MSG No. 74.555 $Imma1'$ [Type II, orthorhombic]

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

No.	position	mapping
1	$[0,\ 0,\ 0]$	[1,2,5,6,17,18,21,22]
2	$\left[0,\ \frac{1}{2},\ 0\right]$	[3,4,7,8,19,20,23,24]
3	$\left[\frac{1}{2},\ \frac{1}{2},\ \frac{1}{2}\right]$	[9,10,13,14,25,26,29,30]
4	$\left[\frac{1}{2},\ 0,\ \frac{1}{2}\right]$	[11,12,15,16,27,28,31,32]

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

No.	position	mapping
1	$\left[0,\ 0,\ \frac{1}{2}\right]$	[1,2,5,6,17,18,21,22]
2	$\left[0,\ \frac{1}{2},\ \frac{1}{2}\right]$	[3,4,7,8,19,20,23,24]
3	$\left[\frac{1}{2},\ \frac{1}{2},\ 0\right]$	[9,10,13,14,25,26,29,30]
4	$\left[\frac{1}{2},\ 0,\ 0\right]$	[11,12,15,16,27,28,31,32]

Table 3: Wyckoff site: 4c, site symmetry: .2/m.1'

No.	position	mapping
1	$\left[\frac{1}{4},\ \frac{1}{4},\ \frac{1}{4}\right]$	[1,7,11,13,17,23,27,29]
2	$\left[\frac{1}{4},\ \frac{3}{4},\ \frac{3}{4}\right]$	[2,8,12,14,18,24,28,30]
3	$\left[\frac{3}{4},\ \frac{3}{4},\ \frac{3}{4}\right]$	[3,5,9,15,19,21,25,31]
4	$\left[\frac{3}{4},\ \frac{1}{4},\ \frac{1}{4}\right]$	[4,6,10,16,20,22,26,32]

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

No.	position	mapping
1	$\left[\frac{1}{4},\ \frac{1}{4},\ \frac{3}{4}\right]$	[1,7,11,13,17,23,27,29]
2	$\left[\frac{1}{4},\ \frac{3}{4},\ \frac{1}{4}\right]$	[2,8,12,14,18,24,28,30]
3	$\left[\frac{3}{4},\ \frac{3}{4},\ \frac{1}{4}\right]$	[3,5,9,15,19,21,25,31]
4	$\left[\frac{3}{4},\ \frac{1}{4},\ \frac{3}{4}\right]$	[4,6,10,16,20,22,26,32]

Table 5: Wyckoff site: 4e, site symmetry: mm21'

No.	position	mapping
1	$\left[0,\ \frac{1}{4},\ z\right]$	[1,4,6,7,17,20,22,23]
2	$\left[0,\ \frac{3}{4},\ -z\right]$	[2,3,5,8,18,19,21,24]

continued ...

Table 5

No.	position	mapping
3	$\left[\frac{1}{2},\ \frac{3}{4},\ z+\frac{1}{2}\right]$	`[9,12,14,15,25,28,30,31]`
4	$\left[\frac{1}{2},\ \frac{1}{4},\ \frac{1}{2}-z\right]$	`[10,11,13,16,26,27,29,32]`

Table 6: Wyckoff site: `8f`, site symmetry: `2..1'`

No.	position	mapping
1	$[x,\ 0,\ 0]$	`[1,2,17,18]`
2	$\left[-x,\ \frac{1}{2},\ 0\right]$	`[3,4,19,20]`
3	$[-x,\ 0,\ 0]$	`[5,6,21,22]`
4	$\left[x,\ \frac{1}{2},\ 0\right]$	`[7,8,23,24]`
5	$\left[x+\frac{1}{2},\ \frac{1}{2},\ \frac{1}{2}\right]$	`[9,10,25,26]`
6	$\left[\frac{1}{2}-x,\ 0,\ \frac{1}{2}\right]$	`[11,12,27,28]`
7	$\left[\frac{1}{2}-x,\ \frac{1}{2},\ \frac{1}{2}\right]$	`[13,14,29,30]`
8	$\left[x+\frac{1}{2},\ 0,\ \frac{1}{2}\right]$	`[15,16,31,32]`

