

Oligoclase, $\text{Na}_{0.9-0.7}\text{Ca}_{0.1-0.3}\text{Al}_{1.1-1.3}\text{Si}_{2.9-2.7}\text{O}_8$

Oligoclase is isostructural with albite.

Albite

Downs R T, Hazen R M, Finger L W

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The high-pressure crystal chemistry of low albite and the origin of the pressure dependency of Al-Si ordering

8.1372 12.7870 7.1574 94.245 116.605 87.809 C-1

Atom	x	y	z	Wyckoff
Na	0.269134	0.989040	0.148935	2i
Al1o	0.008896	0.168193	0.207617	2i
Si1m	0.003984	0.820432	0.236646	2i
Si2o	0.692220	0.110443	0.315895	2i
Si2m	0.681617	0.881794	0.360883	2i
O1	0.006146	0.131658	0.968891	2i
O2	0.591577	0.997059	0.278960	2i
O3	0.813702	0.110113	0.195038	2i
O4	0.818977	0.850892	0.256290	2i
O5	0.012388	0.301848	0.269006	2i
O6	0.023273	0.693405	0.227539	2i
O7	0.206430	0.108942	0.386309	2i
O8	0.180922	0.868009	0.428643	2i

(13 × 2i)

Raman Active Modes

WP	A_g	A_u
2i	3	-

Total number of modes:

$$39A_g = 39$$