

Crystal Data: Monoclinic. *Point Group:* 2/m. As prismatic crystals to 3 mm, elongate along [010], and in radial aggregates.

Physical Properties: *Cleavage:* Imperfect on {001} and another plane. *Tenacity:* n.d.
Fracture: Stepped. Hardness = 5 D(meas.) = 2.88(2) D(calc.) = 2.89 Nonfluorescent.

Optical Properties: Translucent to transparent. *Color:* Colorless to white, rarely yellowish, pink, or light orange. *Streak:* n.d. *Luster:* Vitreous.
Optical Class: Biaxial (+). $\alpha = 1.688(2)$ $\beta = 1.698(2)$ $\gamma = 1.802(3)$ $2V(\text{meas.}) = 37(1)^\circ$
Orientation: $a = Z$, $b = Y$, $c \wedge X = 27^\circ$ in obtuse β . *Pleochroism:* $X = Z =$ pale yellow, $Y =$ orange. Colorless varieties nonpleochroic.

Cell Data: *Space Group:* C2/m. $a = 14.292(4)$ $b = 13.750(4)$ $c = 7.792(2)$ $\beta = 117.03(1)^\circ$ $Z = 1$

X-ray Powder Pattern: Kovdor massif, Kola Peninsula, Russia.
3.175 (100), 3.093 (57), 3.083 (55), 6.94 (51), 3.024 (51), 2.576 (48), 6.34 (34)

Chemistry:	(1)		(1)
Na ₂ O	4.61	MnO	0.01
K ₂ O	8.57	Al ₂ O ₃	0.30
SrO	0.01	SiO ₂	39.70
CaO	0.03	TiO ₂	23.96
BaO	6.23	Nb ₂ O ₅	3.65
FeO	1.49	H ₂ O	[9.24]
MgO	1.22	Total	99.02

(1) Kovdor massif, Kola Peninsula, Russia; average electron microprobe analysis, H₂O calculated; corresponds to (Na_{3.57}□_{0.42}Ca_{0.01})_{Σ=4}K₄[(H₂O)_{2.18}Ba_{0.97}□_{0.48}K_{0.37}]_{Σ=4}(□_{0.91}Mg_{0.73}Fe²⁺_{0.36})_{Σ=2}(Ti_{17.20}Nb_{0.66}Fe³⁺_{0.14})_{Σ=8.00}(Si_{15.86}Al_{0.14})_{Σ=16.00}O₄₈[O_{4.46}(OH)_{3.54}]_{Σ=8.00}·8.35H₂O.

Mineral Group: Labuntsovite subgroup of the labuntsovite group.

Occurrence: In cavities within dolomitic carbonatite in an alkaline massif.

Association: Catapleite, anatase, pyrite, calcite.

Distribution: From the Kovdor ultramafic alkaline massif, Kola Peninsula, Russia.

Name: Suffix, *Mg*, refers to the magnesium-dominance in the D site of a member of the *labuntsovite* subgroup.

Type Material: A.E. Fersman Mineralogical Museum, Moscow, Russia (91287).

References: (1) Khomyakov, A.P., G.N. Nechelyustov, G. Ferraris, A. Gula, and G. Ivaldi (2001) Labuntsovite-Fe and labuntsovite-Mg- two new minerals from the Khibina and Kovdor alkaline massifs, Kola Peninsula. *Zap. Ross. Mineral. Obshch.*, 130(4), 36-45. (2) (2002) *Amer. Mineral.*, 87, 1732-1733 (abs. ref. 1). (3) Chukanov, N.V., I.V. Pekov, and A.P. Khomyakov (2002) Recommended nomenclature for labuntsovite-group minerals. *Eur. J. Mineral.*, 14, 165-173. (4) Pekov, I.V. (2007) New minerals from former Soviet Union countries, 1998-2006. *Mineral. Almanac*, 11, 30-31.