MSG No. 146.11 $R31'$ [Type II, trigonal]

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

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

Table 2: Wyckoff site: `9b`, site symmetry: `11'`

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