

Crystal Data: Hexagonal. *Point Group:* 6/m 2/m 2/m. As equant, short prismatic or thick tabular crystals, to 0.5 mm, that display prominent {100} and {001}, and rare {102} and {101}. Typically, in gear-like parallel intergrowths, to 1 mm, and crystal clusters to 1.2 mm.

Physical Properties: *Cleavage:* None. *Fracture:* Conchoidal. *Tenacity:* Brittle.
Hardness = ~3 D(meas.) = 2.78(1) D(calc.) = 2.773

Optical Properties: Transparent. *Color:* Colorless. *Streak:* White. *Luster:* Vitreous.
Optical Class: Uniaxial (-). $\omega = 1.597(2)$ $\varepsilon = 1.572(2)$

Cell Data: Space Group: $P6_3/mmc$. $a = 8.5139(2)$ $c = 11.1408(3)$ $Z = 2$

X-ray Powder Pattern: Oktyabr'skoe deposit, Talnakh, Norilsk district, Siberia, Russia.
3.383 (100), 7.38 (68), 4.259 (46), 2.130 (17), 3.503 (15), 2.493 (14), 2.249 (14)

Chemistry:	(1)	(2)
CaO	28.67	28.65
Al ₂ O ₃	0.11	
GeO ₂	0.50	
SnO ₂	24.20	25.66
SO ₃	27.25	27.28
H ₂ O	[18.34]	18.41
Total	99.07	100.00

(1) Oktyabr'skoe deposit, Talnakh, Norilsk district, Siberia.; average of 4 electron microprobe analyses supplemented by FTIR spectroscopy, H₂O calculated from structure; corresponds to $\text{Ca}_{3.01}(\text{Sn}_{0.95}\text{Ge}_{0.03}\text{Al}_{0.01})_{\Sigma=0.99}\text{S}_{2.01}\text{O}_8(\text{OH})_6 \cdot 3\text{H}_2\text{O}$. (2) $\text{Ca}_3\text{Sn}(\text{SO}_4)_2(\text{OH})_6 \cdot 3\text{H}_2\text{O}$.

Mineral Group: Fleischerite group.

Occurrence: A late-stage, low-temperature hydrothermal mineral in cavities in massive chalcopyrite.

Association: Greenalite, chamosite, pectolite, ferroactinolite, calcite, fluorapatite.

Distribution: From the No. 1 shaft (level 750-m), Oktyabr'skoe Cu-Ni-Pd-Pt deposit (Oktyabr'sky mine), Talnakh, Norilsk district, Siberia, Russia.

Name: Honors Gennadiy Nikolaevich Plesin (b. 1963), a surveyor at the Oktyabr'sky mine and an amateur mineralogist who collected and provided samples of several new species first described from the Norilsk district.

Type Material: A.E. Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia (94618).

References: (1) Pekov, I.V., E.V. Sereda, N.V. Zubkova, V.O. Yapaskurt, N.V. Chukanov, S.N. Britvin, I.S. Lykova, and D.Y. Pushcharovsky (2018) Genplesite, $\text{Ca}_3\text{Sn}(\text{SO}_4)_2(\text{OH})_6 \cdot 3\text{H}_2\text{O}$, a new mineral of the fleischerite group: first occurrence of a tin sulfate in nature. Eur. J. Mineral., 30(2), 375-382. (2) (2019) Amer. Mineral., 104(4), 626 (abs. ref 1).