

**Crystal Data:** Tetragonal. *Point Group:*  $4/m\ 2/m\ 2/m$ . Crystals are tabular on {001}, in rounded lenslike shapes composed of {001} and {101}, to 5 cm; commonly forms aggregates of rosettes.

**Physical Properties:** *Fracture:* Irregular to subconchoidal. *Tenacity:* Very brittle. Hardness = 3–3.5  $D(\text{meas.}) = 2.076$   $D(\text{calc.}) = 2.070$  (synthetic). Soluble in H<sub>2</sub>O; alters to tinalconite on exposure.

**Optical Properties:** Transparent. *Color:* Colorless to white, pale buff due to organic inclusions; colorless in transmitted light. *Luster:* Vitreous to greasy, dulled on exposure to air. *Optical Class:* Uniaxial (-).  $\omega = 1.519$   $\epsilon = 1.503$

**Cell Data:** *Space Group:*  $P4/nmm$ .  $a = 7.260(2)$   $c = 4.847(2)$   $Z = 2$

**X-ray Powder Pattern:** Synthetic.  
2.697 (10), 2.015 (9), 2.90 (8), 1.659 (8), 2.264 (7), 1.815 (7), 1.709 (7)

Chemistry:	(1)	(2)
B <sub>2</sub> O <sub>4</sub>	22.05	26.71
CO <sub>3</sub>	9.42	
Ca	0.08	
Na	28.93	28.69
Cl	18.72	22.12
H <sub>2</sub> O	20.48	22.48
insol.	0.15	
Total	99.83	100.00

(1) Borax Lake, California, USA; after deduction of Ca as calcite and remaining CO<sub>2</sub> as trona, corresponds to Na<sub>2.00</sub>B<sub>1.00</sub>(OH)<sub>3.69</sub>Cl<sub>1.03</sub>. (2) Na<sub>2</sub>B(OH)<sub>4</sub>Cl.

**Occurrence:** Formed by reaction of boron-rich brines with halite in an extremely desiccated lake (Borax Lake, California, USA).

**Association:** Halite, trona, burkeite, hanksite.

**Distribution:** In the USA, in California, from Borax Lake, Lake Co., and in large crystals at Searles Lake, San Bernardino Co.

**Name:** Honors John Edgar Teeple (1874–1931), for his work on the chemistry of Searles Lake, California, USA.

**Type Material:** Harvard University, Cambridge, Massachusetts, 95832; National Museum of Natural History, Washington, D.C., USA, 97449.

**References:** (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 372–373. (2) Ross, V. and J.O. Edwards (1959) Tetrahedral boron in teepleite and bandylite. *Amer. Mineral.*, 44, 875–877. (3) Effenberger, H. (1982) Verfeinerung der Kristallstruktur von synthetischem Teepleit. *Acta Cryst.*, 38, 82–85 (in German).