

SG No. 39 C_{2v}^{15} $Aem2$ [orthorhombic]

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

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

Table 1: Wyckoff bond: 4a@4a

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

Table 2: Wyckoff bond: 4b@4a

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

Table 3: Wyckoff bond: 8c@4a

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

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

Table 4: Wyckoff bond: 4a@4b

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

Table 5: Wyckoff bond: 4b@4b

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

Table 6: Wyckoff bond: 8c@4b

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

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

Table 7: Wyckoff bond: 4a@4c

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

Table 8: Wyckoff bond: 4b@4c

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

Table 9: Wyckoff bond: 8c@4c

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

* Wyckoff site: 8d, site symmetry: 1

Table 10: Wyckoff bond: 8a@8d

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