

Metauranospinite



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Crystal Data: Tetragonal. *Point Group:* n.d. As small tabular crystals with square to rectangular outline.

Physical Properties: *Cleavage:* Perfect on {001}. *Hardness* = 2–3. *D*(meas.) = n.d. *D*(calc.) = 3.65 *Radioactive.*

Optical Properties: *Translucent.* *Color:* Yellow. *Luster:* Pearly on {010}.
Optical Class: Biaxial (-). *Pleochroism:* Weak; *X* = colorless; *Z* = pale yellow. α = n.d.
 β = n.d. γ = 1.618 *2V*(meas.) = n.d.

Cell Data: *Space Group:* n.d. *a* = 7.14 *c* = 17.00 *Z* = 2

X-ray Powder Pattern: Clara mine, Germany.
8.65 (10), 3.57 (10), 3.31 (9), 5.53 (8), 3.00 (5), 5.08 (4), 4.36 (4b)

Chemistry: (1) Identity established by microchemical analysis yielding only Ca, U, As, and coincidence with the X-ray pattern of synthetic material.

Mineral Group: Meta-autunite group.

Occurrence: A secondary mineral of the oxide zone in a hydrothermal polymetallic barite–fluorite deposit.

Association: n.d.

Distribution: From the Clara mine, near Oberwolfach, Black Forest, Germany.

Name: The prefix *meta* indicates the dehydration product of *uranospinite*.

Type Material: n.d.

References: (1) Walenta, K. (1958) Die sekundären Uranminerale des Schwarzwaldes. Jahresheft geol. Landesamt Baden-Württemberg, 3, 17–51, esp. 30–31 (in German). (2) (1960) Amer. Mineral., 45, 254 (abs. ref. 1). (3) Mrose, M.E. (1953) Studies of uranium minerals (XIII): synthetic uranospinites [metauranospinite]. Amer. Mineral., 38, 1159–1168. (4) Walenta, K. (1965) Beiträge zur Kenntnis seltener Arsenatminerale unter besonderer Berücksichtigung von Vorkommen des Schwarzwaldes. 2. Folge. Tschermarks Mineral. Petrog. Mitt., 9, 252–282, esp. 253–262 (in German).