

Glagolevite**Na(Mg, Al)₆(Si₃Al)O₁₀(OH, O)₈**

Crystal Data: Triclinic. *Point Group:* 1. As poikilitic grains to 3 cm; platy grains to 15 mm.

Physical Properties: *Cleavage:* Perfect {001}. *Fracture:* Stepped. *Tenacity:* Flexible, sectile. Hardness = 3-5 D(meas.) = 2.66 D(calc.) = 2.61

Optical Properties: Transparent. *Color:* Colorless. *Streak:* White. *Luster:* Vitreous to pearly. *Optical Class:* Biaxial (+). $\alpha \approx \beta \approx 1.569(2)$ $\gamma = 1.571(2)$ $2V(\text{meas.}) = 17(3)^\circ$ *Orientation:* $Z \approx c$.

Cell Data: *Space Group:* C1. $a = 5.3580(11)$ $b = 9.2810(19)$ $c = 14.574(3)$
 $\alpha = 90.00(3)^\circ$ $\beta = 97.08(3)^\circ$ $\gamma = 90.00(3)^\circ$ $Z = 2$

X-ray Powder Pattern: Kovdor Phlogopite quarry, Kovdor massif, Kola Peninsula, Russia. 2.556 (100), 1.544 (100), 2.597 (60), 2.457 (50), 2.992 (40), 7.266 (30), 4.629 (30)

Chemistry:	(1)
Na ₂ O	3.94
MgO	37.23
FeO	0.38
MnO	0.11
Al ₂ O ₃	13.36
SiO ₂	29.24
<u>H₂O</u>	<u>14.5</u>
Total	98.76

(1) Kovdor Phlogopite quarry, Kovdor massif, Kola Peninsula, Russia; average of four electron microprobe analyses, H₂O by TGA; corresponds to
 $\text{Na}_{0.75}(\text{Mg}_{5.50}\text{Fe}_{0.03}\text{Mn}_{0.01}\text{Al}_{0.46})_{\Sigma=6.00}(\text{Si}_{2.90}\text{Al}_{1.10})_{\Sigma=4.00}\text{O}_{10}(\text{OH}_{7.88}\text{O}_{0.12})_{\Sigma=8.00} \cdot 0.85\text{H}_2\text{O}$.

Mineral Group: A trioctahedral chlorite group mineral with several polytypes intergrown.

Occurrence: In lenses within altered melilitic rocks in a phlogopite deposit in an alkaline massif.

Association: Pectolite, monticellite, diopside, phlogopite, andradite, calcite, olivine, magnetite, vesuvianite.

Distribution: From the Kovdor Phlogopite quarry, Kovdor massif, Kola Peninsula, Russia.

Name: Honors Russian mineralogist A.A. *Glagolev* (1927-1993).

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

References: (1) Seredkin, M.V., N.I. Organova, S.V. Krivovichev, T. Armbruster, M.M. Moiseev, N.V. Chukanov, V.M. Chukanova, P.C. Burns, I.M. Marsiy, B.B. Zvyagin, N.N. Kononkova, and A.V. Sivtsov (2003) Glagolevite, NaMg₆[Si₃AlO₁₀](OH,O)₈·H₂O, a new mineral. *Zap. Vseross. Mineral. Obshch.*, 132(1), 67-75 (in Russian, English abs.). (2) (2004) *Amer. Mineral.*, 89(1), 250 (abs. ref. 1). (3) (2004) *Can. Mineral.*, 42(1), 227 (abs. ref. 1). (4) Krivovichev, S.V., T. Armbruster, N.I. Organova, P.C. Burns, M.V. Seredkin, and N.V. Chukanov (2004) Incorporation of sodium into the chlorite structure: the crystal structure of glagolevite, NaMg₆[Si₃AlO₁₀](OH,O)₈. *Amer. Mineral.*, 89, 1138-1141.