

# Eugsterite



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**Crystal Data:** Monoclinic (?). *Point Group:* n.d. As clusters of thin fibers, to 40  $\mu\text{m}$ .

**Physical Properties:** Hardness = "Low".  $D(\text{meas.}) < 2.5$   $D(\text{calc.}) = \text{n.d.}$  Soluble in  $\text{H}_2\text{O}$ .

**Optical Properties:** Transparent. *Color:* Colorless.

*Optical Class:* Biaxial. *Orientation:*  $Z = b$ ;  $Y \wedge c = 27^\circ$ .  $\alpha = \sim 1.492$   $\beta = \text{n.d.}$   $\gamma = \sim 1.496$   
 $2V(\text{meas.}) = \text{n.d.}$

**Cell Data:** *Space Group:* n.d.  $a = \text{n.d.}$   $b = \text{n.d.}$   $c = \text{n.d.}$   $\beta = 116^\circ$   $Z = \text{n.d.}$

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

3.428 (100), 5.50 (64), 1.7126 (61), 2.746 (46), 9.20 (39), 4.50 (33), 3.454 (32)

**Chemistry:** (1) Qualitative electron microprobe analysis confirms Na, Ca, and S as the major chemical components; identification depends on correspondence of other properties with those of synthetic material.

**Occurrence:** As evaporative crusts in carbonate-poor soil, playa sediment and around an active boron-rich spring.

**Association:** Thénardite, halite, blödite, gypsum, glauberite, nesquehonite, admontite.

**Distribution:** From northeast of Karapınar, between Konya and Ereğli, Great Konya Basin, Konya Province, Turkey. Along the shore of Lake Victoria, at Sindo and Luanda, and at Kalacha, Turkana district, Kenya. From Schildmauer, near Admont, Styria, Austria. In the USA, from the Eagle Borax Spring, Furnace Creek district, Death Valley, Inyo Co., California. On the Río Grande and Rincón playas, Jujuy Province, Argentina.

**Name:** Honors Professor Hans Peter Eugster (1927–1985), Swiss–American mineralogist, Johns Hopkins University, Baltimore, Maryland, USA, who studied the mineralogy of saline lakes.

**Type Material:** National Museum of Geology and Mineralogy, Leiden, The Netherlands.

**References:** (1) Vergouwen, L. (1981) Eugsterite, a new salt mineral. *Amer. Mineral.*, 66, 632–636.