

Crystal Data: Monoclinic. *Point Group:* $2/m$. Crystals are acicular to lamellar, fibrous, showing {100}, {110}, {001}, {011}, {101}, as very fine-grained aggregates. *Twinning:* Common on {100}.

Physical Properties: Hardness = n.d. $D(\text{meas.}) = 2.09$ $D(\text{calc.}) = 2.114$ Soluble in H_2O , leaving a residue of gypsum.

Optical Properties: Semitransparent. *Color:* Colorless to white.

Optical Class: Biaxial (-). *Orientation:* $Y = b$; $Z' \wedge c$ (on {110}) = 2° . $\alpha = 1.524$ $\beta = 1.532$ $\gamma = 1.536$ $2V(\text{meas.}) = 72^\circ$

Cell Data: *Space Group:* $P2_1/a$. $a = 10.17$ $b = 7.15$ $c = 6.34$ $\beta = 102.75^\circ$ $Z = 2$

X-ray Powder Pattern: Žeravice, Czech Republic. (ICDD 11-475).
9.83 (100), 3.30 (65), 4.96 (40), 5.83 (25), 3.00 (25), 3.56 (20), 2.89 (20)

Chemistry: (1) Optical data and X-ray pattern are found to be identical with synthetic $(\text{NH}_4)_2\text{Ca}(\text{SO}_4)_2 \cdot \text{H}_2\text{O}$.

Occurrence: On waste piles of a lignite mine.

Association: Gypsum, mascagnite, tschermigite.

Distribution: From Žeravice, near Kyjov, Czech Republic.

Name: To honor Jaroslav Kokta (1904–1970), Czech chemist who analyzed the synthetic compound.

Type Material: Moravian Museum, Brno, Czech Republic, A6109; National School of Mines, Paris, France; National Museum of Natural History, Washington, D.C., USA, 137963.

References: (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 444.