

MSG No. 40.210  $A_Bma2$  [ Type IV, orthorhombic ]

Table 1: Wyckoff site: 4a, site symmetry:  $mm'2'$

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

Table 2: Wyckoff site: 8b, site symmetry:  $. . 2$

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

Table 3: Wyckoff site: 8c, site symmetry:  $m . .$

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

Table 4: Wyckoff site: 8d, site symmetry:  $.m'.$

No.	position	mapping
1	$[x, \frac{3}{4}, z]$	[1,12]
2	$[-x, \frac{1}{4}, z]$	[2,11]
3	$[\frac{1}{2} - x, \frac{3}{4}, z]$	[3,10]
4	$[x + \frac{1}{2}, \frac{1}{4}, z]$	[4,9]
5	$[x, \frac{1}{4}, z + \frac{1}{2}]$	[5,16]

*continued ...*

Table 4

No.	position	mapping
6	$[-x, \frac{3}{4}, z + \frac{1}{2}]$	[6,15]
7	$[\frac{1}{2} - x, \frac{1}{4}, z + \frac{1}{2}]$	[7,14]
8	$[x + \frac{1}{2}, \frac{3}{4}, z + \frac{1}{2}]$	[8,13]

Table 5: Wyckoff site: **16e**, site symmetry: 1

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