

Crystal Data: Triclinic. *Point Group:* $\bar{1}$. Rhomb-like crystals, flattened on [001] and elongated along [100] in radiating sheaves, to 3 mm.

Physical Properties: *Cleavage:* Perfect on {001}. *Fracture:* Smooth. *Tenacity:* Sectile. Hardness = 4 D(meas.) = 2.32(5) D(calc.) = 2.363

Optical Properties: Transparent. *Color:* Colorless, white in aggregates. *Streak:* White. *Luster:* Vitreous individuals, silky aggregates. *Optical Class:* Biaxial (-). $\alpha = 1.520(2)$ $\beta = 1.534(2)$ $\gamma = 1.536$ $2V(\text{meas.}) = 5^\circ$ $2V(\text{calc.}) = \text{n.d.}$ *Orientation:* $X = c$.

Cell Data: *Space Group:* $P\bar{1}$. $a = 9.576(11)$ $b = 5.577(11)$ $c = 16.438(19)$ $\alpha = 85.85(2)^\circ$ $\beta = 75.23(2)^\circ$ $\gamma = 60.142(14)^\circ$ $Z = 1$

X-ray Powder Pattern: Ariskop quarry, Aris alkaline complex, Namibia. 15.50 (100), 3.023 (33), 3.159 (30), 1.827 (27), 2.791 (24), 4.22 (16), 4.98 (14)

Chemistry:	(1)
Na ₂ O	9.26
SiO ₂	60.35
K ₂ O	0.23
CaO	17.35
H ₂ O	12.5
Total	99.69

(1) Ariskop quarry, Aris alkaline complex, Namibia; average of 4 electron microprobe analyses, H₂O by Penfield method; corresponding to $(\text{Na}_{4.95}\text{K}_{0.09})_{\Sigma=5.04}(\text{Ca}_{5.57}\text{Na}_{0.43})_{\Sigma=6.00}\text{Si}_{18.10}\text{O}_{38}(\text{OH})_{13}\cdot 6\text{H}_2\text{O}$.

Occurrence: A low-temperature mineral in vesicles in hydrothermally altered phonolite.

Association: Aegirine, albite, manganoneptunite, microcline, natrolite, polyolithionite.

Distribution: From the Ariskop quarry, Aris alkaline complex, 25 km south of Windhoek, Namibia.

Name: Honors Dr. Hans Vidar Ellingsen (b. 1930), who has been chairman of the Norwegian Amateur Geological Society and who collected the first specimens.

Type Material: Mineralogical Museum, St. Petersburg State University, Russia (1/19443), and at the Natural History Museum, Oslo University, Norway (42188).

References: (1) Yakovenchuk, V.N., G.Yu. Ivanyuk, Y.A. Pakhomovsky, E.A. Selivanova, and J.A. Mikhailova (2011) Ellingsenite, $\text{Na}_5\text{Ca}_6\text{Si}_{18}\text{O}_{38}(\text{OH})_{13}\cdot 6\text{H}_2\text{O}$, a new martinite-related mineral species from phonolite of the Aris alkaline complex, Namibia. *Can. Mineral.*, 49, 1165-1173. (2) (2012) *Amer. Mineral.*, 97, 1261 (abs. ref. 1).