MSG No. 160.66 $R3m1'$ [Type II, trigonal]

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

No.	position	mapping
1	$[0,\ 0,\ z]$	`[1,2,3,4,5,6,19,20,21,22,23,24]`
2	$\left[\frac{2}{3},\ \frac{1}{3},\ z+\frac{1}{3}\right]$	`[7,8,9,10,11,12,25,26,27,28,29,30]`
3	$\left[\frac{1}{3},\ \frac{2}{3},\ z+\frac{2}{3}\right]$	`[13,14,15,16,17,18,31,32,33,34,35,36]`

Table 2: Wyckoff site: `9b`, site symmetry: `.m.1'`

No.	position	mapping
1	$[x,\ -x,\ z]$	`[1,5,19,23]`
2	$[x,\ 2x,\ z]$	`[2,6,20,24]`
3	$[-2x,\ -x,\ z]$	`[3,4,21,22]`
4	$\left[x+\frac{2}{3},\ \frac{1}{3}-x,\ z+\frac{1}{3}\right]$	`[7,11,25,29]`
5	$\left[x+\frac{2}{3},\ 2x+\frac{1}{3},\ z+\frac{1}{3}\right]$	`[8,12,26,30]`
6	$\left[\frac{2}{3}-2x,\ \frac{1}{3}-x,\ z+\frac{1}{3}\right]$	`[9,10,27,28]`
7	$\left[x+\frac{1}{3},\ \frac{2}{3}-x,\ z+\frac{2}{3}\right]$	`[13,17,31,35]`
8	$\left[x+\frac{1}{3},\ 2x+\frac{2}{3},\ z+\frac{2}{3}\right]$	`[14,18,32,36]`
9	$\left[\frac{1}{3}-2x,\ \frac{2}{3}-x,\ z+\frac{2}{3}\right]$	`[15,16,33,34]`

Table 3: Wyckoff site: `18c`, site symmetry: `11'`

No.	position	mapping
1	$[x,\ y,\ z]$	`[1,19]`
2	$[-y,\ x-y,\ z]$	`[2,20]`
3	$[-x+y,\ -x,\ z]$	`[3,21]`
4	$[-x+y,\ y,\ z]$	`[4,22]`
5	$[-y,\ -x,\ z]$	`[5,23]`
6	$[x,\ x-y,\ z]$	`[6,24]`
7	$\left[x+\frac{2}{3},\ y+\frac{1}{3},\ z+\frac{1}{3}\right]$	`[7,25]`
8	$\left[\frac{2}{3}-y,\ x-y+\frac{1}{3},\ z+\frac{1}{3}\right]$	`[8,26]`
9	$\left[-x+y+\frac{2}{3},\ \frac{1}{3}-x,\ z+\frac{1}{3}\right]$	`[9,27]`
10	$\left[-x+y+\frac{2}{3},\ y+\frac{1}{3},\ z+\frac{1}{3}\right]$	`[10,28]`
11	$\left[\frac{2}{3}-y,\ \frac{1}{3}-x,\ z+\frac{1}{3}\right]$	`[11,29]`
12	$\left[x+\frac{2}{3},\ x-y+\frac{1}{3},\ z+\frac{1}{3}\right]$	`[12,30]`
13	$\left[x+\frac{1}{3},\ y+\frac{2}{3},\ z+\frac{2}{3}\right]$	`[13,31]`
14	$\left[\frac{1}{3}-y,\ x-y+\frac{2}{3},\ z+\frac{2}{3}\right]$	`[14,32]`
15	$\left[-x+y+\frac{1}{3},\ \frac{2}{3}-x,\ z+\frac{2}{3}\right]$	`[15,33]`
16	$\left[-x+y+\frac{1}{3},\ y+\frac{2}{3},\ z+\frac{2}{3}\right]$	`[16,34]`
17	$\left[\frac{1}{3}-y,\ \frac{2}{3}-x,\ z+\frac{2}{3}\right]$	`[17,35]`
18	$\left[x+\frac{1}{3},\ x-y+\frac{2}{3},\ z+\frac{2}{3}\right]$	`[18,36]`