

SG No. 184  $C_{6v}^2$   $P6cc$  [ hexagonal ]

\* plus set:  $+ [0, 0, 0]$

Table 1: Wyckoff site: 2a, site symmetry: 6. .

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

Table 2: Wyckoff site: 4b, site symmetry: 3. .

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

Table 3: Wyckoff site: 6c, site symmetry: 2. .

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

Table 4: Wyckoff site: 12d, site symmetry: 1

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

12	$[-x, -x + y, z + \frac{1}{2}]$	[12]
----	---------------------------------	------