

$\bar{2}mm$

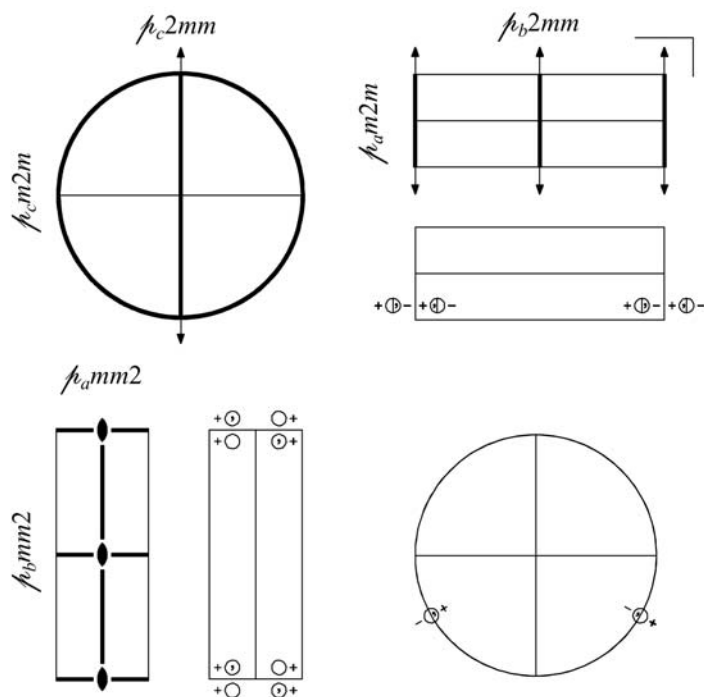
$2mm$

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)  $m \ x, 0, z$

**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  Special: no extra conditions
2	$e$ . $m$ .	$x, 0, z$	$x, 0, \bar{z}$			
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**

<b>I</b>	$[2] \mu 11m$ (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