SG No. 27 C_{2v}^3 $Pcc2$ [orthorhombic]

* plus set: $+[0, 0, 0]$
* Wyckoff site: `2a`, site symmetry: `..2`

Table 1: Wyckoff bond: `2a@2a`

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

Table 2: Wyckoff bond: `2b@2a`

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

Table 3: Wyckoff bond: `4c@2a`

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

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

Table 4: Wyckoff bond: `2a@2b`

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

Table 5: Wyckoff bond: `2b@2b`

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

Table 6: Wyckoff bond: `4c@2b`

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

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

Table 7: Wyckoff bond: `2a@2c`

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

Table 8: Wyckoff bond: `2b@2c`

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

Table 9: Wyckoff bond: `4c@2c`

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

* Wyckoff site: `2d`, site symmetry: `..2`

Table 10: Wyckoff bond: `2a@2d`

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

Table 11: Wyckoff bond: `2b@2d`

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

Table 12: Wyckoff bond: `4c@2d`

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

* Wyckoff site: `4e`, site symmetry: `1`

Table 13: Wyckoff bond: `4a@4e`

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