic. (3) AgSbS<sub>2</sub>.

**Polymorphism & Series:** Trimorphous with cuboargyrite and baumstarkite.

**Occurrence:** In hydrothermal veins of low-temperature origin.

**Association:** Baumstarkite, proustite, pyrargyrite, polybasite, silver, galena, sphalerite, pyrite, quartz, calcite, barite.

**Distribution:** In small amounts in many mines, rarely a principal ore mineral. In Germany, from Braünsdorf, near Freiberg, Saxony [TL]; at St. Andreasberg and Clausthal, in the Harz Mountains; and many other localities. From Příbram and Třebesko, Czech Republic. At Baia Sprie, Romania (formerly Felsőbánya, Hungary). From Hiendelaencina, Guadalajara Province, Spain. In the Strezhen deposit, Altai Mountains, Russia. At the Rampura-Agucha deposits, Rajasthan, India. In the Ailaoshan metamorphic belt, Yunnan Province, China. From the Van Silver mine, Brandywine Creek, British Columbia, Canada. In the USA, in Idaho, from the Silver City and Flint districts, Owyhee Co.; at the Kelly, Coyote and Santa Fe mines, in the Randsburg district, San Bernardino Co., California. In Mexico, from Catorce, San Luis Potosí; and from Sombrerete and Veta Grande, Zacatecas. In Chile, from Tres Puntas, near Copiapó, and Huantajaya, Tarapacá. At Colquechaca and Cerro Rico, Potosí, and Pulcayo, Huanchaca, Bolivia. From Huancavalica and Julcani, Peru.

**Name:** From the Greek for *less* and *silver*, as it contains less silver than other red silver sulfosalt minerals.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the prior written permission of Mineral Data Publishing.

**References:** (1) Palache, C., H. Berman, and C. Frondel (1944) Dana's system of mineralogy, (7th edition), v. I, 424–427. (2) Graham, A.R. (1951) Matildite, aramayoite, miargyrite. *Amer. Mineral.*, 36, 436–449. (3) Effenberger, H., W.H. Paar, D. Topa, A.J. Criddle, and M. Fleck (2002) The new mineral baumstarkite and a structural reinvestigation of aramayoite and miargyrite. *Amer. Mineral.*, 87, 753–764. (4) (1967) NBS Mono. 25, 5, 49–50. (5) Criddle, A.J. and C.J. Stanley, Eds. (1993) Quantitative data file for ore minerals, 3rd ed. Chapman & Hall, London, 369.