$\odot$  2001 Mineral Data Publishing, version 1.2

**Crystal Data:** Hexagonal. Point Group:  $\overline{6}m2$ . Rarely in crystals showing a trigonal outline; commonly as anhedral grains or aggregates, to 1 cm.

**Physical Properties:** Hardness =  $\sim 6$  D(meas.) = 4.03 D(calc.) = 4.07 Fluoresces bluish white under SW UV.

**Optical Properties:** Semitransparent. *Color:* Colorless to white with a pink tinge on a fresh surface; in thin section, shows anomalous interference colors in blue-violet or golden yellow. *Luster:* Vitreous.

Optical Class: Uniaxial (-).  $\omega = 1.685(2)$   $\epsilon = 1.674(2)$ 

**Cell Data:** Space Group:  $P\overline{6}c2$ . a = 6.7037(7) c = 9.824(1) Z = 2

X-ray Powder Pattern: Santa Cruz, California, USA. 3.762 (100), 2.775 (90), 5.829 (30), 3.363 (30), 1.987 (20), 2.912 (18), 1.807 (17)

Chemistry:

	(1)
$SiO_2$	37.7
$TiO_2$	3.8
$\mathrm{SnO}_2$	24.4
BaO	33.2
Total	99.1

(1) Santa Cruz, California, USA; by electron microprobe, corresponding to  $Ba_{1.03}(Sn_{0.77}Ti_{0.23})_{\Sigma=1.00}Si_{2.99}O_9$ .

**Occurrence:** As fracture fillings and disseminated grains in recrystallized siliceous limestone which shows evidence of contact metamorphism.

Association: Calcite, quartz, tremolite, witherite, phlogopite, diopside, forsterite, taramellite.

Distribution: In the USA, in the Kalkar quarry, Santa Cruz, Santa Cruz Co., California.

Name: For Dr. Adolf Pabst (1899–1990), Professor of Mineralogy, University of California, Berkeley, California, USA.

**Type Material:** Harvard University, Cambridge, Massachusetts, 119605; National Museum of Natural History, Washington, D.C., USA, 145632.

**References:** (1) Gross, E.B., J.E.N. Wainwright, and B.W. Evans (1965) Pabstite, the tin analogue of benitoite. Amer. Mineral., 50, 1164–1169. (2) Hawthorne, F.C. (1987) The crystal chemistry of the benitoite group minerals and structural relations in  $(Si_3O_9)$  ring structures. Neues Jahrb. Mineral., Monatsh., 16–30.