

Electron Microprobe Data

RRUFF ID: **R050287**

Mineral: **Cryolite**

Locality: Ivigtut, Greenland

Weight Percents

Analysis	#1	#7	#8	#9	#11	#12	#13	#15	#16	#17	#19	Average	StDev
F	53.45	54.1	54.4	54.21	53.56	52.47	54.44	53.88	55.15	53.5	54.51	53.97	0.71
Na	33.71	32.88	33.39	33.41	33.57	33.23	33.57	33.38	33.04	32.89	33.36	33.31	0.28
Al	14.07	13.95	14.08	13.93	14.09	13.99	13.79	13.96	13.76	14.1	13.89	13.96	0.12
Totals	101.23	100.93	101.88	101.55	101.2	99.7	101.8	101.23	101.94	100.49	101.76	101.25	0.68

Cation numbers normalized to 6 F

												ACN	StDev	NCN	CNISF*
Na	3.13	3.01	3.04	3.06	3.11	3.14	3.06	3.07	2.97	3.05	3.04	3.06	0.05	2.95	3.00
Al	1.11	1.09	1.09	1.09	1.11	1.13	1.07	1.10	1.05	1.11	1.08	1.09	0.02	0.05	1.00
Cation	4.24	4.10	4.14	4.14	4.22	4.27	4.13	4.17	4.02	4.16	4.11	4.15	0.07	4.00	

Ideal Chemistry: Na_3AlF_6

Calculated Chemistry: $\text{Na}_{3.00}\text{Al}_{1.00}\text{F}_{6.00}$

Microprobe Calibration Data

	Xtal	El	Line	Pk(s)	Bkg(s)	Bkg(+)	Bkg(-)	Standards
Instrument: Cameca SX50	TAP	Na	Ka	20	10	600	-600	albite-cr
Sample Voltage: 15 kV	TAP	F	Ka	20	10	350	-600	MgF2
Acceleration Current: 10 nA	TAP	Al	Ka	20	10	500	-300	anor-s

Instrument: Cameca SX50

Sample Voltage: 15 kV

Acceleration Current: 10 nA

Beam Size: 10 microns

Date of Analysis: 05/05/2006

ACN: Average Number of Cations

NCN: Normalized Cation Numbers = $\text{ACN} * 4 / 4.15$

StDev: Standard Deviation

CNISF : Cation Numers In Structural Formulae

* = normalized for each structural site and charge balanced