

MSG No. 58.399 $Pn'n'm'$ [Type III, orthorhombic]

Table 1: Wyckoff site: 2a, site symmetry: $\dots 2/m'$

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

Table 2: Wyckoff site: 2b, site symmetry: $\dots 2/m'$

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

Table 3: Wyckoff site: 2c, site symmetry: $\dots 2/m'$

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

Table 4: Wyckoff site: 2d, site symmetry: $\dots 2/m'$

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

Table 5: Wyckoff site: 4e, site symmetry: $\dots 2$

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

Table 6: Wyckoff site: **4f**, site symmetry: $\dots 2$

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

Table 7: Wyckoff site: **4g**, site symmetry: $\dots m'$

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

Table 8: Wyckoff site: **8h**, site symmetry: 1

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