SG No. 65 D_{2h}^{19} $Cmmm$ [orthorhombic]

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

Table 1: Wyckoff site: `2a`, site symmetry: `mmm`

No.	position	mapping
1	$[0,\ 0,\ 0]$	`[1,2,3,4,5,6,7,8]`

Table 2: Wyckoff site: `2b`, site symmetry: `mmm`

No.	position	mapping
1	$\left[\frac{1}{2},\ 0,\ 0\right]$	`[1,2,3,4,5,6,7,8]`

Table 3: Wyckoff site: `2c`, site symmetry: `mmm`

No.	position	mapping
1	$\left[\frac{1}{2},\ 0,\ \frac{1}{2}\right]$	`[1,2,3,4,5,6,7,8]`

Table 4: Wyckoff site: `2d`, site symmetry: `mmm`

No.	position	mapping
1	$\left[0,\ 0,\ \frac{1}{2}\right]$	`[1,2,3,4,5,6,7,8]`

Table 5: Wyckoff site: `4e`, site symmetry: `..2/m`

No.	position	mapping
1	$\left[\frac{1}{4},\ \frac{1}{4},\ 0\right]$	`[1,2,5,6]`
2	$\left[\frac{3}{4},\ \frac{1}{4},\ 0\right]$	`[3,4,7,8]`

Table 6: Wyckoff site: `4f`, site symmetry: `..2/m`

No.	position	mapping
1	$\left[\frac{1}{4},\ \frac{1}{4},\ \frac{1}{2}\right]$	`[1,2,5,6]`
2	$\left[\frac{3}{4},\ \frac{1}{4},\ \frac{1}{2}\right]$	`[3,4,7,8]`

Table 7: Wyckoff site: `4g`, site symmetry: `2mm`

No.	position	mapping
1	$[x,\ 0,\ 0]$	`[1,4,6,7]`
2	$[-x,\ 0,\ 0]$	`[2,3,5,8]`

Table 8: Wyckoff site: `4h`, site symmetry: `2mm`

No.	position	mapping
1	$\left[x,\ 0,\ \frac{1}{2}\right]$	`[1,4,6,7]`
2	$\left[-x,\ 0,\ \frac{1}{2}\right]$	`[2,3,5,8]`

Table 9: Wyckoff site: `4i`, site symmetry: `m2m`

No.	position	mapping
1	$[0,\ y,\ 0]$	`[1,3,6,8]`
2	$[0,\ -y,\ 0]$	`[2,4,5,7]`

Table 10: Wyckoff site: `4j`, site symmetry: `m2m`

No.	position	mapping
1	$\left[0,\ y,\ \frac{1}{2}\right]$	`[1,3,6,8]`
2	$\left[0,\ -y,\ \frac{1}{2}\right]$	`[2,4,5,7]`

Table 11: Wyckoff site: `4k`, site symmetry: `mm2`

No.	position	mapping
1	$[0,\ 0,\ z]$	`[1,2,7,8]`
2	$[0,\ 0,\ -z]$	`[3,4,5,6]`

Table 12: Wyckoff site: `4l`, site symmetry: `mm2`

No.	position	mapping
1	$\left[0,\ \frac{1}{2},\ z\right]$	`[1,2,7,8]`
2	$\left[0,\ \frac{1}{2},\ -z\right]$	`[3,4,5,6]`

Table 13: Wyckoff site: `8m`, site symmetry: `..2`

No.	position	mapping
1	$\left[\frac{1}{4}, \frac{1}{4}, z\right]$	`[1,2]`
2	$\left[\frac{3}{4}, \frac{1}{4}, -z\right]$	`[3,4]`
3	$\left[\frac{3}{4}, \frac{3}{4}, -z\right]$	`[5,6]`
4	$\left[\frac{1}{4}, \frac{3}{4}, z\right]$	`[7,8]`

Table 14: Wyckoff site: `8n`, site symmetry: `m..`

No.	position	mapping
1	$[0, y, z]$	`[1,8]`
2	$[0, -y, z]$	`[2,7]`
3	$[0, y, -z]$	`[3,6]`
4	$[0, -y, -z]$	`[4,5]`

Table 15: Wyckoff site: `8o`, site symmetry: `.m.`

No.	position	mapping
1	$[x, 0, z]$	`[1,7]`
2	$[-x, 0, z]$	`[2,8]`
3	$[-x, 0, -z]$	`[3,5]`
4	$[x, 0, -z]$	`[4,6]`

Table 16: Wyckoff site: `8p`, site symmetry: `..m`

No.	position	mapping
1	$[x, y, 0]$	`[1,6]`
2	$[-x, -y, 0]$	`[2,5]`
3	$[-x, y, 0]$	`[3,8]`
4	$[x, -y, 0]$	`[4,7]`

Table 17: Wyckoff site: `8q`, site symmetry: `..m`

No.	position	mapping
1	$\left[x, y, \frac{1}{2}\right]$	`[1,6]`
2	$\left[-x, -y, \frac{1}{2}\right]$	`[2,5]`
3	$\left[-x, y, \frac{1}{2}\right]$	`[3,8]`
4	$\left[x, -y, \frac{1}{2}\right]$	`[4,7]`

Table 18: Wyckoff site: `16r`, site symmetry: `1`

No.	position	mapping
1	$[x,\ y,\ z]$	`[1]`
2	$[-x,\ -y,\ z]$	`[2]`
3	$[-x,\ y,\ -z]$	`[3]`
4	$[x,\ -y,\ -z]$	`[4]`
5	$[-x,\ -y,\ -z]$	`[5]`
6	$[x,\ y,\ -z]$	`[6]`
7	$[x,\ -y,\ z]$	`[7]`
8	$[-x,\ y,\ z]$	`[8]`