

Smithsonite, ZnCO₃

Smithsonite

Graf D L

American Mineralogist 46 (1961) 1283-1316

Crystallographic tables for the rhombohedral carbonates

4.6528 4.6528 15.025 90 90 120 R-3c

atom	x	y	z	Wyckoff
Zn	0	0	0	6b
C	0	0	0.25	6a
O	0.2764	0	0.25	18e

Raman Active Modes

WP	A _{1g}	A _{1u}	A _{2g}	A _{2u}	E _u	E _g
18e	1	.	.	.	.	3
6b	.	.	.	.	.	.
6a	.	.	.	.	.	1

Total number of modes:

$$1A_{1g} + 4E_g = 5$$