Table 7: Wyckoff site: `8g`, site symmetry: `.2.1'`

No.	position	mapping
1	$\left[\frac{1}{4},\ y,\ \frac{1}{4}\right]$	`[1,11,17,27]`
2	$\left[\frac{1}{4},\ -y,\ \frac{3}{4}\right]$	`[2,12,18,28]`
3	$\left[\frac{3}{4},\ y+\frac{1}{2},\ \frac{3}{4}\right]$	`[3,9,19,25]`
4	$\left[\frac{3}{4},\ \frac{1}{2}-y,\ \frac{1}{4}\right]$	`[4,10,20,26]`
5	$\left[\frac{3}{4},\ -y,\ \frac{3}{4}\right]$	`[5,15,21,31]`
6	$\left[\frac{3}{4},\ y,\ \frac{1}{4}\right]$	`[6,16,22,32]`
7	$\left[\frac{1}{4},\ \frac{1}{2}-y,\ \frac{1}{4}\right]$	`[7,13,23,29]`
8	$\left[\frac{1}{4},\ y+\frac{1}{2},\ \frac{3}{4}\right]$	`[8,14,24,30]`

Table 8: Wyckoff site: `8h`, site symmetry: `m..1'`

No.	position	mapping
1	$[0,\ y,\ z]$	`[1,6,17,22]`
2	$[0,\ -y,\ -z]$	`[2,5,18,21]`
3	$\left[0,\ y+\frac{1}{2},\ -z\right]$	`[3,8,19,24]`
4	$\left[0,\ \frac{1}{2}-y,\ z\right]$	`[4,7,20,23]`
5	$\left[\frac{1}{2},\ y+\frac{1}{2},\ z+\frac{1}{2}\right]$	`[9,14,25,30]`
6	$\left[\frac{1}{2},\ \frac{1}{2}-y,\ \frac{1}{2}-z\right]$	`[10,13,26,29]`
7	$\left[\frac{1}{2},\ y,\ \frac{1}{2}-z\right]$	`[11,16,27,32]`
8	$\left[\frac{1}{2},\ -y,\ z+\frac{1}{2}\right]$	`[12,15,28,31]`

Table 9: Wyckoff site: `8i`, site symmetry: `.m.1'`

No.	position	mapping
1	$\left[x,\ \frac{1}{4},\ z\right]$	`[1,7,17,23]`
2	$\left[x,\ \frac{3}{4},\ -z\right]$	`[2,8,18,24]`
3	$\left[-x,\ \frac{3}{4},\ -z\right]$	`[3,5,19,21]`
4	$\left[-x,\ \frac{1}{4},\ z\right]$	`[4,6,20,22]`
5	$\left[x+\frac{1}{2},\ \frac{3}{4},\ z+\frac{1}{2}\right]$	`[9,15,25,31]`
6	$\left[x+\frac{1}{2},\ \frac{1}{4},\ \frac{1}{2}-z\right]$	`[10,16,26,32]`
7	$\left[\frac{1}{2}-x,\ \frac{1}{4},\ \frac{1}{2}-z\right]$	`[11,13,27,29]`
8	$\left[\frac{1}{2}-x,\ \frac{3}{4},\ z+\frac{1}{2}\right]$	`[12,14,28,30]`

Table 10: Wyckoff site: `16j`, site symmetry: `11'`

No.	position	mapping
1	$[x,\ y,\ z]$	`[1,17]`
2	$[x,\ -y,\ -z]$	`[2,18]`
3	$\left[-x,\ y+\frac{1}{2},\ -z\right]$	`[3,19]`
4	$\left[-x,\ \frac{1}{2}-y,\ z\right]$	`[4,20]`
5	$[-x,\ -y,\ -z]$	`[5,21]`
6	$[-x,\ y,\ z]$	`[6,22]`
7	$\left[x,\ \frac{1}{2}-y,\ z\right]$	`[7,23]`
8	$\left[x,\ y+\frac{1}{2},\ -z\right]$	`[8,24]`
9	$\left[x+\frac{1}{2},\ y+\frac{1}{2},\ z+\frac{1}{2}\right]$	`[9,25]`
10	$\left[x+\frac{1}{2},\ \frac{1}{2}-y,\ \frac{1}{2}-z\right]$	`[10,26]`
11	$\left[\frac{1}{2}-x,\ y,\ \frac{1}{2}-z\right]$	`[11,27]`
12	$\left[\frac{1}{2}-x,\ -y,\ z+\frac{1}{2}\right]$	`[12,28]`
13	$\left[\frac{1}{2}-x,\ \frac{1}{2}-y,\ \frac{1}{2}-z\right]$	`[13,29]`
14	$\left[\frac{1}{2}-x,\ y+\frac{1}{2},\ z+\frac{1}{2}\right]$	`[14,30]`
15	$\left[x+\frac{1}{2},\ -y,\ z+\frac{1}{2}\right]$	`[15,31]`
16	$\left[x+\frac{1}{2},\ y,\ \frac{1}{2}-z\right]$	`[16,32]`