

**Crystal Data:** Triclinic. *Point Group:*  $\bar{1}$ . As bladed to fibrous prismatic crystals, moderately striated and elongated along [001], may be bent, to 7.5 cm; as intergrown cleavable masses.

**Physical Properties:** *Cleavage:* {110}, excellent; {010}, good; {100},  $\{\bar{1}26\}$ , fair;  $\{1\bar{1}0\}$ ,  $\{\bar{1}01\}$ , poor. *Tenacity:* Brittle. Hardness = 3 ( $\parallel$  {001}), 3.5 ( $\perp$  {001}). D(meas.) = 2.053 D(calc.) = 2.049 Soluble in H<sub>2</sub>O.

**Optical Properties:** Transparent. *Color:* Colorless. *Luster:* Vitreous to satiny. *Optical Class:* Biaxial (-). *Orientation:* X (177°, 86°); Y (-90°, 47°); Z (82°, 43°) [using ( $\phi, \rho$ )]. *Dispersion:*  $r > v$ .  $\alpha = 1.468(1)$   $\beta = 1.507(1)$   $\gamma = 1.529(1)$  2V(meas.) = 73.5°

**Cell Data:** *Space Group:*  $P\bar{1}$ .  $a = 8.598(2)$   $b = 9.570(2)$   $c = 6.576(2)$   $\alpha = 102^\circ 45'(3)'$   $\beta = 107^\circ 30'(3)'$   $\gamma = 71^\circ 31'(3)'$   $Z = 1$

**X-ray Powder Pattern:** Tincalayu deposit, Argentina. 6.936 (100), 3.074 (38), 4.494 (29), 3.135 (19), 2.780 (19), 2.039 (10), 3.302 (8)

Chemistry:	(1)	(2)
B <sub>2</sub> O <sub>3</sub>	59.4	58.20
Na <sub>2</sub> O	19.8	21.08
K <sub>2</sub> O	0.18	
H <sub>2</sub> O <sup>+</sup>	20.4	20.72
Total	99.78	100.00

(1) Tincalayu deposit, Argentina; (OH)<sup>1-</sup> and H<sub>2</sub>O confirmed by DTA; corresponds to Na<sub>3.98</sub>B<sub>10.54</sub>O<sub>17</sub>•7H<sub>2</sub>O. (2) Na<sub>4</sub>B<sub>10</sub>O<sub>17</sub>•7H<sub>2</sub>O.

**Occurrence:** Probably formed from solutions derived from dehydration of borax in a discordant deposit in folded playa siltstones and sandstones.

**Association:** Borax, kernite, halite.

**Distribution:** From the Tincalayu borax deposit, Salar del Hombre Muerto, Salta Province, Argentina.

**Name:** Honors Juan Manuel de Ezcurra (1900–1970), Manager of the Compania Productora de Boratos, S.A., owner of the Tincalayu deposit, Argentina.

**Type Material:** National Museum of Natural History, Washington, D.C., USA, 123927.

**References:** (1) Muessig, S. and R.D. Allen (1957) Ezcurrite (2Na<sub>2</sub>O•5B<sub>2</sub>O<sub>3</sub>•7H<sub>2</sub>O), a new sodium borate from Argentina: occurrence, mineralogy, and associated minerals. *Econ. Geol.*, 52, 426–437. (2) Hurlbut, C.S., Jr., and L.F. Aristarain (1967) Ezcurrite, 2Na<sub>2</sub>O•5B<sub>2</sub>O<sub>3</sub>•7H<sub>2</sub>O: a restudy. *Amer. Mineral.*, 52, 1048–1059. (3) Cannillo, E., A. Dal Negro, and L. Ungaretti (1973) The crystal structure of ezcurrite. *Amer. Mineral.*, 58, 110–115.