MSG No. 74.560 $Im'm'a'$ [Type III, orthorhombic]

Table 1: Wyckoff site: `4a`, site symmetry: `2/m'..`

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

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

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

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

No.	position	mapping
1	$\left[\frac{1}{4},\ \frac{1}{4},\ \frac{1}{4}\right]$	`[1,7,11,13]`
2	$\left[\frac{1}{4},\ \frac{3}{4},\ \frac{3}{4}\right]$	`[2,8,12,14]`
3	$\left[\frac{3}{4},\ \frac{3}{4},\ \frac{3}{4}\right]$	`[3,5,9,15]`
4	$\left[\frac{3}{4},\ \frac{1}{4},\ \frac{1}{4}\right]$	`[4,6,10,16]`

Table 4: Wyckoff site: `4d`, site symmetry: `.2/m'.`

No.	position	mapping
1	$\left[\frac{1}{4},\ \frac{1}{4},\ \frac{3}{4}\right]$	`[1,7,11,13]`
2	$\left[\frac{1}{4},\ \frac{3}{4},\ \frac{1}{4}\right]$	`[2,8,12,14]`
3	$\left[\frac{3}{4},\ \frac{3}{4},\ \frac{1}{4}\right]$	`[3,5,9,15]`
4	$\left[\frac{3}{4},\ \frac{1}{4},\ \frac{3}{4}\right]$	`[4,6,10,16]`

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

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

continued ...

Table 5

No.	position	mapping
3	$\left[\frac{1}{2}, \frac{3}{4}, z+\frac{1}{2}\right]$	[9,12,14,15]
4	$\left[\frac{1}{2}, \frac{1}{4}, \frac{1}{2}-z\right]$	[10,11,13,16]

Table 6: Wyckoff site: 8f, site symmetry: 2..

No.	position	mapping
1	$[x, 0, 0]$	[1,2]
2	$\left[-x, \frac{1}{2}, 0\right]$	[3,4]
3	$[-x, 0, 0]$	[5,6]
4	$\left[x, \frac{1}{2}, 0\right]$	[7,8]
5	$\left[x+\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	[9,10]
6	$\left[\frac{1}{2}-x, 0, \frac{1}{2}\right]$	[11,12]
7	$\left[\frac{1}{2}-x, \frac{1}{2}, \frac{1}{2}\right]$	[13,14]
8	$\left[x+\frac{1}{2}, 0, \frac{1}{2}\right]$	[15,16]

Table 7: Wyckoff site: 8g, site symmetry: .2.

No.	position	mapping
1	$\left[\frac{1}{4}, y, \frac{1}{4}\right]$	[1,11]
2	$\left[\frac{1}{4}, -y, \frac{3}{4}\right]$	[2,12]
3	$\left[\frac{3}{4}, y+\frac{1}{2}, \frac{3}{4}\right]$	[3,9]
4	$\left[\frac{3}{4}, \frac{1}{2}-y, \frac{1}{4}\right]$	[4,10]
5	$\left[\frac{3}{4}, -y, \frac{3}{4}\right]$	[5,15]
6	$\left[\frac{3}{4}, y, \frac{1}{4}\right]$	[6,16]
7	$\left[\frac{1}{4}, \frac{1}{2}-y, \frac{1}{4}\right]$	[7,13]
8	$\left[\frac{1}{4}, y+\frac{1}{2}, \frac{3}{4}\right]$	[8,14]

Table 8: Wyckoff site: 8h, site symmetry: m'..

No.	position	mapping
1	$[0, y, z]$	[1,6]
2	$[0, -y, -z]$	[2,5]
3	$\left[0, y+\frac{1}{2}, -z\right]$	[3,8]
4	$\left[0, \frac{1}{2}-y, z\right]$	[4,7]
5	$\left[\frac{1}{2}, y+\frac{1}{2}, z+\frac{1}{2}\right]$	[9,14]
6	$\left[\frac{1}{2}, \frac{1}{2}-y, \frac{1}{2}-z\right]$	[10,13]
7	$\left[\frac{1}{2}, y, \frac{1}{2}-z\right]$	[11,16]
8	$\left[\frac{1}{2}, -y, z+\frac{1}{2}\right]$	[12,15]

Table 9: Wyckoff site: `8i`, site symmetry: `.m'.`

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

Table 10: Wyckoff site: `16j`, site symmetry: `1`

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