MSG No. 161.72 R_I3c [Type IV, trigonal]

Table 1: Wyckoff site: `6a`, site symmetry: `3m'.`

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

Table 2: Wyckoff site: `18b`, site symmetry: `.m'.`

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

Table 3: Wyckoff site: `36c`, site symmetry: `1`

No.	position	mapping
1	$[x,\ y,\ z]$	`[1]`
2	$[-y,\ x-y,\ z]$	`[2]`
3	$[-x+y,\ -x,\ z]$	`[3]`
4	$\left[-x+y,\ y,\ z+\frac{1}{2}\right]$	`[4]`
5	$\left[-y,\ -x,\ z+\frac{1}{2}\right]$	`[5]`
6	$\left[x,\ x-y,\ z+\frac{1}{2}\right]$	`[6]`
7	$\left[x+\frac{2}{3},\ y+\frac{1}{3},\ z+\frac{1}{3}\right]$	`[7]`

continued ...

Table 3

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