

$\bar{3}$

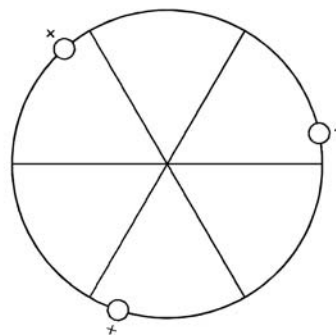
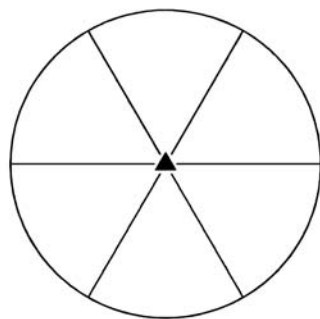
3

Trigonal

No. 42

$\bar{3}$

Patterson symmetry $\bar{3}$



Origin on 3

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

Symmetry operations

- | | | |
|-------------|---------------------|---------------------|
| (1) 1 | (2) $3^+ 0, 0, z$ | (3) $3^- 0, 0, z$ |
| (1 0, 0, 0) | (3_2^+ 0, 0, 0) | (3_2^- 0, 0, 0) |

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

Positions

Multiplicity,
Wyckoff letter,
Site symmetry

Coordinates

Reflection conditions

3 b 1 (1) x, y, z (2) $\bar{y}, x - y, z$ (3) $\bar{x} + y, \bar{x}, z$

General:

no conditions

Special: no extra conditions

1 a 3.. 0,0,z

Symmetry of special projections

Along [001] 3

Along [100] $\neq 1$

Along [210] $\neq 1$

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

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

Origin at 0,0,z

Origin at $x, 0, 0$

Origin at $x, \frac{1}{2}x, 0$

Maximal non-isotypic non-enantiomorphic subgroups

I $[3] \neq 1$ (1) 1

IIa none

IIb $[3] \neq 3_2$ ($\mathbf{c}' = 3\mathbf{c}$) (44); $[3] \neq 3_1$ ($\mathbf{c}' = 3\mathbf{c}$) (43)

Maximal isotypic subgroups and enantiomorphic subgroups of lowest index

IIc $[2] \neq 3$ ($\mathbf{c}' = 2\mathbf{c}$) (42)

Minimal non-isotypic non-enantiomorphic supergroups

I $[2] \neq \bar{3}$ (45); $[2] \neq 312$ (46); $[2] \neq 3m1$ (49); $[2] \neq 3c1$ (50); $[2] \neq 6$ (53); $[2] \neq 6_3$ (56); $[2] \neq \bar{6}$ (59)

II none