

**Crystal Data:** Monoclinic. *Point Group:* 2/m. As irregularly-shaped grains and microcrystalline masses to 0.1 cm.

**Physical Properties:** *Cleavage:* Perfect on {100}. *Fracture:* Uneven. *Tenacity:* Brittle. Hardness = n.d. D(meas.) = n.d. D(calc.) = 2.89 Water soluble and hygroscopic.

**Optical Properties:** Transparent. *Color:* Colorless. *Streak:* White. *Luster:* Vitreous. *Optical Class:* Biaxial (+).  $\alpha = 1.532(2)$   $\beta = 1.544(2)$   $\gamma = 1.570(2)$   $2V(\text{calc.}) = 69.4^\circ$

**Cell Data:** Space Group:  $P2_1/c$ .  $a = 6.8904(5)$   $b = 9.6115(7)$   $c = 8.2144(6)$   $\beta = 96.582(2)^\circ$   $Z = 4$

**X-ray Powder Pattern:** Yadovitaya fumarole, Tolbachik volcano, Kamchatka Peninsula, Russia. 6.845 (100), 3.159 (84), 3.640 (71), 3.114 (52), 2.912 (44), 3.122 (41), 2.981 (41)

<b>Chemistry:</b>	(1)
K <sub>2</sub> O	19.55
Rb <sub>2</sub> O	0.58
ZnO	34.85
SO <sub>3</sub>	34.65
Cl	14.77
<u>-O = Cl<sub>2</sub></u>	<u>3.34</u>
Total	101.06

(1) Yadovitaya fumarole, Second scoria cone, Tolbachik volcano, Kamchatka Peninsula, Russia; average of 6 EDS analyses; corresponds to  $K_{0.97}Rb_{0.01}Zn_{1.00}S_{1.01}O_{4.03}Cl_{0.97}$ .

**Occurrence:** As sublimates near a volcanic fumarole (~250°C.) vent.

**Association:** Langbeinite, kamchatkite, euchlorine, anglesite, zincite.

**Distribution:** From the Yadovitaya fumarole, Second scoria cone, Tolbachik volcano, Kamchatka Peninsula, Russia.

**Name:** Honors Dr. Alexander Borisovich Belousov (b. 1962), Institute of Volcanology, Russian Academy of Sciences, Petropavlovsk-Kamchatskiy, for his contributions to volcanology.

**Type Material:** Mineralogical Museum, St. Petersburg State University, St. Petersburg, Russia (1/19665).

**References:** (1) Siidra, O.I., E.V. Nazarchuk, E.A. Lukina, A.N. Zaitsev, and V.V. Shilovskikh (2018) Belousovite, KZn(SO<sub>4</sub>)Cl, a new sulfate mineral from the Tolbachik volcano with apophyllite sheet-topology. *Mineral. Mag.*, 82(5), 1079-1088. (2) (2019) *Amer. Mineral.*, 104(5), 779-780 (abs. ref. 1).