

SG No. 35 C_{2v}^{11} $Cmm2$ [orthorhombic]

* plus set: $+ [0, 0, 0]$, $+ [\frac{1}{2}, \frac{1}{2}, 0]$

* Wyckoff site: 2a, site symmetry: mm2

Table 1: Wyckoff bond: 2a@2a

No.	vector	center	mapping
1	$[0, 0, Z]$	$[0, 0, z]$	$[1, 2, 3, 4]$

Table 2: Wyckoff bond: 2b@2a

No.	vector	center	mapping
1	$[0, Y, 0]$	$[0, 0, z]$	$[1, -2, -3, 4]$

Table 3: Wyckoff bond: 2c@2a

No.	vector	center	mapping
1	$[X, 0, 0]$	$[0, 0, z]$	$[1, -2, 3, -4]$

Table 4: Wyckoff bond: 4d@2a

No.	vector	center	mapping
1	$[X, Y, 0]$	$[0, 0, z]$	$[1, -2]$
2	$[X, -Y, 0]$	$[0, 0, z]$	$[3, -4]$

Table 5: Wyckoff bond: 4e@2a

No.	vector	center	mapping
1	$[X, 0, Z]$	$[0, 0, z]$	$[1, 3]$
2	$[-X, 0, Z]$	$[0, 0, z]$	$[2, 4]$

Table 6: Wyckoff bond: 4f@2a

No.	vector	center	mapping
1	$[0, Y, Z]$	$[0, 0, z]$	$[1, 4]$
2	$[0, -Y, Z]$	$[0, 0, z]$	$[2, 3]$

Table 7: Wyckoff bond: 8g@2a

No.	vector	center	mapping
1	$[X, Y, Z]$	$[0, 0, z]$	[1]
2	$[-X, -Y, Z]$	$[0, 0, z]$	[2]
3	$[X, -Y, Z]$	$[0, 0, z]$	[3]
4	$[-X, Y, Z]$	$[0, 0, z]$	[4]

* Wyckoff site: 2b, site symmetry: mm2

Table 8: Wyckoff bond: 2a@2b

No.	vector	center	mapping
1	$[0, 0, Z]$	$[0, \frac{1}{2}, z]$	[1,2,3,4]

Table 9: Wyckoff bond: 2b@2b

No.	vector	center	mapping
1	$[0, Y, 0]$	$[0, \frac{1}{2}, z]$	[1,-2,-3,4]

Table 10: Wyckoff bond: 2c@2b

No.	vector	center	mapping
1	$[X, 0, 0]$	$[0, \frac{1}{2}, z]$	[1,-2,3,-4]

Table 11: Wyckoff bond: 4d@2b

No.	vector	center	mapping
1	$[X, Y, 0]$	$[0, \frac{1}{2}, z]$	[1,-2]
2	$[X, -Y, 0]$	$[0, \frac{1}{2}, z]$	[3,-4]

Table 12: Wyckoff bond: 4e@2b

No.	vector	center	mapping
1	$[X, 0, Z]$	$[0, \frac{1}{2}, z]$	[1,3]
2	$[-X, 0, Z]$	$[0, \frac{1}{2}, z]$	[2,4]

Table 13: Wyckoff bond: 4f@2b

No.	vector	center	mapping
1	$[0, Y, Z]$	$[0, \frac{1}{2}, z]$	[1,4]
2	$[0, -Y, Z]$	$[0, \frac{1}{2}, z]$	[2,3]

Table 14: Wyckoff bond: 8g@2b

No.	vector	center	mapping
1	$[X, Y, Z]$	$[0, \frac{1}{2}, z]$	[1]
2	$[-X, -Y, Z]$	$[0, \frac{1}{2}, z]$	[2]
3	$[X, -Y, Z]$	$[0, \frac{1}{2}, z]$	[3]
4	$[-X, Y, Z]$	$[0, \frac{1}{2}, z]$	[4]

* Wyckoff site: 4c, site symmetry: . .2

Table 15: Wyckoff bond: 4a@4c

No.	vector	center	mapping
1	$[X, Y, 0]$	$[\frac{1}{4}, \frac{1}{4}, z]$	[1,-2]
2	$[X, -Y, 0]$	$[\frac{1}{4}, \frac{3}{4}, z]$	[3,-4]

Table 16: Wyckoff bond: 4b@4c

No.	vector	center	mapping
1	$[0, 0, Z]$	$[\frac{1}{4}, \frac{1}{4}, z]$	[1,2]
2	$[0, 0, Z]$	$[\frac{1}{4}, \frac{3}{4}, z]$	[3,4]

Table 17: Wyckoff bond: 8c@4c

No.	vector	center	mapping
1	$[X, Y, Z]$	$[\frac{1}{4}, \frac{1}{4}, z]$	[1]
2	$[-X, -Y, Z]$	$[\frac{1}{4}, \frac{1}{4}, z]$	[2]
3	$[X, -Y, Z]$	$[\frac{1}{4}, \frac{3}{4}, z]$	[3]
4	$[-X, Y, Z]$	$[\frac{1}{4}, \frac{3}{4}, z]$	[4]

* Wyckoff site: 4d, site symmetry: .m.

Table 18: Wyckoff bond: 4a@4d

No.	vector	center	mapping
1	[$X, 0, Z$]	[$x, 0, z$]	[1,3]
2	[$-X, 0, Z$]	[$-x, 0, z$]	[2,4]

Table 19: Wyckoff bond: 4b@4d

No.	vector	center	mapping
1	[$0, Y, 0$]	[$x, 0, z$]	[1,-3]
2	[$0, -Y, 0$]	[$-x, 0, z$]	[2,-4]

Table 20: Wyckoff bond: 8c@4d

No.	vector	center	mapping
1	[X, Y, Z]	[$x, 0, z$]	[1]
2	[$-X, -Y, Z$]	[$-x, 0, z$]	[2]
3	[$X, -Y, Z$]	[$x, 0, z$]	[3]
4	[$-X, Y, Z$]	[$-x, 0, z$]	[4]

* Wyckoff site: 4e, site symmetry: m..

Table 21: Wyckoff bond: 4a@4e

No.	vector	center	mapping
1	[$0, Y, Z$]	[$0, y, z$]	[1,4]
2	[$0, -Y, Z$]	[$0, -y, z$]	[2,3]

Table 22: Wyckoff bond: 4b@4e

No.	vector	center	mapping
1	[$X, 0, 0$]	[$0, y, z$]	[1,-4]
2	[$-X, 0, 0$]	[$0, -y, z$]	[2,-3]

Table 23: Wyckoff bond: **8c@4e**

No.	vector	center	mapping
1	$[X, Y, Z]$	$[0, y, z]$	[1]
2	$[-X, -Y, Z]$	$[0, -y, z]$	[2]
3	$[X, -Y, Z]$	$[0, -y, z]$	[3]
4	$[-X, Y, Z]$	$[0, y, z]$	[4]

* Wyckoff site: **8f**, site symmetry: **1**

Table 24: Wyckoff bond: **8a@8f**

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, y, z]$	[1]
2	$[-X, -Y, Z]$	$[-x, -y, z]$	[2]
3	$[X, -Y, Z]$	$[x, -y, z]$	[3]
4	$[-X, Y, Z]$	$[-x, y, z]$	[4]