

$p\bar{1}$

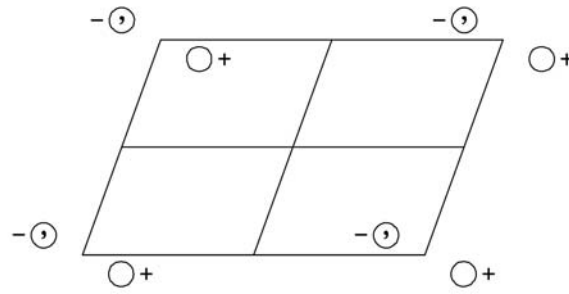
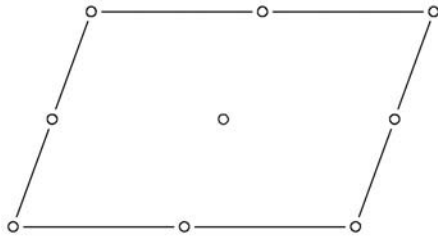
$\bar{1}$

Triclinic/Oblique

No. 2

$p\bar{1}$

Patterson symmetry  $p\bar{1}$



Origin at  $\bar{1}$

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

Symmetry operations

(1) 1 (2)  $\bar{1}$  0,0,0

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

**Positions**

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

**Symmetry of special projections**

Along  $[001] p2$

$\mathbf{a}' = \mathbf{a}_p$        $\mathbf{b}' = \mathbf{b}_p$

Origin at  $0, 0, z$

Along  $[100] \cancel{2}11$

$\mathbf{a}' = \mathbf{b}_p$

Origin at  $x, 0, 0$

Along  $[010] \cancel{2}11$

$\mathbf{a}' = \mathbf{a}_p$

Origin at  $0, y, 0$

**Maximal non-isotypic subgroups**

**I**  $[2] p1 (1) 1$

**IIa** none

**IIb** none

**Maximal isotypic subgroups of lowest index**

**IIc**  $[2] p\bar{1} (\mathbf{a}' = 2\mathbf{a}$  or  $\mathbf{b}' = 2\mathbf{b}$  or  $\mathbf{a}' = \mathbf{a} + \mathbf{b}, \mathbf{b}' = -\mathbf{a} + \mathbf{b}) (2)$

**Minimal non-isotypic supergroups**

**I**  $[2] p112/m (6)$ ;  $[2] p112/a (7)$ ;  $[2] p2/m11 (14)$ ;  $[2] p2_1/m11 (15)$ ;  $[2] p2/b11 (16)$ ;  $[2] p2_1/b11 (17)$ ;  $[2] c2/m11 (18)$ ;  $[3] p\bar{3} (66)$

**II** none