

$\mu 112/m$

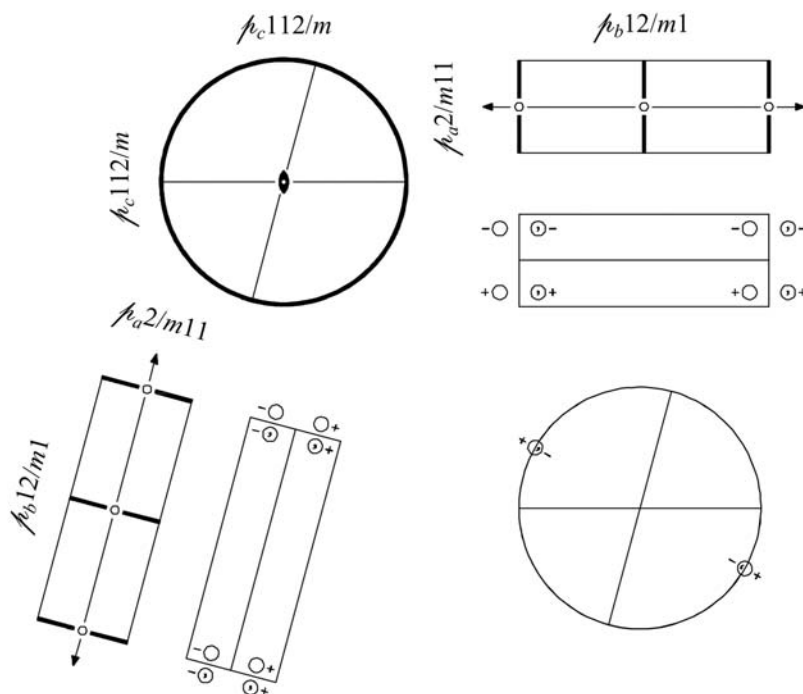
$2/m$

Monoclinic/Rectangular

No. 11

$\mu 112/m$

Patterson symmetry $\mu 112/m$



Origin at centre ($2/m$)

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

Symmetry operations

- | | | | |
|-----------|-------------------------|-----------------------|-----------------|
| (1) 1 | (2) $2 \ 0,0,z$ | (3) $\bar{1} \ 0,0,0$ | (4) $m \ x,y,0$ |
| (1 0,0,0) | (2 _z 0,0,0) | ($\bar{1}$ 0,0,0) | (m_z 0,0,0) |

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

Positions

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

Symmetry of special projections

Along [001] 211	Along [100] $\bar{1}2mm$	Along [010] $\bar{1}2mm$
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	$[2] \bar{1}11m$ (10)	1; 4
	$[2] \bar{1}112$ (8)	1; 2
	$[2] \bar{1}\bar{1}$ (2)	1; 3

IIa none

IIb $[2] \bar{1}112, /m$ ($\mathbf{c}' = 2\mathbf{c}$) (12)

Maximal isotypic subgroups and enantiomorphic subgroups of lowest index

IIc $[2] \bar{1}112/m$ ($\mathbf{c}' = 2\mathbf{c}$) (11)

Minimal non-isotypic non-enantiomorphic supergroups

I $[2] \bar{1}mmm$ (20); $[2] \bar{1}ccm$ (21); $[2] \bar{1}4/m$ (28); $[2] \bar{1}4_2/m$ (29); $[3] \bar{1}6/m$ (60)

II none