MSG No. 160.67 $R3m'$ [Type III, trigonal]

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

No.	position	mapping
1	$[0,\ 0,\ z]$	`[1,2,3,4,5,6]`
2	$\left[\frac{2}{3},\ \frac{1}{3},\ z+\frac{1}{3}\right]$	`[7,8,9,10,11,12]`
3	$\left[\frac{1}{3},\ \frac{2}{3},\ z+\frac{2}{3}\right]$	`[13,14,15,16,17,18]`

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

No.	position	mapping
1	$[x,\ -x,\ z]$	`[1,5]`
2	$[x,\ 2x,\ z]$	`[2,6]`
3	$[-2x,\ -x,\ z]$	`[3,4]`
4	$\left[x+\frac{2}{3},\ \frac{1}{3}-x,\ z+\frac{1}{3}\right]$	`[7,11]`
5	$\left[x+\frac{2}{3},\ 2x+\frac{1}{3},\ z+\frac{1}{3}\right]$	`[8,12]`
6	$\left[\frac{2}{3}-2x,\ \frac{1}{3}-x,\ z+\frac{1}{3}\right]$	`[9,10]`
7	$\left[x+\frac{1}{3},\ \frac{2}{3}-x,\ z+\frac{2}{3}\right]$	`[13,17]`
8	$\left[x+\frac{1}{3},\ 2x+\frac{2}{3},\ z+\frac{2}{3}\right]$	`[14,18]`
9	$\left[\frac{1}{3}-2x,\ \frac{2}{3}-x,\ z+\frac{2}{3}\right]$	`[15,16]`

Table 3: Wyckoff site: `18c`, site symmetry: `1`

No.	position	mapping
1	$[x,\ y,\ z]$	`[1]`
2	$[-y,\ x-y,\ z]$	`[2]`
3	$[-x+y,\ -x,\ z]$	`[3]`
4	$[-x+y,\ y,\ z]$	`[4]`
5	$[-y,\ -x,\ z]$	`[5]`
6	$[x,\ x-y,\ z]$	`[6]`
7	$\left[x+\frac{2}{3},\ y+\frac{1}{3},\ z+\frac{1}{3}\right]$	`[7]`
8	$\left[\frac{2}{3}-y,\ x-y+\frac{1}{3},\ z+\frac{1}{3}\right]$	`[8]`
9	$\left[-x+y+\frac{2}{3},\ \frac{1}{3}-x,\ z+\frac{1}{3}\right]$	`[9]`
10	$\left[-x+y+\frac{2}{3},\ y+\frac{1}{3},\ z+\frac{1}{3}\right]$	`[10]`
11	$\left[\frac{2}{3}-y,\ \frac{1}{3}-x,\ z+\frac{1}{3}\right]$	`[11]`
12	$\left[x+\frac{2}{3},\ x-y+\frac{1}{3},\ z+\frac{1}{3}\right]$	`[12]`
13	$\left[x+\frac{1}{3},\ y+\frac{2}{3},\ z+\frac{2}{3}\right]$	`[13]`
14	$\left[\frac{1}{3}-y,\ x-y+\frac{2}{3},\ z+\frac{2}{3}\right]$	`[14]`
15	$\left[-x+y+\frac{1}{3},\ \frac{2}{3}-x,\ z+\frac{2}{3}\right]$	`[15]`
16	$\left[-x+y+\frac{1}{3},\ y+\frac{2}{3},\ z+\frac{2}{3}\right]$	`[16]`
17	$\left[\frac{1}{3}-y,\ \frac{2}{3}-x,\ z+\frac{2}{3}\right]$	`[17]`
18	$\left[x+\frac{1}{3},\ x-y+\frac{2}{3},\ z+\frac{2}{3}\right]$	`[18]`