C_{2v}^{16} *Ama*2 No. 40 *Ama*2

Generators selected (1); $t(1,0,0)$; $t(0,1,0)$; $t(0,0,1)$; $t(0,\frac{1}{2},\frac{1}{2})$; (2); (3)

General position

Multiplicity, Wyckoff letter, Site symmetry	Coordinates			
	$(0,0,0)+$	$(0,\frac{1}{2},\frac{1}{2})+$		
8 c 1	(1) x,y,z	(2) $\bar{x},\bar{y},z$	(3) $x+\frac{1}{2},\bar{y},z$	(4) $\bar{x}+\frac{1}{2},y,z$

I Maximal *translationengleiche* subgroups

[2] *A*1*a*1 (9, *C*1*c*1)	(1; 3)+	**c**, **b**, −**a**	
[2] *Am*11 (6, *P*1*m*1)	(1; 4)+	1/2(**b**+**c**), **a**, 1/2(**b**−**c**)	1/4, 0, 0
[2] *A*112 (5)	(1; 2)+		

II Maximal *klassengleiche* subgroups

- **Loss of centring translations**

[2] *Pnn*2 (34)	1; 2; (3; 4)+$(0,\frac{1}{2},\frac{1}{2})$		
[2] $Pna2_1$ (33)	1; 3; (2; 4)+$(0,\frac{1}{2},\frac{1}{2})$		0, 1/4, 0
[2] $Pmn2_1$ (31)	1; 4; (2; 3)+$(0,\frac{1}{2},\frac{1}{2})$		1/4, 1/4, 0
[2] *Pma*2 (28)	1; 2; 3; 4		

- **Enlarged unit cell**

[3] **a**′ = 3**a**			
*Ama*2 (40)	⟨2; 3+(1,0,0)⟩	3**a**, **b**, **c**	
*Ama*2 (40)	⟨2+(2,0,0); 3+(1,0,0)⟩	3**a**, **b**, **c**	1, 0, 0
*Ama*2 (40)	⟨2+(4,0,0); 3+(1,0,0)⟩	3**a**, **b**, **c**	2, 0, 0
[3] **b**′ = 3**b**			
*Ama*2 (40)	⟨2; 3⟩	**a**, 3**b**, **c**	
*Ama*2 (40)	⟨(2; 3)+(0,2,0)⟩	**a**, 3**b**, **c**	0, 1, 0
*Ama*2 (40)	⟨(2; 3)+(0,4,0)⟩	**a**, 3**b**, **c**	0, 2, 0
[3] **c**′ = 3**c**			
*Ama*2 (40)	⟨2; 3⟩	**a**, **b**, 3**c**	

- **Series of maximal isomorphic subgroups**

[p] **a**′ = p**a**			
*Ama*2 (40)	⟨2+(2u,0,0); 3+($\frac{p}{2}-\frac{1}{2}$,0,0)⟩ prime $p>2$; $0\le u<p$ p conjugate subgroups	p**a**, **b**, **c**	u, 0, 0
[p] **b**′ = p**b**			
*Ama*2 (40)	⟨(2; 3)+(0,2u,0)⟩ prime $p>2$; $0\le u<p$ p conjugate subgroups	**a**, p**b**, **c**	0, u, 0
[p] **c**′ = p**c**			
*Ama*2 (40)	⟨2; 3⟩ prime $p>2$ no conjugate subgroups	**a**, **b**, p**c**	

I Minimal *translationengleiche* supergroups

[2] *Cmcm* (63); [2] *Cccm* (66); [3] $P\bar{6}c2$ (188); [3] $P\bar{6}2c$ (190)

II Minimal non-isomorphic *klassengleiche* supergroups

- **Additional centring translations**

[2] *Fmm*2 (42)

- **Decreased unit cell**

[2] **b**′ = $\frac{1}{2}$**b**, **c**′ = $\frac{1}{2}$**c** *Pma*2 (28); [2] **a**′ = $\frac{1}{2}$**a** *Amm*2 (38)

