

$\bar{3}m2$

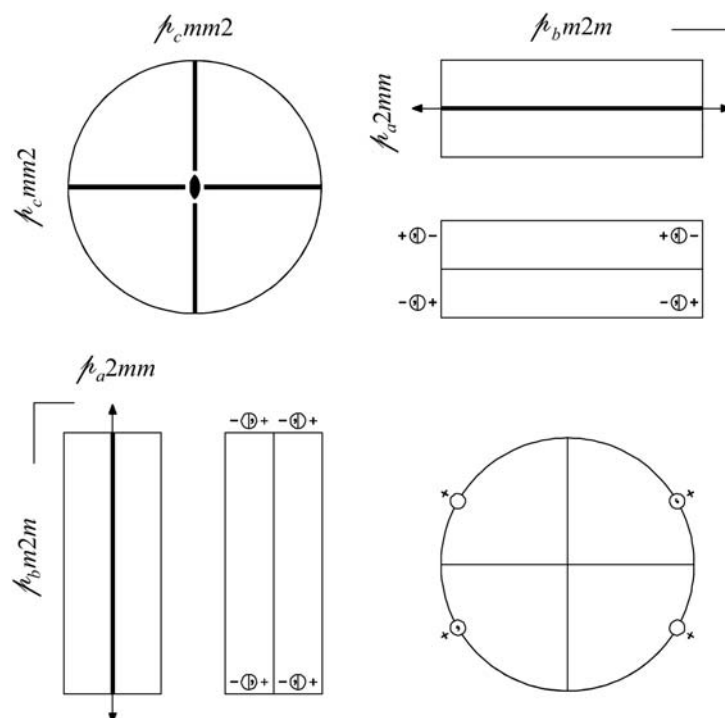
$mm2$

Orthorhombic

No. 15

$\bar{3}m2$

Patterson symmetry $\bar{3}m2$



Origin on $mm2$

Asymmetric unit $0 \leq x; 0 \leq y; 0 \leq z \leq 1$

Symmetry operations

- | | | | |
|-----------|-------------------------|-------------------------|-------------------------|
| (1) 1 | (2) $2_{0,0,z}$ | (3) $m_{x,0,z}$ | (4) $m_{0,y,z}$ |
| (1 0,0,0) | (2 _z 0,0,0) | (m _y 0,0,0) | (m _x 0,0,0) |

Generators selected (1); $t(0,0,1)$; (2); (3)

Positions

		Coordinates				Reflection conditions
						General:
Multiplicity, Wyckoff letter, Site symmetry						
4	<i>d</i> 1	(1) x, y, z	(2) \bar{x}, \bar{y}, z	(3) x, \bar{y}, z	(4) \bar{x}, y, z	no conditions
2	<i>c</i> $m..$	$0, y, z$	$0, \bar{y}, z$			Special: no extra conditions
2	<i>b</i> $.m.$	$x, 0, z$	$\bar{x}, 0, z$			
1	<i>a</i> $mm2$	$0, 0, z$				

Symmetry of special projections

Along [001] $2mm$	Along [100] $\mu 11m$	Along [010] $\mu 11m$
Origin at $0, 0, z$	$\mathbf{a}' = \mathbf{c}$ Origin at $x, 0, 0$	$\mathbf{a}' = \mathbf{c}$ Origin at $0, y, 0$

Maximal non-isotypic non-enantiomorphic subgroups

I	$[2] \mu 112$ (8)	1; 2
	$[2] \mu 1m1$ ($\mu m11$, 4)	1; 3
	$[2] \mu m11$ (4)	1; 4

IIa none

IIb $[2] \mu mc2_1$ ($\mathbf{c}' = 2\mathbf{c}$) (17); $[2] \mu cm2_1$ ($\mathbf{c}' = 2\mathbf{c}$) ($\mu mc2_1$, 17); $[2] \mu cc2$ ($\mathbf{c}' = 2\mathbf{c}$) (16)

Maximal isotypic subgroups and enantiomorphic subgroups of lowest index

IIc $[2] \mu mm2$ ($\mathbf{c}' = 2\mathbf{c}$) (15)

Minimal non-isotypic non-enantiomorphic supergroups

I $[2] \mu mmm$ (20); $[2] \mu 4mm$ (34); $[2] \mu 4_2cm$ (35); $[2] \mu \bar{4}2m$ (37); $[3] \mu 6mm$ (68)

II none