

MSG No. 106.225 P_C4_2bc [Type IV, tetragonal]

Table 1: Wyckoff site: 4a, site symmetry: $2\bar{m}'\bar{m}'$.

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

Table 2: Wyckoff site: 4b, site symmetry: $2\bar{m}'\bar{m}'$.

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

Table 3: Wyckoff site: 8c, site symmetry: $2'..$

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

Table 4: Wyckoff site: 8d, site symmetry: $.\bar{m}'$.

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

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

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