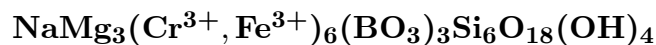


Chromdravite

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Crystal Data: Hexagonal. *Point Group:* $3m$. In pyramidal acicular crystals, to 0.1 mm.

Physical Properties: Hardness = $[\sim 7]$ (by analogy to the tourmaline group).
D(meas.) = 3.40(1) D(calc.) = [3.39]

Optical Properties: Semitransparent. *Color:* Dark green to nearly black.
Optical Class: Uniaxial (-). *Pleochroism:* O = dark green; E = yellow-green.
Absorption: $O > E$. $\omega = 1.778(5)$ $\epsilon = 1.772(5)$

Cell Data: *Space Group:* $R3m$. $a = 16.11$ $c = 7.27$ $Z = [3]$

X-ray Powder Pattern: Velikaya Guba deposit, Karelia.
2.62 (100), 3.58 (75), 3.04 (75), 6.57 (50), 4.05 (50), 2.079 (50), 4.31 (40)

Chemistry:

	(1)
SiO ₂	30.75
TiO ₂	0.13
B ₂ O ₃	9.00
Al ₂ O ₃	2.92
Fe ₂ O ₃	7.65
V ₂ O ₃	1.46
Cr ₂ O ₃	31.60
MnO	0.19
MgO	9.05
CaO	0.16
Na ₂ O	2.66
LOI	4.43
Total	[100.00]

(1) Velikaya Guba deposit, Karelia; recalculated to 100.00% after correction for 6.5% chromian phengite; corresponds to $(\text{Na}_{0.97}\text{Ca}_{0.03})_{\Sigma=1.00}(\text{Mg}_{2.57}\text{V}_{0.22}\text{Al}_{0.16}\text{Mn}_{0.03}\text{Ti}_{0.02})_{\Sigma=3.00}(\text{Cr}_{4.71}^{3+}\text{Fe}_{1.08}^{3+}\text{Al}_{0.21})_{\Sigma=6.00}[(\text{B}_{0.97}\text{Al}_{0.03})_{\Sigma=1.00}\text{O}_3]_3(\text{Si}_{5.81}\text{Al}_{0.19})_{\Sigma=6.00}\text{O}_{18}[(\text{OH})_{3.77}\text{O}_{0.23}]_{\Sigma=4.00}$.

Mineral Group: Tourmaline group.

Occurrence: In micaceous metasomatic clay-carbonate rocks.

Association: Chromian phengite, taeniolite, vanadian muscovite, quartz, dolomite.

Distribution: From the Velikaya Guba uranium deposit, Zaonezhskii Peninsula, southern Karelia.

Name: For CHROMium in the composition and similarity to *dravite*.

Type Material: Mining Institute, St. Petersburg, Russia, 1239/1; A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, Russia, 82811.

References: (1) Rumantseva, E.V. (1983) Chromdravite, a new mineral. *Zap. Vses. Mineral. Obshch.*, 112, 222–226 (in Russian). (2) (1984) *Amer. Mineral.*, 69, 210 (abs. ref. 1). (3) Deer, W.A., R.A. Howie, and J. Zussman (1986) *Rock-forming minerals*, (2nd edition), v. 1B, disilicates and ring silicates, 559–602. (4) Dunn, P.J. (1977) Chromium in dravite. *Mineral. Mag.*, 41, 408–410.