

SG No. 178  $D_6^2$   $P6_122$  [ hexagonal ]

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

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

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

Table 2: Wyckoff site: 6b, site symmetry: ..2

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

Table 3: Wyckoff site: 12c, site symmetry: 1

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