Taseqite $Na_{12}Sr_3Ca_6Fe_3Zr_3NbSi_{25}O_{73}(O,OH,H_2O)_3Cl_2$

Crystal Data: Hexagonal. *Point Group*: 3*m*. As platy crystals flattened on {0001}, to 3 mm, and in aggregates.

Physical Properties: *Cleavage*: Fair on {0001}. *Fracture*: Uneven. *Tenacity*: Brittle. Hardness = 5.5 D(meas.) = 3.24(1) D(calc.) = 3.20

Optical Properties: Transparent. *Color*: Clove to yellowish brown, lemon-yellow. *Streak*: White to light brown. *Luster*: Vitreous.
Optical Class: Uniaxial (-). ε = 1.6378(5) ω = 1.6494(3)

Cell Data: *Space Group*: *R*3*m*. *a* = 14.286(6) *c* = 29.99(2) Z = 3

X-ray Powder Pattern: Ilímaussaq alkaline complex, South Greenland.
2.98 (100), 2.86 (100), 9.51 (90), 3.43 (90), 3.19 (80), 11.49 (50)

Chemistry:	(1)		(1)
Na_2O	7.71	ZrO_2	9.89
K_2O	0.23	HfO_2	0.32
CaO	8.19	Nb_2O_5	4.38
SrO	13.98	Ta_2O_5	0.24
MnO	3.02	SiO_2	41.64
FeO	3.92	Cl	1.91
Y_2O_3	0.28	H_2O	[0.59]
Ce_2O_3	0.08	-O = Cl	0.43
SnO_2	0.13	Total	96.08

(1) Ilímaussaq alkaline complex, South Greenland; average of 3 electron microprobe analyses, H_2O calculated, presence of CO_3, OH and H_2O confirmed by IR spectroscopy; corresponding to $(Na_{8.81}Sr_{4.78}K_{0.17}Ce_{0.02})_{\Sigma=13.78}(Ca_{5.17}Mn_{0.59}Y_{0.09})_{\Sigma=5.85}(Fe_{1.93}Mn_{0.92})_{\Sigma=2.85}(Zr_{2.84}Nb_{0.11}Hf_{0.05})_{\Sigma=3.00}$ $(Nb_{1.06}\ Ta_{0.04}Sn_{0.03})_{\Sigma=1.13}Si_{24.55}O_{73}(O_{1.65}OH_{0.75}(H_2O)_{0.74})_{\Sigma=3.14}(Cl_{1.91}OH_{0.09})_{\Sigma=2.00}$.

Mineral Group: Eudialyte group.

Occurrence: In a cavity in a late-stage hydrothermal albitite vein in alkaline igneous complex.

Association: Albite, aegirine, analcime, ancylite-(La), calcite, catapleiite, dolomite, ferrobustamite, fluorapatite, hemimorphite, pectolite, sphalerite, strontianite.

Distribution: From the Taseq slope, northern part of the the Ilímaussaq alkaline complex, Narsap Kommunea, South Greenland.

Name: For the *Taseq* slope of the Ilímaussaq alkaline complex near which the first specimens were collected.

Type Material: Geological Museum, Copenhagen, Denmark.

References: (1) Petersen, O.V., O. Johnsen, R.A. Gault, G. Niedermayr, and J.D. Grice (2004) Taseqite, a new member of the eudialyte group from the Ilímaussaq alkaline complex, South Greenland. Neues Jahrb. Mineral. Monatsh., 83-96. (2) (2004) Amer. Mineral., 89, 1831-1832 (abs. ref. 1).