

TABLE 6. Refractive indices and densities of accessory minerals of "b" association.

	Acicular mineral	Corundum	Double-refracting mineral	KAlSi ₃ O ₈ ·H ₂ O***	Weakly double-refracting mineral
Refractive indices	Ng' = 1.771* Np' = 1.765*	Ng = 1.767 Np = 1.759	Ng' = 1.548* Np' = 1.537*	Ng = 1.545 Np = 1.535	Ng' = 1.570* Np' = 1.564*
Densities (g/cm ³)	3.95-4.05	3.95-4.10	2.55-2.65	2.58	2.6-2.7

*All +0.003; **Larsen and Berman, 1965; ***Seki, Kennedy, 1964.

TABLE 7. Interplanar spacings of minerals of "b" association.

a		b		c		d	
Acicular mineral		Corundum**		Material adjoining needles		KAlSi ₃ O ₈ ·H ₂ O***	
d*	l	d	l	d*	l	d	l
				4.65	10	7.67	0.5
				4.01	8	4.61	0.3
				3.88	4	3.96	3.0
						3.85	3.3
3.48	10	3.44	3	3.30	3		
				3.25	2		
2.94	4			2.96	10	2.957	10
2.69	2			2.67	10	2.667	8.9
2.55	10	2.54	6			2.518	1.0
2.37	3	2.37	4				
				2.31	3	2.308	1.5
				2.22	5	2.241	6.4
						2.211	1.7
2.09	10	2.08	9	2.09	1		
				1.94	4	1.924	1.3
				1.86	3	1.848	1.3
1.73	8	1.74	5	1.75	2	1.746	0.3
						1.715	0.4
				1.70	1	1.703	0.5
1.60	10	1.599	10	1.60	3		
						1.591	1.3
						1.560	0.7
				1.54	5	1.541	1.0
				1.51	2		
1.40	6	1.401	6				
1.37	8	1.374	7	1.37	1		
				1.33	7	1.334	1.0
						1.321	0.3
						1.283	0.8
				1.28	1	1.260	0.3
1.23	3						
						1.216	0.3
						1.203	0.3
						1.184	0.3

*Corrected relative to NaCl; **Mikheyev, 1957; ***Seki, Kennedy, 1964.

ta for the acicular mineral those for corundum (table 7, -ray data for the adjoining agree with those for hydro- 3·H₂O³ (table 7, col. d). How- cal data, several strong lines ern of the mixture, absent in of hydrosandine, indicate the d mineral in the "b" associa- be identified from the avail-

e indices and the density of al agree closely with those he refractive indices and ouble-refracting mineral agree those of hydrosandine (table b" association contains a e third mineral, we assume sion this mineral is not in second conversion takes

2O·Al₂O₃·4SiO₂·xH₂O + (K-analcime)

l₂O₃ + K₂O·Al₂O₃·6SiO₂· (hydrosandine)

H₂O + H₂O

hydrosandine association specimens up to 1800°C, section above 1800°C con- micaceous mass ("c" type re 1 (3) shows a sketch of a ecimen whose cold zone had 560°C, and whose hot zone

synthesized at high pressures 964).



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