

$\bar{4}3$

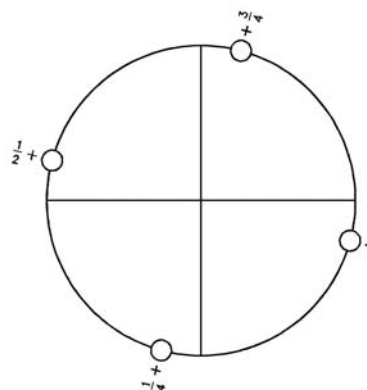
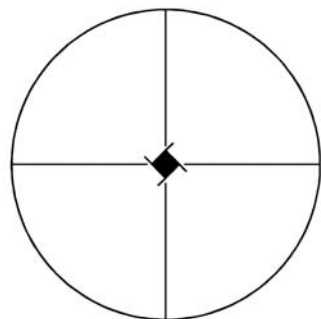
4

Tetragonal

No. 26

$\bar{4}3$

Patterson symmetry $\bar{4}/m$



Origin on 4_3

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

Symmetry operations

- | | | | |
|-------------|--|--|--|
| (1) 1 | (2) $2(\frac{1}{2})$ 0, 0, z | (3) $4^+(\frac{3}{4})$ 0, 0, z | (4) $4^-(\frac{1}{4})$ 0, 0, z |
| (1 0, 0, 0) | (2 _z 0, 0, $\frac{1}{2}$) | (4 _z 0, 0, $\frac{3}{4}$) | (4 _z ⁻¹ 0, 0, $\frac{1}{4}$) |

Generators selected (1); $t(0,0,1)$; (2); (3)

Positions

Multiplicity, Wyckoff letter, Site symmetry	Coordinates	Reflection conditions
		General:
4 <i>a</i> 1	(1) x, y, z (2) $\bar{x}, \bar{y}, z + \frac{1}{2}$ (3) $\bar{y}, x, z + \frac{3}{4}$ (4) $y, \bar{x}, z + \frac{1}{4}$	$l : l = 4n$

Symmetry of special projections

Along [001] 4	Along [100] $\mu 11g$	Along [110] $\mu 11g$
Origin at 0,0,z	$\mathbf{a}' = \mathbf{c}$ Origin at $x, 0, 0$	$\mathbf{a}' = \mathbf{c}$ Origin at $x, x, 0$

Maximal non-isotypic non-enantiomorphic subgroups

I [2] $\mu 112_1$ (9) 1; 2

IIa none

IIb none

Maximal isotypic subgroups and enantiomorphic subgroups of lowest index

IIc [3] $\mu 4_1$ ($\mathbf{c}' = 3\mathbf{c}$) (24); [5] $\mu 4_3$ ($\mathbf{c}' = 5\mathbf{c}$) (26)

Minimal non-isotypic non-enantiomorphic supergroups

I [2] $\mu 4_3 22$ (33)

II [2] $\mu 4_2$ ($\mathbf{c}' = \frac{1}{2}\mathbf{c}$) (25)