

Crystal Data: Monoclinic. *Point Group:* 2/m. As equant to short prismatic or tabular crystals to 0.07 mm, or as anhedral grains to 0.5 mm.

Physical Properties: *Cleavage:* Distinct on {10 $\bar{2}$ } (by analogy to picromerite). *Fracture:* Stepped. *Tenacity:* Brittle. Hardness = 2-2.5 D(meas.) = 2.20(2) D(calc.) = 2.222 Soluble in water.

Optical Properties: Transparent. *Color:* Light greenish blue. *Streak:* White. *Luster:* Vitreous. *Optical Class:* Biaxial (+). $\alpha = 1.486(2)$ $\beta = 1.489(2)$ $\gamma = 1.494(2)$ 2V(meas.) = 75(10)° 2V(calc.) = 76°

Cell Data: *Space Group:* P2₁/c. $a = 6.1310(7)$ $b = 12.1863(14)$ $c = 9.0076(10)$
 $\beta = 105.045(2)^\circ$ $Z = 2$

X-ray Powder Pattern: Ufaley quartz deposit, Kyshtym District, South Urals, Russia. 4.085 (100), 3.685 (85), 4.312 (46), 3.041 (45), 5.386 (34), 2.368 (34), 4.240 (33)

Chemistry:	(1)	(2)
K ₂ O	20.93	21.55
MgO	0.38	
FeO	0.07	
NiO	16.76	17.09
SO ₃	37.20	36.63
H ₂ O	[24.66]	24.73
Total	100.00	100.00

(1) Ufaley quartz deposit, Kyshtym District, South Urals, Russia; average of 5 electron microprobe analyses, supplemented by FTIR spectroscopy, H₂O by difference; corresponding to K_{1.93}Mg_{0.04}Ni_{0.98}S_{2.02}O_{8.05}(H₂O)_{5.95}. (2) K₂Ni(SO₄)₂·6H₂O.

Mineral Group: Picromerite group.

Occurrence: A secondary mineral in the fractures of slightly weathered actinolite-talc schist containing partially vermiculitized biotite and partially altered, nickle-bearing sulfides.

Association: Gypsum, goethite.

Distribution: From vein #169, Ufaley quartz deposit, near Slyudorudnik, Kyshtym District, Chelyabinsk area, South Urals, Russia.

Name: For a member of the *picromerite* group with essential *nickel*.

Type Material: In Russia, at the Natural Scientific Museum, Ilmen State Reserve, Miass (17301) and the A.E. Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow (93776).

References: (1) Belogub, E.V., S.V. Krivovichev, I.V. Pekov, A.M. Kuznetsov, V.O. Yapaskurt, V.A. Kotlyarov, N.V. Chukanov and D.I. Belakovskiy (2015) Nickelpicromerite, K₂Ni(SO₄)₂·6H₂O, a new picromerite-group mineral from Slyudorudnik, South Urals, Russia. *Mineralogy and Petrology*, 109, 143-152. (2) (2016) *Amer. Mineral.*, 101, 2129 (abs. ref. 1).