

$\mu 6$

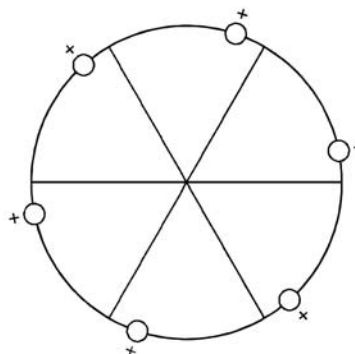
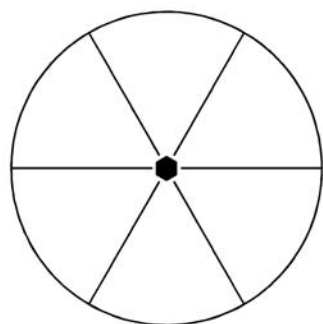
6

Hexagonal

No. 53

$\mu 6$

Patterson symmetry $\mu 6/m$



Origin on 6

Asymmetric unit $0 \leq x; 0 \leq y; 0 \leq z \leq 1; y \leq x$

Symmetry operations

- | | | |
|---------------|-----------------|-----------------|
| (1) 1 | (2) $3^+ 0,0,z$ | (3) $3^- 0,0,z$ |
| (4) $2 0,0,z$ | (5) $6^- 0,0,z$ | (6) $6^+ 0,0,z$ |

Generators selected (1); $t(0,0,1)$; (2); (4)

Positions

Multiplicity, Wyckoff letter, Site symmetry	Coordinates			Reflection conditions
6 <i>b</i> 1	(1) x, y, z (4) \bar{x}, \bar{y}, z	(2) $\bar{y}, x - y, z$ (5) $y, \bar{x} + y, z$	(3) $\bar{x} + y, \bar{x}, z$ (6) $x - y, x, z$	General: no conditions Special: no extra conditions
1 <i>a</i> 6	0,0,z			

Symmetry of special projections

Along [001] 6	Along [100] $\mu 1 1 m$ $\mathbf{a}' = \mathbf{c}$ Origin at $x, 0, 0$	Along [210] $\mu 1 1 m$ $\mathbf{a}' = \mathbf{c}$ Origin at $x, \frac{1}{2}x, 0$
Origin at 0,0,z		

Maximal non-isotypic non-enantiomorphic subgroups

I	$[2] \mu 3 (42)$ 1; 2; 3 $[3] \mu 1 1 2 (8)$ 1; 4
IIa	none
IIb	$[2] \mu 6_3 (\mathbf{c}' = 2\mathbf{c}) (56)$; $[3] \mu 6_4 (\mathbf{c}' = 3\mathbf{c}) (57)$; $[3] \mu 6_2 (\mathbf{c}' = 3\mathbf{c}) (55)$

Maximal isotypic subgroups and enantiomorphic subgroups of lowest index

IIc $[2] \mu 6 (\mathbf{c}' = 2\mathbf{c}) (53)$

Minimal non-isotypic non-enantiomorphic supergroups

I	$[2] \mu 6/m (60)$; $[2] \mu 6 2 2 (62)$; $[2] \mu 6 m m (68)$; $[2] \mu 6 c c (69)$
II	none