

MSG No. 52.312 $Pn'na'$ [Type III, orthorhombic]

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

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

Table 2: Wyckoff site: 4b, site symmetry: -1

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

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

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

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

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

Table 5: Wyckoff site: 8e, site symmetry: 1

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

continued ...

Table 5

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