SG No. 37 C_{2v}^{13} $Ccc2$ [orthorhombic]

* plus set: $+[0,\ 0,\ 0]$, $+\left[\frac{1}{2},\ \frac{1}{2},\ 0\right]$
* 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	$[X,\ -Y,\ 0]$	$\left[0,\ 0,\ z+\frac{1}{2}\right]$	`[3,-4]`

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

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

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

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

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: `4b@4b`

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: `8c@4b`

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: `4c`, site symmetry: `..2`

Table 7: Wyckoff bond: `4a@4c`

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

Table 8: Wyckoff bond: `4b@4c`

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

Table 9: Wyckoff bond: `8c@4c`

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