

C_{2v}^6
 $Pnc2$

No. 30

 $Pnc2$
Generators selected (1); $t(1,0,0)$; $t(0,1,0)$; $t(0,0,1)$; (2); (3)

General position

 Multiplicity,
Wyckoff letter,
Site symmetry

Coordinates

 4 c 1 (1) x, y, z (2) \bar{x}, \bar{y}, z (3) $x, \bar{y} + \frac{1}{2}, z + \frac{1}{2}$ (4) $\bar{x}, y + \frac{1}{2}, z + \frac{1}{2}$
I Maximal translationengleiche subgroups

[2] $P1c1$ (7)	1; 3		0, 1/4, 0
[2] $Pn11$ (7, $P1c1$)	1; 4	b, a, -b - c	
[2] $P112$ (3)	1; 2		

II Maximal klassengleiche subgroups

• Enlarged unit cell

[2] $a' = 2a$			
$Pnn2$ (34)	$\langle 2; 3 + (1, 0, 0) \rangle$	2a, b, c	
$Pnn2$ (34)	$\langle (2; 3) + (1, 0, 0) \rangle$	2a, b, c	1/2, 0, 0
$Pnc2$ (30)	$\langle 2; 3 \rangle$	2a, b, c	
$Pnc2$ (30)	$\langle 3; 2 + (1, 0, 0) \rangle$	2a, b, c	1/2, 0, 0
[3] $a' = 3a$			
$Pnc2$ (30)	$\langle 2; 3 \rangle$	3a, b, c	
$Pnc2$ (30)	$\langle 3; 2 + (2, 0, 0) \rangle$	3a, b, c	1, 0, 0
$Pnc2$ (30)	$\langle 3; 2 + (4, 0, 0) \rangle$	3a, b, c	2, 0, 0
[3] $b' = 3b$			
$Pnc2$ (30)	$\langle 2; 3 + (0, 1, 0) \rangle$	a, 3b, c	
$Pnc2$ (30)	$\langle 2 + (0, 2, 0); 3 + (0, 3, 0) \rangle$	a, 3b, c	0, 1, 0
$Pnc2$ (30)	$\langle 2 + (0, 4, 0); 3 + (0, 5, 0) \rangle$	a, 3b, c	0, 2, 0
[3] $c' = 3c$			
$Pnc2$ (30)	$\langle 2; 3 + (0, 0, 1) \rangle$	a, b, 3c	

• Series of maximal isomorphic subgroups

[p] $a' = pa$			
$Pnc2$ (30)	$\langle 3; 2 + (2u, 0, 0) \rangle$	pa, b, c	$u, 0, 0$
	$p > 2; 0 \leq u < p$		
	p conjugate subgroups for the prime p		
[p] $b' = pb$			
$Pnc2$ (30)	$\langle 2 + (0, 2u, 0); 3 + (0, \frac{p}{2} - \frac{1}{2} + 2u, 0) \rangle$	a, pb, c	$0, u, 0$
	$p > 2; 0 \leq u < p$		
	p conjugate subgroups for the prime p		
[p] $c' = pc$			
$Pnc2$ (30)	$\langle 2; 3 + (0, 0, \frac{p}{2} - \frac{1}{2}) \rangle$	a, b, pc	
	$p > 2$		
	no conjugate subgroups		

I Minimal translationengleiche supergroups

 [2] $Pban$ (50); [2] $Pnna$ (52); [2] $Pmna$ (53); [2] $Pbcn$ (60)

II Minimal non-isomorphic klassengleiche supergroups

• Additional centring translations

 [2] $Ccc2$ (37); [2] $Amm2$ (38); [2] $Bbe2$ (41, $Aea2$); [2] $Ima2$ (46)

• Decreased unit cell

 [2] $b' = \frac{1}{2}b$ $Pcc2$ (27); [2] $c' = \frac{1}{2}c$ $Pbm2$ (28, $Pma2$)