

MSG No. 14.83 P_{A2_1}/c [Type IV, monoclinic]

Table 1: Wyckoff site: 2a, site symmetry: $2'/\text{m}'$

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

Table 2: Wyckoff site: 2b, site symmetry: $2'/\text{m}'$

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

Table 3: Wyckoff site: 2c, site symmetry: $2'/\text{m}'$

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

Table 4: Wyckoff site: 2d, site symmetry: $2'/\text{m}'$

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

Table 5: Wyckoff site: 4e, site symmetry: $-1'$

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

Table 6: Wyckoff site: 4f, site symmetry: -1'

No.	position	mapping
1	$[\frac{1}{2}, \frac{3}{4}, \frac{1}{4}]$	[1,7]
2	$[\frac{1}{2}, \frac{1}{4}, \frac{1}{4}]$	[2,8]
3	$[\frac{1}{2}, \frac{1}{4}, \frac{3}{4}]$	[3,5]
4	$[\frac{1}{2}, \frac{3}{4}, \frac{3}{4}]$	[4,6]

Table 7: Wyckoff site: 4g, site symmetry: 2'

No.	position	mapping
1	$[0, y, 0]$	[1,6]
2	$[0, y + \frac{1}{2}, \frac{1}{2}]$	[2,5]
3	$[0, -y, 0]$	[3,8]
4	$[0, \frac{1}{2} - y, \frac{1}{2}]$	[4,7]

Table 8: Wyckoff site: 4h, site symmetry: 2'

No.	position	mapping
1	$[\frac{1}{2}, y, 0]$	[1,6]
2	$[\frac{1}{2}, y + \frac{1}{2}, \frac{1}{2}]$	[2,5]
3	$[\frac{1}{2}, -y, 0]$	[3,8]
4	$[\frac{1}{2}, \frac{1}{2} - y, \frac{1}{2}]$	[4,7]

Table 9: Wyckoff site: 4i, site symmetry: m'

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

Table 10: Wyckoff site: 8j, site symmetry: 1

No.	position	mapping
1	$[x, y, z]$	[1]
2	$[-x, y + \frac{1}{2}, \frac{1}{2} - z]$	[2]
3	$[-x, -y, -z]$	[3]
4	$[x, \frac{1}{2} - y, z + \frac{1}{2}]$	[4]

continued ...

Table 10

No.	position	mapping
5	$[x, y + \frac{1}{2}, z + \frac{1}{2}]$	[5]
6	$[-x, y, -z]$	[6]
7	$[-x, \frac{1}{2} - y, \frac{1}{2} - z]$	[7]
8	$[x, -y, z]$	[8]