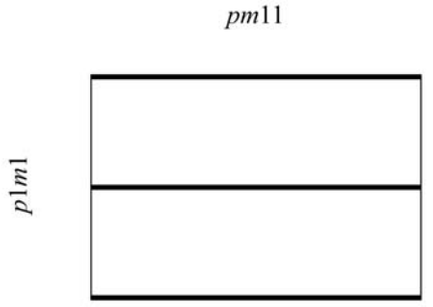
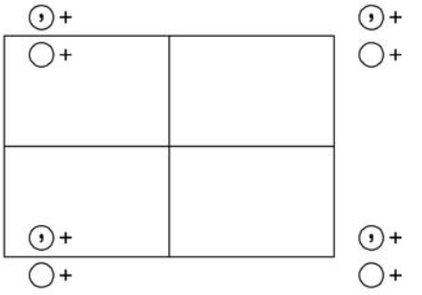
$pm11$ m Monoclinic/Rectangular

No. 11 $pm11$ Patterson symmetry $p2/m11$





Origin on mirror plane m

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

Symmetry operations

(1) 1 $(1|0,0,0)$
(2) m $0,y,z$ $(m_x|0,0,0)$

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

Positions

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

Symmetry of special projections

Along [001] $p1m1$
$\mathbf{a}'=\mathbf{a}$ $\mathbf{b}'=\mathbf{b}_p$
Origin at $0,0,z$

Along [100] $\not{p}111$
$\mathbf{a}'=\mathbf{b}$
Origin at $x,0,0$

Along [010] $\not{p}1m1$
$\mathbf{a}'=\mathbf{a}$
Origin at $0,y,0$

Maximal non-isotypic subgroups

I [2] $p1$ (1) 1

IIa none

IIb [2] $cm11$ ($\mathbf{a}'=2\mathbf{a},\mathbf{b}'=2\mathbf{b}$) (13); [2] $pb11$ ($\mathbf{b}'=2\mathbf{b}$) (12)

Maximal isotypic subgroups of lowest index

IIc [2] $pm11$ ($\mathbf{a}'=2\mathbf{a}$) (11); [2] $pm11$ ($\mathbf{b}'=2\mathbf{b}$) (11)

Minimal non-isotypic supergroups

I [2] $p2/m11$ (14); [2] $p2_1/m11$ (15); [2] $pmm2$ (23); [2] $pma2$ (24); [2] $pm2m$ (27); [2] $pm2_1b$ (28); [2] $pm2a$ (31); [2] $pm2_1n$ (32)

II [2] $cm11$ (13)