

$\bar{3}21$

321

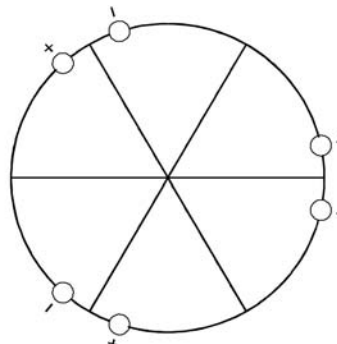
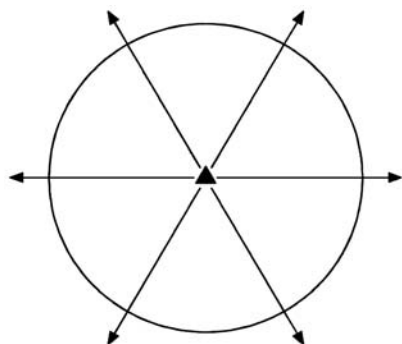
Trigonal

No. 46

$\bar{3}21$

Patterson symmetry $\bar{3}m1$

SECOND SETTING



Origin at 321

Asymmetric unit $0 \leq x; \quad 0 \leq y; \quad 0 \leq z \leq \frac{1}{2}$

Symmetry operations

- | | | |
|---------------|-----------------------|-----------------------|
| (1) 1 | (2) $3^+ \quad 0,0,z$ | (3) $3^- \quad 0,0,z$ |
| (4) 2 $x,x,0$ | (5) 2 $x,0,0$ | (6) 2 $0,y,0$ |

Generators selected (1); $t(0,0,1)$; (2); (4)

Positions

Multiplicity, Wyckoff letter, Site symmetry			Coordinates			Reflection conditions
						General:
6	<i>f</i>	1	(1) x, y, z (4) $y, x, \bar{z}$	(2) $\bar{y}, x - y, z$ (5) $x - y, \bar{y}, \bar{z}$	(3) $\bar{x} + y, \bar{x}, z$ (6) $\bar{x}, \bar{x} + y, \bar{z}$	no conditions
						Special: no extra conditions
3	<i>e</i>	. 2 .	$x, 0, \frac{1}{2}$	$0, x, \frac{1}{2}$	$\bar{x}, \bar{x}, \frac{1}{2}$	
3	<i>d</i>	. 2 .	$x, 0, 0$	$0, x, 0$	$\bar{x}, \bar{x}, 0$	
2	<i>c</i>	3 . .	$0, 0, z$	$0, 0, \bar{z}$		
1	<i>b</i>	3 2 .	$0, 0, \frac{1}{2}$			
1	<i>a</i>	3 2 .	$0, 0, 0$			

Symmetry of special projections

Along [001] $3m$	Along [100] $\bar{3}211$	Along [210] $\bar{3}1m1$
	$\mathbf{a}' = \mathbf{c}$	$\mathbf{a}' = \mathbf{c}$
Origin at $0, 0, z$	Origin at $x, 0, 0$	Origin at $x, \frac{1}{2}x, 0$

Maximal non-isotypic non-enantiomorphic subgroups

I	$[2]\bar{3}11 (\bar{3}, 42)$	1; 2; 3
	$[3]\bar{1}21 (\bar{2}11, 3)$	1; 4
	$[3]\bar{1}21 (\bar{2}11, 3)$	1; 5
	$[3]\bar{1}21 (\bar{2}11, 3)$	1; 6
IIa	none	
IIb	$[3]\bar{3}_221 (\mathbf{c}' = 3\mathbf{c}) (\bar{3}_212, 48)$; $[3]\bar{3}_121 (\mathbf{c}' = 3\mathbf{c}) (\bar{3}_112, 47)$	

Maximal isotypic subgroups and enantiomorphic subgroups of lowest index

IIc	$[2]\bar{3}21 (\mathbf{c}' = 2\mathbf{c}) (\bar{3}12, 46)$
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Minimal non-isotypic non-enantiomorphic supergroups

I	$[2]\bar{3}1m (51)$; $[2]\bar{3}1c (52)$; $[2]622 (62)$; $[2]\bar{6}_322 (65)$; $[2]\bar{6}m2 (71)$; $[2]\bar{6}c2 (72)$
II	none