

**Crystal Data:** Orthorhombic. *Point Group:* 2/m 2/m 2/m. As well-formed ship-like crystals to 1 mm elongated along [001] and flattened along [010] displaying {010}, {100}, and {101}.  
*Twinning:* Common by an undetermined law.

**Physical Properties:** *Cleavage:* None. *Tenacity:* n.d. *Fracture:* n.d. Hardness = 2.5  
D(meas.) = n.d. D(calc.) = 1.924

**Optical Properties:** Transparent. *Color:* Colorless. *Streak:* White. *Luster:* Vitreous.  
Turns milky white and opaque in a few months, by dehydration to lindbergite MnC<sub>2</sub>O<sub>4</sub>·2H<sub>2</sub>O.  
*Optical Class:* Biaxial.  $\alpha = 1.460$   $\beta = \text{n.d.}$   $\gamma = 1.560$   $2V(\text{meas.}) = \text{n.d.}$   $2V(\text{calc.}) = \text{n.d.}$

**Cell Data:** *Space Group:* Pcaa.  $a = 10.527(5)$   $b = 6.626(2)$   $c = 9.783(6)$   $Z = 4$

**X-ray Powder Pattern:** Falotta mine, Oberhalbstein region, Canton Grisons, Switzerland.  
6.630 (100), 3.801 (90), 3.153 (80), 2.622 (70), 1.726 (70), 4.635 (60), 2.959 (60), 2.122 (60)

**Chemistry:** Powder XRD pattern is identical to synthetic MnC<sub>2</sub>O<sub>4</sub>·3H<sub>2</sub>O.

(1) Falotta mine, Oberhalbstein region, Canton Grisons, Switzerland; qualitative microprobe EDS analyses show only Mn, C, and O.

**Occurrence:** Presumably from reaction of humus and oxalic acids (from plants) with manganese minerals in syndimentary lenses of manganese ore in radiolaritic rocks of an ophiolitic zone.

**Association:** n.d.

**Distribution:** From the abandoned manganese mines of Falotta, Parsettens, and Tinzen, Oberhalbstein region, Canton Grisons, Switzerland.

**Name:** For its type locality, the *Falotta* mine, Switzerland.

**Type Material:** Natural History Museum Basel, Basel, Switzerland (S69).

**References:** (1) Graeser S. and W. Gabriel (2016) Falottait (MnC<sub>2</sub>O<sub>4</sub>·3H<sub>2</sub>O) - ein neues Oxalat-Mineral aus den Schweizer Alpen. Schweizer Strahler, 50(3), 20-27 (in German and French).  
(2) (2020) Amer. Mineral., 105, 1920 (abs. ref. 1).