

# MSG No. 174.135 $P\bar{6}'$ [ Type III, hexagonal ]

Table 1: Wyckoff site: **1a**, site symmetry:  $-6' \dots$

No.	position	mapping
1	[0, 0, 0]	[1,2,3,4,5,6]

Table 2: Wyckoff site: **1b**, site symmetry:  $-6' \dots$

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

Table 3: Wyckoff site: **1c**, site symmetry:  $-6' \dots$

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

Table 4: Wyckoff site: **1d**, site symmetry:  $-6' \dots$

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

Table 5: Wyckoff site: **1e**, site symmetry:  $-6' \dots$

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

Table 6: Wyckoff site: **1f**, site symmetry:  $-6' \dots$

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

Table 7: Wyckoff site: 2g, site symmetry: 3..

No.	position	mapping
1	[0, 0, z]	[1,2,3]
2	[0, 0, -z]	[4,5,6]

Table 8: Wyckoff site: 2h, site symmetry: 3..

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

Table 9: Wyckoff site: 2i, site symmetry: 3..

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

Table 10: Wyckoff site: 3j, site symmetry: m'..

No.	position	mapping
1	[x, y, 0]	[1,5]
2	[-y, x - y, 0]	[2,6]
3	[-x + y, -x, 0]	[3,4]

Table 11: Wyckoff site: 3k, site symmetry: m'..

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

Table 12: Wyckoff site: 6l, site symmetry: 1

No.	position	mapping
1	[x, y, z]	[1]
2	[-y, x - y, z]	[2]

*continued ...*

Table 12

No.	position	mapping
3	$[-x + y, -x, z]$	[3]
4	$[-x + y, -x, -z]$	[4]
5	$[x, y, -z]$	[5]
6	$[-y, x - y, -z]$	[6]