

Table A.1. Averaged EPMA data of blue elbaite samples (Barreto 1999).

Oxides (wt. %)	Samples							Average of the blue color group
	C6A	C7A	C8A	C9A	Q11A	S6VA	S25A	
SiO <sub>2</sub>	36.446	37.245	36.087	37.440	36.126	37.087	36.823	36.751
TiO <sub>2</sub>	0.001	0.016	bdl	0.004	0.007	0.001	0.001	0.004
B <sub>2</sub> O <sub>3</sub>	13.948	14.643	13.893	9.536	13.769	12.127	13.806	13.103
Al <sub>2</sub> O <sub>3</sub>	38.360	35.618	37.238	38.602	39.607	40.615	39.861	38.557
Bi <sub>2</sub> O <sub>3</sub>	bdl	bdl	0.001	0.004	bdl	0.006	0.006	0.002
MgO	0.006	bdl	bdl	0.031	0.011	bdl	0.003	0.007
CaO	0.248	0.142	0.131	0.278	0.268	0.083	0.078	0.175
MnO	1.746	1.190	1.229	1.093	1.720	0.751	0.895	1.232
FeO	3.657	3.097	2.965	4.937	2.830	3.162	3.676	3.475
CuO	bdl	bdl	0.002	0.003	bdl	bdl	bdl	0.001
ZnO	0.285	2.708	2.653	0.065	0.421	0.107	0.068	0.901
Na <sub>2</sub> O	2.488	2.378	2.656	2.288	2.211	2.004	2.029	2.293
H <sub>2</sub> O	3.272	2.965	3.188	2.951	3.368	3.327	3.419	3.213
F	1.134	1.748	1.222	1.429	0.944	0.815	0.611	1.129
O=F	0.478	0.736	0.514	0.602	0.397	0.343	0.257	0.475
SUM	101.113	101.014	100.751	98.059	100.885	99.742	101.019	100.369
No. analyses	5	3	5	7	4	5	5	-
Si*	5.684	5.806	5.688	6.115	5.635	5.855	5.733	-
Ti	0	0.002	0	0	0.001	0	0	-
B	3.754	3.938	3.779	2.683	3.706	3.296	3.708	-
Al	7.053	6.545	6.919	7.432	7.283	7.558	7.316	-
Bi	0	0	0	0	0	0	0	-
Mg	0.001	0	0	0.008	0.003	0	0.001	-
Ca	0.042	0.024	0.022	0.048	0.045	0.014	0.013	-
Mn	0.231	0.157	0.164	0.151	0.227	0.100	0.118	-
Fe	0.477	0.404	0.391	0.675	0.369	0.417	0.479	-
Cu	0	0	0	0	0	0	0	-
Zn	0.033	0.312	0.309	0.008	0.048	0.012	0.008	-
Na	0.752	0.719	0.812	0.724	0.669	0.613	0.612	-
OH	3.404	3.082	3.351	3.213	3.504	3.501	3.550	-
F	0.559	0.861	0.609	0.738	0.465	0.407	0.298	-

bdl: below detection limit.

\* The analyses were carried out for 28 oxygens. The values of H<sub>2</sub>O were quantified by the loss of water obtained from the TGA-DTA method, considering standard samples of structural chemical formulas. Li values were obtained by ICP-MS, and B values by stoichiometric calculus. The F was analyzed by EPMA (Barreto 1999).