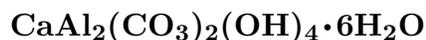


Para-alumohydrocalcite



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Crystal Data: n.d. *Point Group:* n.d. Crystals, to 0.01 mm, in radially fibrous spherules.

Physical Properties: Hardness = 1.75(5) D(meas.) = 2.0 D(calc.) = n.d.

Optical Properties: Semitransparent. *Color:* White; colorless in thin section.

Optical Class: Biaxial (-). *Orientation:* Positive elongation, extinction inclined 10°–12°.

$\alpha = 1.473$ $\beta = \text{n.d.}$ $\gamma = 1.502$ $2V(\text{meas.}) = 69(7)^\circ$

Cell Data: *Space Group:* n.d. $Z = \text{n.d.}$

X-ray Powder Pattern: Gaurdak deposit, Turkmenistan.

7.90 (100), 2.64 (32), 6.20 (30), 3.32 (28), 3.90 (25), 2.68 (24), 4.04 (20)

Chemistry:

	(1)	(2)
SiO ₂	0.35	
CO ₂	22.42	22.56
Al ₂ O ₃	25.88	26.13
MgO	0.16	
CaO	14.06	14.37
H ₂ O ⁺	27.37	
H ₂ O ⁻	9.36	
H ₂ O		36.94
Total	99.60	100.00

(1) Vodin deposit, Russia; corresponds to $(\text{Ca}_{0.98}\text{Mg}_{0.01})_{\Sigma=0.99}\text{Al}_{2.00}(\text{CO}_3)_{2.00}(\text{OH})_{4.00} \cdot 6.0\text{H}_2\text{O}$.

(2) $\text{CaAl}_2(\text{CO}_3)_2(\text{OH})_4 \cdot 6\text{H}_2\text{O}$.

Occurrence: In the oxidized zone of sulfur deposits, formed by decomposition of allophane (Vodin deposit, Russia; Gaurdak deposit, Turkmenistan).

Association: Gypsum, calcite, halloysite (Vodin deposit, Russia; Gaurdak deposit, Turkmenistan); allophane, scarbroite, dundasite (Hampstead Farm quarry, England).

Distribution: From the Vodin sulfur deposit, Samara district, Russia. At the Gaurdak sulfur deposit, Turkmenistan. In Hampstead Farm quarry, Chipping Sodbury, Avon, and from Boughton, near Northampton, England.

Name: From the Greek *para*, for *near*, and its relation to *alumohydrocalcite*.

Type Material: A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, Russia, 81064.

References: (1) Srebrodol'skii, B.I. (1977) Paraalumohydrocalcite – a new mineral. Zap. Vses. Mineral. Obshch., 106, 336–337 (in Russian). (2) Srebrodol'skii, B.I. (1974) Alumohydrocalcite. Izvest. Akad. Nauk., SSSR, Ser. Geol., 10, 88–96 (in Russian). (3) (1978) Amer. Mineral., 63, 794 (abs. refs. 1–2). (4) Pekov, I.V. (1998) Minerals first discovered on the territory of the former Soviet Union. Ocean Pictures, Moscow, 159–160.