Nepskoeite $Mg_4Cl(OH)_7 \cdot 6H_2O$

Crystal Data: Orthorhombic. *Point Group*: 2/*m* 2/*m* 2/*m* or *mm*2. As spherulites to 1.5 mm consisting of 0.5-10 mm fibers, elongate along [010].

Physical Properties: *Cleavage*: n.d. *Tenacity*: n.d. *Fracture*: n.d. Hardness = 1.5-2
D(meas.) = 1.76(2) D(calc.) = 1.756

Optical Properties: Translucent. *Color*: Almost colorless with a bright yellow tint. *Streak*: White. *Luster*: Pearly.
Optical Class: Biaxial (-). $\alpha = 1.532(2)$ $\beta \approx \gamma = 1.562(2)$ 2V(meas.) = <5° Straight extinction and negative elongation.

Cell Data: *Space Group*: *Pcmm*, $Pcm2_1$ or *Pc*2*m*. $a = 11.215(9)$ $b = 3.124(3)$ $c = 19.21(3)$ $Z = 2$

X-ray Powder Pattern: Nepskoye salt deposit, Eastern Siberia, Russia.
3.498 (100), 9.78 (46), 9.60 (38), 11.41 (29), 4.25 (20), 10.64 (18), 2.448 (18)

Chemistry:

	(1)
Mg	27.35
Cl	10.04
O+H	[62.61]
Total	100.00

(1) Nepskoye salt deposit, Eastern Siberia, Russia; average electron microprobe analysis supplemented by IR spectroscopy, H+O by difference; corresponds to $Mg_{3.975}Cl(OH)_{7.45} \cdot 5.725H_2O$.

Occurrence: In anhydrite-halite rock in a salt deposit.

Association: Anhydrite, halite, fluoborite, pyrrhotite.

Distribution: At the Nepskoye salt deposit, near Ust-Kut, Irkutsk District, Eastern Siberia, Russia.

Name: For the locality, the Nepskoye salt deposit.

Type Material: A.E. Fersman Mineralogical Museum, RAS, Moscow, Russia (89864).

References: (1) Apollonov, V.N. (1998) Nepskoeite $Mg_4Cl(OH)_7 \cdot 6H_2O$ - a new mineral from the Nepskoye potash salt deposit. Zap. Ross. Mineral. Obshch., 127(1), 41-46 (in Russian with English abs.). (2) (1999) Amer. Mineral., 84, 686 (abs. ref. 1).