

$pb11$

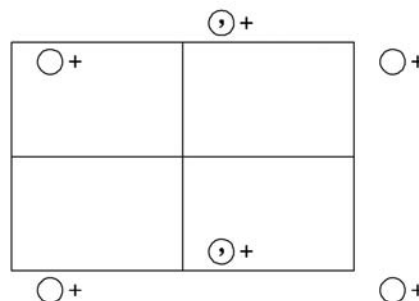
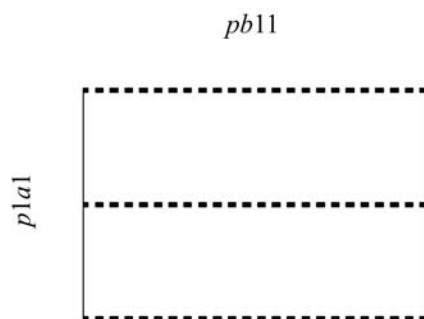
m

Monoclinic/Rectangular

No. 12

$pb11$

Patterson symmetry $p2/m11$



Origin on glide plane b

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

Symmetry operations

(1) 1 (2) $b \ 0,y,z$

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

Positions

Multiplicity, Wyckoff letter, Site symmetry	Coordinates	Reflection conditions
2 <i>a</i> 1	(1) x, y, z (2) $\bar{x}, y + \frac{1}{2}, z$	General: $0k: k = 2n$

Symmetry of special projections

Along [001] $p1g1$ $\mathbf{a}' = \mathbf{a}$ $\mathbf{b}' = \mathbf{b}_p$ Origin at $0, 0, z$	Along [100] $\bar{1}111$ $\mathbf{a}' = \frac{1}{2}\mathbf{b}$ Origin at $x, 0, 0$	Along [010] $\bar{1}m1$ $\mathbf{a}' = \mathbf{a}$ Origin at $0, y, 0$
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Maximal non-isotypic subgroups

I [2] $p1(1) 1$
IIa none
IIb none

Maximal isotypic subgroups of lowest index

IIc [2] $pb11(\mathbf{a}' = 2\mathbf{a})(12)$
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Minimal non-isotypic supergroups

I [2] $p2/b11(16)$; [2] $p2_1/b11(17)$; [2] $pma2(24)$; [2] $pba2(25)$; [2] $pb2_1m(29)$; [2] $pb2b(30)$; [2] $pb2_1a(33)$; [2] $pb2n(34)$
II [2] $cm11(13)$; [2] $pm11(\mathbf{b}' = \frac{1}{2}\mathbf{b})(11)$