MSG No. 174.134 $P\bar{6}1'$ [Type II, hexagonal]

Table 1: Wyckoff site: `1a`, site symmetry: `-6..1'`

No.	position	mapping
1	[0, 0, 0]	`[1,2,3,4,5,6,7,8,9,10,11,12]`

Table 2: Wyckoff site: `1b`, site symmetry: `-6..1'`

No.	position	mapping
1	$\left[0, 0, \frac{1}{2}\right]$	`[1,2,3,4,5,6,7,8,9,10,11,12]`

Table 3: Wyckoff site: `1c`, site symmetry: `-6..1'`

No.	position	mapping
1	$\left[\frac{1}{3}, \frac{2}{3}, 0\right]$	`[1,2,3,4,5,6,7,8,9,10,11,12]`

Table 4: Wyckoff site: `1d`, site symmetry: `-6..1'`

No.	position	mapping
1	$\left[\frac{1}{3}, \frac{2}{3}, \frac{1}{2}\right]$	`[1,2,3,4,5,6,7,8,9,10,11,12]`

Table 5: Wyckoff site: `1e`, site symmetry: `-6..1'`

No.	position	mapping
1	$\left[\frac{2}{3}, \frac{1}{3}, 0\right]$	`[1,2,3,4,5,6,7,8,9,10,11,12]`

Table 6: Wyckoff site: `1f`, site symmetry: `-6..1'`

No.	position	mapping
1	$\left[\frac{2}{3}, \frac{1}{3}, \frac{1}{2}\right]$	`[1,2,3,4,5,6,7,8,9,10,11,12]`

Table 7: Wyckoff site: `2g`, site symmetry: `3..1'`

No.	position	mapping
1	$[0,\ 0,\ z]$	`[1,2,3,7,8,9]`
2	$[0,\ 0,\ -z]$	`[4,5,6,10,11,12]`

Table 8: Wyckoff site: `2h`, site symmetry: `3..1'`

No.	position	mapping
1	$\left[\frac{1}{3},\ \frac{2}{3},\ z\right]$	`[1,2,3,7,8,9]`
2	$\left[\frac{1}{3},\ \frac{2}{3},\ -z\right]$	`[4,5,6,10,11,12]`

Table 9: Wyckoff site: `2i`, site symmetry: `3..1'`

No.	position	mapping
1	$\left[\frac{2}{3},\ \frac{1}{3},\ z\right]$	`[1,2,3,7,8,9]`
2	$\left[\frac{2}{3},\ \frac{1}{3},\ -z\right]$	`[4,5,6,10,11,12]`

Table 10: Wyckoff site: `3j`, site symmetry: `m..1'`

No.	position	mapping
1	$[x,\ y,\ 0]$	`[1,5,7,11]`
2	$[-y,\ x-y,\ 0]$	`[2,6,8,12]`
3	$[-x+y,\ -x,\ 0]$	`[3,4,9,10]`

Table 11: Wyckoff site: `3k`, site symmetry: `m..1'`

No.	position	mapping
1	$\left[x,\ y,\ \frac{1}{2}\right]$	`[1,5,7,11]`
2	$\left[-y,\ x-y,\ \frac{1}{2}\right]$	`[2,6,8,12]`
3	$\left[-x+y,\ -x,\ \frac{1}{2}\right]$	`[3,4,9,10]`

Table 12: Wyckoff site: `6l`, site symmetry: `11'`

No.	position	mapping
1	$[x,\ y,\ z]$	`[1,7]`
2	$[-y,\ x-y,\ z]$	`[2,8]`

continued ...

Table 12

No.	position	mapping
3	$[-x+y,\ -x,\ z]$	`[3,9]`
4	$[-x+y,\ -x,\ -z]$	`[4,10]`
5	$[x,\ y,\ -z]$	`[5,11]`
6	$[-y,\ x-y,\ -z]$	`[6,12]`