

SG No. 161 C_{3v}^6 $R3c$ [trigonal]

* plus set: $+ [0, 0, 0]$, $+ [\frac{2}{3}, \frac{1}{3}, \frac{1}{3}]$, $+ [\frac{1}{3}, \frac{2}{3}, \frac{2}{3}]$

* Wyckoff site: 6a, site symmetry: 3.

Table 1: Wyckoff bond: 6a@6a

No.	vector	center	mapping
1	$[0, 0, Z]$	$[0, 0, z]$	[1,2,3]
2	$[0, 0, Z]$	$[0, 0, z + \frac{1}{2}]$	[4,5,6]

Table 2: Wyckoff bond: 18b@6a

No.	vector	center	mapping
1	$[X, Y, Z]$	$[0, 0, z]$	[1]
2	$[-Y, X - Y, Z]$	$[0, 0, z]$	[2]
3	$[-X + Y, -X, Z]$	$[0, 0, z]$	[3]
4	$[-Y, -X, Z]$	$[0, 0, z + \frac{1}{2}]$	[4]
5	$[-X + Y, Y, Z]$	$[0, 0, z + \frac{1}{2}]$	[5]
6	$[X, X - Y, Z]$	$[0, 0, z + \frac{1}{2}]$	[6]

* Wyckoff site: 18b, site symmetry: 1

Table 3: Wyckoff bond: 18a@18b

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, y, z]$	[1]
2	$[-Y, X - Y, Z]$	$[-y, x - y, z]$	[2]
3	$[-X + Y, -X, Z]$	$[-x + y, -x, z]$	[3]
4	$[-Y, -X, Z]$	$[-y, -x, z + \frac{1}{2}]$	[4]
5	$[-X + Y, Y, Z]$	$[-x + y, y, z + \frac{1}{2}]$	[5]
6	$[X, X - Y, Z]$	$[x, x - y, z + \frac{1}{2}]$	[6]