MSG No. 38.193 A_bmm2 [Type IV, orthorhombic]

Table 1: Wyckoff site: 4a, site symmetry: mm2

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

Table 2: Wyckoff site: 4b, site symmetry: mm'2'

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

Table 3: Wyckoff site: 4c, site symmetry: mm2

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

Table 4: Wyckoff site: 4d, site symmetry: mm'2'

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

Table 5: Wyckoff site: 8e, site symmetry: .m.

No.	position	mapping
1	$[x,\,0,\,z]$	[1,4]
2	$[-x,\,0,\,z]$	[2,3]

continued …

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Table 5

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

Table 6: Wyckoff site: 8f, site symmetry: .m'.

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

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

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

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

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

continued ...

Table 8

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

Table 9: Wyckoff site: 16i, 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	$\left[x, y + \frac{1}{2}, z + \frac{1}{2}\right]$	[5]
6	$\left[-x, \frac{1}{2} - y, z + \frac{1}{2}\right]$	[6]
7	$\left[-x, y + \frac{1}{2}, z + \frac{1}{2}\right]$	[7]
8	$\left[x, \frac{1}{2} - y, z + \frac{1}{2}\right]$	[8]
9	$\left[x, y, z + \frac{1}{2}\right]$	[9]
10	$\left[-x, -y, z + \frac{1}{2}\right]$	[10]
11	$\left[-x, y, z + \frac{1}{2}\right]$	[11]
12	$\left[x, -y, z + \frac{1}{2}\right]$	[12]
13	$\left[x, y + \frac{1}{2}, z\right]$	[13]
14	$\left[-x, \frac{1}{2} - y, z\right]$	[14]
15	$\left[-x, y + \frac{1}{2}, z\right]$	[15]
16	$\left[x, \frac{1}{2} - y, z\right]$	[16]