MSG No. 165.92 $P\bar{3}c11'$ [Type II, trigonal]

Table 1: Wyckoff site: `2a`, site symmetry: `32.1'`

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

Table 2: Wyckoff site: `2b`, site symmetry: `-3..1'`

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

Table 3: Wyckoff site: `4c`, site symmetry: `3..1'`

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

Table 4: Wyckoff site: `4d`, site symmetry: `3..1'`

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

Table 5: Wyckoff site: `6e`, site symmetry: `-11'`

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

Table 6: Wyckoff site: `6f`, site symmetry: `.2.1'`

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

Table 7: Wyckoff site: `12g`, site symmetry: `11'`

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