

$\bar{2}mm$

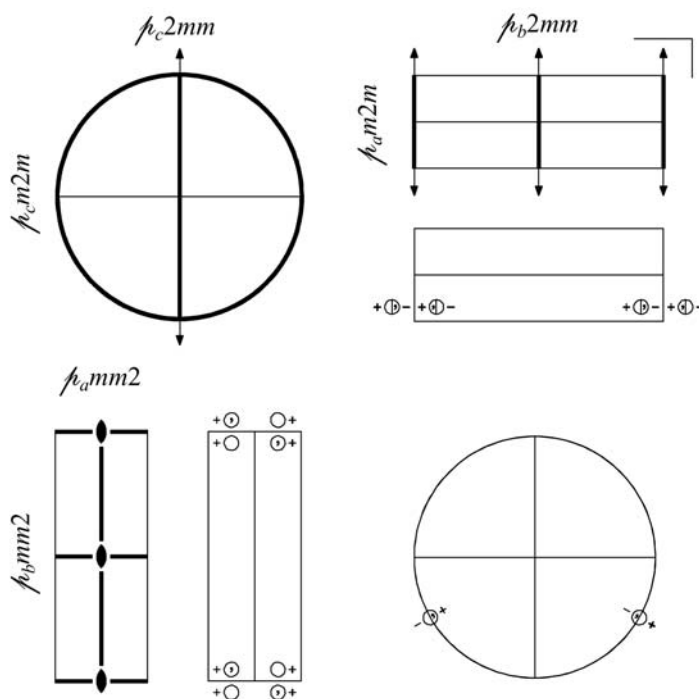
$2mm$

Orthorhombic

No. 18

$\bar{2}mm$

Patterson symmetry $\bar{2}mmm$



Origin on $2mm$

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

Symmetry operations

- | | | | |
|-------------|---------------------------|---------------------------|---------------------------|
| (1) 1 | (2) $2 \ x, 0, 0$ | (3) $m \ x, y, 0$ | (4) $m \ x, 0, z$ |
| (1 0, 0, 0) | (2 _x 0, 0, 0) | (m _z 0, 0, 0) | (m _y 0, 0, 0) |

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

Positions

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

Symmetry of special projections

Along [001] 1 1 m	Along [100] $\mu 2mm$	Along [010] $\mu 1m1$
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	$[2] \mu 11m$ (10)	1; 3
	$[2] \mu 1m1$ ($\mu m11$, 4)	1; 4
	$[2] \mu 211$ (3)	1; 2

IIa none

IIb $[2] \mu 2cm$ ($\mathbf{c}' = 2\mathbf{c}$) (19)

Maximal isotypic subgroups and enantiomorphic subgroups of lowest index

IIc $[2] \mu 2mm$ ($\mathbf{c}' = 2\mathbf{c}$) (18)

Minimal non-isotypic non-enantiomorphic supergroups

I $[2] \mu mmm$ (20); $[2] \mu mcm$ (22); $[3] \mu \bar{6}m2$ (71)

II none