

Sodalite, Na<sub>4</sub>Si<sub>3</sub>Al<sub>3</sub>O<sub>12</sub>Cl

Sodalite

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Sodalite: High-temperature structures obtained from synchrotron radiation and Rietveld refinements

8.88696 8.88696 8.88696 90 90 90 P-43n

atom	x	y	z	Wyckoff
Na	0.1779	0.1779	0.1779	8e
Al	0.25	0	0.5	6d
Si	0.25	0.5	0	6c
O	0.13974	0.15013	0.43895	24i
Cl	0	0	0	2a

**Raman Active Modes**

WP	A <sub>1</sub>	A <sub>2</sub>	E	T <sub>1</sub>	T <sub>2</sub>
24i	3	.	6	.	9
8e	1	.	2	.	3
6d	.	.	1	.	3
6c	.	.	1	.	3
2a	.	.	.	.	1

Total number of modes:

$$4A_1 + 10E + 19T_2 = 33$$