Crystal Data: Triclinic, pseudomonoclinic. *Point Group:* $\bar{1}$. Crystals elongated || [010], lath-shaped on {001}, in radiating aggegates to 5 cm, sometimes tufted and hair-like.

Physical Properties: *Cleavage:* Perfect on {001}; parting on {010}. *Tenacity:* Sectile, thin splinters flexible. Hardness = 1–1.5 VHN = 30–90 (5 g load). D(meas.) = 4.68 D(calc.) = 4.69

Optical Properties: Translucent. *Color:* Cherry-red; red in thin splinters. *Streak:* Brownish red. *Luster:* Adamantine to semimetallic.

Optical Class: Biaxial (+). *Orientation:* $Z = b$ = elongation. $\alpha = > 2.72$ $\beta = > 2.72$ $\gamma = > 2.72$ *Anisotropism:* Very strong to extreme.

R_1–R_2: (400) 31.1–37.5, (420) 30.0–36.4, (440) 29.0–35.2, (460) 28.0–34.0, (480) 27.2–33.0, (500) 26.4–32.2, (520) 25.7–31.3, (540) 25.2–30.6, (560) 24.8–30.0, (580) 24.4–29.4, (600) 24.0–29.0, (620) 23.8–28.6, (640) 23.5–28.2, (660) 23.4–28.0, (680) 23.2–27.8, (700) 23.1–27.7

Cell Data: *Space Group:* $C2/m$ (apparent). $a = 10.784$ $b = 4.065$ $c = 10.206$ $\beta = 101°31'$ Z = 4

X-ray Powder Pattern: Zimbabwe. (JCPDS 11-91).
2.92 (100), 3.13 (90), 2.69 (70), 4.06 (60), 1.782 (60), 5.29 (50), 2.49 (50)

Chemistry:

	(1)	(2)
Sb	75.2	75.24
S	19.9	19.82
O	4.8	4.94
Total	99.9	100.00

(1) Globe and Phoenix mine, Zimbabwe; by electron microprobe. (2) Sb_2S_2O.

Occurrence: A secondary mineral, as an alteration of stibnite, in antimony deposits.

Association: Stibnite, antimony, senarmontite, valentinite, cervantite, stibiconite.

Distribution: In small amounts in many deposits. At Braunsdorf, near Freiberg, Saxony, Germany. From Pernek, Pezinok, and Příbram, Czechoslovakia. In the Chalanches mine, near Allemont, Iseré, France. From the Cetine mine, near Siena, Tuscany, Italy. At Kadamdja, Kirgizia, USSR. In the Santa Cruz and San Francisco mines, Poopó, Oruro, Bolivia. From Broken Hill, New South Wales, Australia. Exceptional radiating groups from the Globe and Phoenix mine, Que Que, Zimbabwe. At Sombrerete, Zacatecas, Mexico. From Canada, in the Lac Nicolet mine, South Ham Township, Wolfe Co., Quebec, and at other localities.

Name: From *kermes* (after Persian *qurmizq, crimson*) for red amorphous antimony trisulfide.

References: (1) Palache, C., H. Berman, and C. Frondel (1944) Dana's system of mineralogy, (7th edition), v. I, 279–280. (2) Kupčik, V. (1967) Die Kristallstruktur des Kermesits, Sb_2S_2O. Naturwiss., 54, 114 (in German). (3) Cervelle, B. (1971) Détermination par microréflectométrie de propriétés optiques d'un cristal monoclinique absorbant (kermésite Sb_2S_2O). Bull. Soc. fr. Minéral., 94, 486–491 (in French). (4) Criddle, A.J. and C.J. Stanley, Eds. (1986) The quantitative data file for ore minerals. British Museum (Natural History), London, England, 184.