

Aea2Former space-group symbol *Aba2*

No. 41

Aea2**C_{2v}¹⁷****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 *b* 1(1) x,y,z (2) \bar{x},\bar{y},z (3) $x+\frac{1}{2},\bar{y}+\frac{1}{2},z$ (4) $\bar{x}+\frac{1}{2},y+\frac{1}{2},z$ **I Maximal translationengleiche subgroups**

[2] <i>A1a1</i> (9, <i>C1c1</i>)	(1; 3)+	c, b, -a	0, 1/4, 0
[2] <i>Ae11</i> (7, <i>P1c1</i>)	(1; 4)+	$1/2(-\mathbf{b} + \mathbf{c}), \mathbf{a}, \mathbf{b}$	1/4, 0, 0
[2] <i>A112</i> (5)	(1; 2)+		

II Maximal klassengleiche subgroups• **Loss of centring translations**

[2] <i>Pbn2₁</i> (33, <i>Pna2₁</i>)	1; 4; (2; 3) + $(0, \frac{1}{2}, \frac{1}{2})$	-b, a, c	0, 1/4, 0
[2] <i>Pba2</i> (32)	1; 2; 3; 4		
[2] <i>Pcn2</i> (30, <i>Pnc2</i>)	1; 2; (3; 4) + $(0, \frac{1}{2}, \frac{1}{2})$	-b, a, c	
[2] <i>Pca2₁</i> (29)	1; 3; (2; 4) + $(0, \frac{1}{2}, \frac{1}{2})$		0, 1/4, 0

• **Enlarged unit cell**

[3] a' = 3a			
{ <i>Aea2</i> (41)	$\langle 2; 3 + (1, 0, 0) \rangle$	3a, b, c	
{ <i>Aea2</i> (41)	$\langle 2 + (2, 0, 0); 3 + (1, 0, 0) \rangle$	3a, b, c	1, 0, 0
{ <i>Aea2</i> (41)	$\langle 2 + (4, 0, 0); 3 + (1, 0, 0) \rangle$	3a, b, c	2, 0, 0
[3] b' = 3b			
{ <i>Aea2</i> (41)	$\langle 2; 3 + (0, 1, 0) \rangle$	a, 3b, c	
{ <i>Aea2</i> (41)	$\langle 2 + (0, 2, 0); 3 + (0, 3, 0) \rangle$	a, 3b, c	0, 1, 0
{ <i>Aea2</i> (41)	$\langle 2 + (0, 4, 0); 3 + (0, 5, 0) \rangle$	a, 3b, c	0, 2, 0
[3] c' = 3c			
<i>Aea2</i> (41)	$\langle 2; 3 \rangle$	a, b, 3c	

• **Series of maximal isomorphic subgroups**

[<i>p</i>] a' = pa			
<i>Aea2</i> (41)	$\langle 2 + (2u, 0, 0); 3 + (\frac{p}{2} - \frac{1}{2}, 0, 0) \rangle$ prime $p > 2$; $0 \leq u < p$ <i>p</i> conjugate subgroups	pa, b, c	<i>u</i> , 0, 0
[<i>p</i>] b' = pb			
<i>Aea2</i> (41)	$\langle 2 + (0, 2u, 0); 3 + (0, \frac{p}{2} - \frac{1}{2} + 2u, 0) \rangle$ prime $p > 2$; $0 \leq u < p$ <i>p</i> conjugate subgroups	a, pb, c	0, <i>u</i> , 0
[<i>p</i>] c' = pc			
<i>Aea2</i> (41)	$\langle 2; 3 \rangle$ prime $p > 2$ no conjugate subgroups	a, b, pc	

I Minimal translationengleiche supergroups[2] *Cmce* (64); [2] *Ccce* (68)**II Minimal non-isomorphic klassengleiche supergroups**• **Additional centring translations**[2] *Fmm2* (42)• **Decreased unit cell**[2] **b' = $\frac{1}{2}$ b, c' = $\frac{1}{2}$ c** *Pma2* (28); [2] **a' = $\frac{1}{2}$ a** *Aem2* (39)