

Crystal Data: Monoclinic. *Point Group:* 2/*m*. Crystals prismatic and striated || [001], to 3 cm, in radiating groups.

Physical Properties: *Fracture:* Conchoidal. *Tenacity:* Brittle. Hardness = 2.5 VHN = 187–212 (100 g load). D(meas.) = 5.51 D(calc.) = 5.50

Optical Properties: Nearly opaque; translucent in thin fragments. *Color:* Steel-black, deep red to brown in transmitted light; in polished section, bluish white with deep red internal reflections. *Streak:* Dark red. *Luster:* Metallic. *Pleochroism:* Weak. *Anisotropism:* Weak. R₁–R₂: (400) 33.8–38.5, (420) 33.6–34.9, (440) 33.2–34.5, (460) 32.6–33.8, (480) 31.6–33.0, (500) 30.6–32.2, (520) 29.6–31.1, (540) 28.8–30.0, (560) 28.1–29.0, (580) 27.5–28.1, (600) 26.8–27.5, (620) 26.3–26.9, (640) 25.9–26.5, (660) 25.4–26.1, (680) 25.1–25.8, (700) 24.8–25.6

Cell Data: *Space Group:* P2₁/*n*. *a* = 10.362(4) *b* = 8.101(3) *c* = 6.647(3) β = 92°38(4)' *Z* = 2

X-ray Powder Pattern: St. Andreasberg, Germany. (ICDD 11-74). 3.20 (100), 3.01 (90), 2.59 (60), 2.86 (50), 2.43 (50), 2.51 (40), 6.4 (30)

Chemistry:

	(1)	(2)
Ag	45.95	46.78
Mn	5.86	5.96
Cu	0.18	
Fe	0.22	
Sb	26.33	26.40
S	20.55	20.86
rem.	0.87	
Total	99.96	100.00

(1) St. Andreasberg, Germany; remainder is CaCO₃ 0.41%, MgCO₃ 0.46%, original total given as 99.86%; corresponds to Ag_{3.99}Mn_{1.00}Fe_{0.04}Cu_{0.03}Sb_{2.02}S_{6.00}. (2) Ag₄MnSb₂S₆.

Occurrence: Very rare in a hydrothermal vein (St. Andreasberg, Germany).

Association: Pyrargyrite, galena, dyscrasite, tetrahedrite, pyrolusite, quartz, calcite, apophyllite (St. Andreasberg, Germany).

Distribution: From the Samson vein, St. Andreasberg, Harz Mountains, Germany [TL]. At the Garpenberg Norra mine, Dalarna, Sweden. From the Brady Lake property of the Silver Miller mine, near Cobalt, Ontario, Canada.

Name: For the occurrence in the Samson vein, St. Andreasberg, Germany.

Type Material: n.d.

References: (1) Palache, C., H. Berman, and C. Frondel (1944) Dana's system of mineralogy, (7th edition), v. I, 393–395. (2) Werner and Fraatz (1910) Samsonit, ein manganhaltiges Silbermineral von St. Andreasberg im Harz. Centralblatt. Min., 331–336 (in German). (3) Edenharter, A. and W. Nowacki (1974) Verfeinerung der Kristallstruktur von Samsonit, (SbS₃)₂Ag₂^{III}Ag₂^{IV}Mn^{VI}. Zeits. Krist., 140, 87–99 (in German with English abs.). (4) Berry, L.G. and R.M. Thompson (1962) X-ray powder data for the ore minerals. Geol. Soc. Amer. Mem. 85, 128–129. (5) Criddle, A.J. and C.J. Stanley, Eds. (1993) Quantitative data file for ore minerals, 3rd ed. Chapman & Hall, London, 498.