

MSG No. 77.17 P_C4_2 [Type IV, tetragonal]

Table 1: Wyckoff site: 4a, site symmetry: 2..

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

Table 2: Wyckoff site: 4b, site symmetry: 2..

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

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

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

Table 4: Wyckoff site: 8d, 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	$[x + \frac{1}{2}, y + \frac{1}{2}, z]$	[5]
6	$[\frac{1}{2} - y, x + \frac{1}{2}, z + \frac{1}{2}]$	[6]
7	$[y + \frac{1}{2}, \frac{1}{2} - x, z + \frac{1}{2}]$	[7]
8	$[\frac{1}{2} - x, \frac{1}{2} - y, z]$	[8]