SG No. 159 C_{3v}^4 $P31c$ [trigonal]

* plus set: $+[0,\ 0,\ 0]$
* Wyckoff site: `2a`, site symmetry: `3..`

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

No.	vector	center	mapping
1	$[0,\ 0,\ Z]$	$[0,\ 0,\ z]$	`[1,2,3]`
2	$[0,\ 0,\ Z]$	$\left[0,\ 0,\ z+\frac{1}{2}\right]$	`[4,5,6]`

Table 2: Wyckoff bond: `6b@2a`

No.	vector	center	mapping
1	$[X,\ Y,\ Z]$	$[0,\ 0,\ z]$	`[1]`
2	$[-Y,\ X-Y,\ Z]$	$[0,\ 0,\ z]$	`[2]`
3	$[-X+Y,\ -X,\ Z]$	$[0,\ 0,\ z]$	`[3]`
4	$[Y,\ X,\ Z]$	$\left[0,\ 0,\ z+\frac{1}{2}\right]$	`[4]`
5	$[X-Y,\ -Y,\ Z]$	$\left[0,\ 0,\ z+\frac{1}{2}\right]$	`[5]`
6	$[-X,\ -X+Y,\ Z]$	$\left[0,\ 0,\ z+\frac{1}{2}\right]$	`[6]`

* Wyckoff site: `2b`, site symmetry: `3..`

Table 3: Wyckoff bond: `2a@2b`

No.	vector	center	mapping
1	$[0,\ 0,\ Z]$	$\left[\frac{1}{3},\ \frac{2}{3},\ z\right]$	`[1,2,3]`
2	$[0,\ 0,\ Z]$	$\left[\frac{2}{3},\ \frac{1}{3},\ z+\frac{1}{2}\right]$	`[4,5,6]`

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

No.	vector	center	mapping
1	$[X,\ Y,\ Z]$	$\left[\frac{1}{3},\ \frac{2}{3},\ z\right]$	`[1]`
2	$[-Y,\ X-Y,\ Z]$	$\left[\frac{1}{3},\ \frac{2}{3},\ z\right]$	`[2]`
3	$[-X+Y,\ -X,\ Z]$	$\left[\frac{1}{3},\ \frac{2}{3},\ z\right]$	`[3]`
4	$[Y,\ X,\ Z]$	$\left[\frac{2}{3},\ \frac{1}{3},\ z+\frac{1}{2}\right]$	`[4]`
5	$[X-Y,\ -Y,\ Z]$	$\left[\frac{2}{3},\ \frac{1}{3},\ z+\frac{1}{2}\right]$	`[5]`
6	$[-X,\ -X+Y,\ Z]$	$\left[\frac{2}{3},\ \frac{1}{3},\ z+\frac{1}{2}\right]$	`[6]`

* Wyckoff site: `6c`, site symmetry: `1`

Table 5: Wyckoff bond: `6a@6c`

No.	vector	center	mapping
1	$[X,\, Y,\, Z]$	$[x,\, y,\, z]$	`[1]`
2	$[-Y,\, X-Y,\, Z]$	$[-y,\, x-y,\, z]$	`[2]`
3	$[-X+Y,\, -X,\, Z]$	$[-x+y,\, -x,\, z]$	`[3]`
4	$[Y,\, X,\, Z]$	$\left[y,\, x,\, z+\frac{1}{2}\right]$	`[4]`
5	$[X-Y,\, -Y,\, Z]$	$\left[x-y,\, -y,\, z+\frac{1}{2}\right]$	`[5]`
6	$[-X,\, -X+Y,\, Z]$	$\left[-x,\, -x+y,\, z+\frac{1}{2}\right]$	`[6]`