

MSG No. 154.42 $P3_2211'$ [Type II, trigonal]

Table 1: Wyckoff site: 3a, site symmetry: $.2.1'$

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

Table 2: Wyckoff site: 3b, site symmetry: $.2.1'$

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

Table 3: Wyckoff site: 6c, site symmetry: $11'$

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