MSG No. 184.196 P_c6cc [Type IV, hexagonal]

Table 1: Wyckoff site: `2a`, site symmetry: `6m'm'`

No.	position	mapping
1	$[0,\ 0,\ z]$	`[1,2,3,4,5,6,19,20,21,22,23,24]`
2	$\left[0,\ 0,\ z+\frac{1}{2}\right]$	`[7,8,9,10,11,12,13,14,15,16,17,18]`

Table 2: Wyckoff site: `4b`, site symmetry: `3m'.`

No.	position	mapping
1	$\left[\frac{1}{3},\ \frac{2}{3},\ z\right]$	`[1,3,5,19,20,21]`
2	$\left[\frac{2}{3},\ \frac{1}{3},\ z\right]$	`[2,4,6,22,23,24]`
3	$\left[\frac{1}{3},\ \frac{2}{3},\ z+\frac{1}{2}\right]$	`[7,8,9,13,15,17]`
4	$\left[\frac{2}{3},\ \frac{1}{3},\ z+\frac{1}{2}\right]$	`[10,11,12,14,16,18]`

Table 3: Wyckoff site: `6c`, site symmetry: `2m'm'`

No.	position	mapping
1	$\left[\frac{1}{2},\ 0,\ z\right]$	`[1,4,19,23]`
2	$\left[\frac{1}{2},\ \frac{1}{2},\ z\right]$	`[2,5,21,22]`
3	$\left[0,\ \frac{1}{2},\ z\right]$	`[3,6,20,24]`
4	$\left[\frac{1}{2},\ 0,\ z+\frac{1}{2}\right]$	`[7,11,13,16]`
5	$\left[0,\ \frac{1}{2},\ z+\frac{1}{2}\right]$	`[8,12,15,18]`
6	$\left[\frac{1}{2},\ \frac{1}{2},\ z+\frac{1}{2}\right]$	`[9,10,14,17]`

Table 4: Wyckoff site: `12d`, site symmetry: `..m'`

No.	position	mapping
1	$[x,\ 0,\ z]$	`[1,23]`
2	$[x,\ x,\ z]$	`[2,21]`
3	$[0,\ x,\ z]$	`[3,24]`
4	$[-x,\ 0,\ z]$	`[4,19]`
5	$[-x,\ -x,\ z]$	`[5,22]`
6	$[0,\ -x,\ z]$	`[6,20]`
7	$\left[-x,\ 0,\ z+\frac{1}{2}\right]$	`[7,16]`
8	$\left[0,\ -x,\ z+\frac{1}{2}\right]$	`[8,18]`
9	$\left[x,\ x,\ z+\frac{1}{2}\right]$	`[9,14]`
10	$\left[-x,\ -x,\ z+\frac{1}{2}\right]$	`[10,17]`
11	$\left[x,\ 0,\ z+\frac{1}{2}\right]$	`[11,13]`
12	$\left[0,\ x,\ z+\frac{1}{2}\right]$	`[12,15]`

Table 5: Wyckoff site: `12e`, site symmetry: `.m'.`

No.	position	mapping
1	$[x,\ -x,\ z]$	`[1,20]`
2	$[2x,\ x,\ z]$	`[2,23]`
3	$[x,\ 2x,\ z]$	`[3,21]`
4	$[-x,\ x,\ z]$	`[4,24]`
5	$[-2x,\ -x,\ z]$	`[5,19]`
6	$[-x,\ -2x,\ z]$	`[6,22]`
7	$\left[-2x,\ -x,\ z+\frac{1}{2}\right]$	`[7,17]`
8	$\left[x,\ -x,\ z+\frac{1}{2}\right]$	`[8,13]`
9	$\left[x,\ 2x,\ z+\frac{1}{2}\right]$	`[9,15]`
10	$\left[-x,\ -2x,\ z+\frac{1}{2}\right]$	`[10,18]`
11	$\left[2x,\ x,\ z+\frac{1}{2}\right]$	`[11,14]`
12	$\left[-x,\ x,\ z+\frac{1}{2}\right]$	`[12,16]`

Table 6: Wyckoff site: `24f`, site symmetry: `1`

No.	position	mapping
1	$[x,\ y,\ z]$	`[1]`
2	$[x-y,\ x,\ z]$	`[2]`
3	$[-y,\ x-y,\ z]$	`[3]`
4	$[-x,\ -y,\ z]$	`[4]`
5	$[-x+y,\ -x,\ z]$	`[5]`
6	$[y,\ -x+y,\ z]$	`[6]`
7	$\left[-x+y,\ y,\ z+\frac{1}{2}\right]$	`[7]`
8	$\left[-y,\ -x,\ z+\frac{1}{2}\right]$	`[8]`
9	$\left[x,\ x-y,\ z+\frac{1}{2}\right]$	`[9]`
10	$\left[-x,\ -x+y,\ z+\frac{1}{2}\right]$	`[10]`
11	$\left[x-y,\ -y,\ z+\frac{1}{2}\right]$	`[11]`
12	$\left[y,\ x,\ z+\frac{1}{2}\right]$	`[12]`
13	$\left[x,\ y,\ z+\frac{1}{2}\right]$	`[13]`
14	$\left[x-y,\ x,\ z+\frac{1}{2}\right]$	`[14]`
15	$\left[-y,\ x-y,\ z+\frac{1}{2}\right]$	`[15]`
16	$\left[-x,\ -y,\ z+\frac{1}{2}\right]$	`[16]`
17	$\left[-x+y,\ -x,\ z+\frac{1}{2}\right]$	`[17]`
18	$\left[y,\ -x+y,\ z+\frac{1}{2}\right]$	`[18]`
19	$[-x+y,\ y,\ z]$	`[19]`
20	$[-y,\ -x,\ z]$	`[20]`
21	$[x,\ x-y,\ z]$	`[21]`
22	$[-x,\ -x+y,\ z]$	`[22]`
23	$[x-y,\ -y,\ z]$	`[23]`
24	$[y,\ x,\ z]$	`[24]`