Chloraluminitet

Crystal Data: Hexagonal. Point Group: \( \overline{3} \overline{2}/m \). As rhombohedral crystals, showing \{0001\}, \{11\overline{2}0\}, and \{10\overline{1}1\}; as crusts, stalactites, compact masses.

Physical Properties: Hardness = Soft. \( D(\text{meas.}) = 1.644 \) (synthetic). \( D(\text{calc.}) = 1.666 \) (synthetic). Very soluble in \( \text{H}_2\text{O} \); deliquescent.

Optical Properties: Transparent. Color: Colorless, white, yellow; colorless in transmitted light. Optical Class: Uniaxial (–). \( \omega = 1.560 \) \( \epsilon = 1.506 \)

Cell Data: Space Group: \( R\overline{3}c \). \( a = 11.827(6) \) \( c = 11.895(3) \). \( Z = 2 \)

X-ray Powder Pattern: Synthetic. 3.297 (100), 3.246 (55), 2.308 (50), 3.89 (40), 2.764 (40), 3.68 (35), 5.95 (25)

Chemistry: Natural material has not been analyzed.

Occurrence: As crusts around acidic fumaroles (Vesuvius, Italy).

Association: Moly site, chloromagnesite (Vesuvius, Italy); natroalumite, gypsum, anhydrite, pickeringite (Cerro Pintados, Chile).

Distribution: From Vesuvius, Campania, Italy. At Cerro Pintados, 80 km southeast of Iquique, Tarapacá, Chile. On Paricutin volcano, Michoacán, Mexico.

Name: For CHLORine and ALUMINum in its composition.

Type Material: Natural History Museum, Paris, France, 107480.