

**Crystal Data:** Orthorhombic. *Point Group:* 2/m 2/m 2/m. As fibrous crystals to 0.4 mm, also as amoeboid grains to 2 mm.

**Physical Properties:** *Cleavage:* Uneven on {001}. *Fracture:* Irregular. *Tenacity:* Brittle. Hardness = 6-6.5 VHN = 520 (20 g load). D(meas.) = 2.97(2) D(calc.) = 2.998

**Optical Properties:** Transparent. *Color:* White, colorless in thin section. *Streak:* White. *Luster:* Vitreous.

*Optical Class:* Biaxial (-).  $\alpha = 1.656(2)$   $\beta = 1.658(2)$   $\gamma = 1.600(2)$   $2V(\text{meas.}) = 80(5)^\circ$   $2V(\text{calc.}) = 89.9^\circ$  *Dispersion:*  $r > v$ , medium. *Orientation:*  $X = b$ ,  $Y = c$ ,  $Z = a$ .

**Cell Data:** *Space Group:* Pbcn.  $a = 5.08510(10)$   $b = 11.4165(3)$   $c = 28.6408(8)$   $Z = 4$

**X-ray Powder Pattern:** Calculated pattern.

2.836 (100), 2.692 (70), 3.047 (67), 3.6098 (39), 1.949 (38), 1.889 (18), 2.439 (17)

Chemistry:	(1)	(2)
SiO <sub>2</sub>	39.62	40.10
MgO	0.05	
CaO	59.22	59.90
MnO	0.08	
FeO	0.18	
Total	99.15	100.00

(1) Birkhin massif, Eastern Siberia, Olkhon region, Russia; average of 23 electron microprobe analyses supplemented by Raman spectroscopy; corresponds to Ca<sub>7.998</sub>Mn<sub>0.009</sub>Mg<sub>0.009</sub>Fe<sub>0.019</sub>Si<sub>4.988</sub>O<sub>18</sub>.

(2) Ca<sub>8</sub>(SiO<sub>4</sub>)<sub>2</sub>(Si<sub>3</sub>O<sub>10</sub>).

**Occurrence:** In veins cutting metasomatically altered silicate carbonate xenoliths in a gabbro massif (Birkhin massif); in cuspidine zones of altered carbonate xenoliths in ignimbrites (Upper Chegem caldera).

**Association:** Dellaite, galuskinite, spurrite, calico-olivine, cuspidine, rusinovite, larnite.

**Distribution:** From the Birkhin massif, Eastern Siberia, Olkhon region and the Upper Chegem caldera, Kabardino-Balkaria, North Caucasus, Russia.

**Name:** Honors Evgeny Vladimirovich Pavlovsky (1901-1982), a geologist who studied Eastern Siberia, in particular the Baikal region, and was one of the founders of the Irkutsk Scientific Center of the Siberian branch of the Russian Academy of Sciences.

**Type Material:** A.E. Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia (4023/1 and 4024/1).

**References:** (1) Galuskin, E.V., F. Gfeller, V.B. Savelyeva, T. Armbruster, B. Lazic, I.O. Galuskina, D.M. Többs, A.E. Zadov, P. Dzierżanowski, N.N. Pertsev, and V.M. Gazeev (2012) Pavlovskyite Ca<sub>8</sub>(SiO<sub>4</sub>)<sub>2</sub>(Si<sub>3</sub>O<sub>10</sub>): A new mineral of altered silicate-carbonate xenoliths from the two Russian type localities, Birkhin massif, Baikal Lake area and Upper Chegem caldera, North Caucasus. *Amer. Mineral.*, 97, 503-512.