

MSG No. 17.15  $P_I222_1$  [ Type IV, orthorhombic ]

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

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

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

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

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

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

Table 4: Wyckoff site: **8d**, site symmetry: 1

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