

# PG No. 22 $C_{3h}$ $\bar{6}$ [ hexagonal ]

\* Wyckoff site: 2a, site symmetry:  $3..$

Table 1: Wyckoff bond: 2a@2a

No.	vector	center	mapping
1	$[0, 0, Z]$	$[0, 0, z]$	$[1, 2, 3]$
2	$[0, 0, -Z]$	$[0, 0, -z]$	$[4, 5, 6]$

Table 2: Wyckoff bond: 6b@2a

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	$[X, Y, -Z]$	$[0, 0, -z]$	$[4]$
5	$[-Y, X - Y, -Z]$	$[0, 0, -z]$	$[5]$
6	$[-X + Y, -X, -Z]$	$[0, 0, -z]$	$[6]$

\* Wyckoff site: 3b, site symmetry:  $m..$

Table 3: Wyckoff bond: 3a@3b

No.	vector	center	mapping
1	$[X, Y, 0]$	$[x, y, 0]$	$[1, 4]$
2	$[-Y, X - Y, 0]$	$[-y, x - y, 0]$	$[2, 5]$
3	$[-X + Y, -X, 0]$	$[-x + y, -x, 0]$	$[3, 6]$

Table 4: Wyckoff bond: 3b@3b

No.	vector	center	mapping
1	$[0, 0, Z]$	$[x, y, 0]$	$[1, -4]$
2	$[0, 0, Z]$	$[-y, x - y, 0]$	$[2, -5]$
3	$[0, 0, Z]$	$[-x + y, -x, 0]$	$[3, -6]$

Table 5: Wyckoff bond: 6c@3b

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, y, 0]$	$[1]$
2	$[-Y, X - Y, Z]$	$[-y, x - y, 0]$	$[2]$

*continued ...*

Table 5

No.	vector	center	mapping
3	$[-X + Y, -X, Z]$	$[-x + y, -x, 0]$	[3]
4	$[X, Y, -Z]$	$[x, y, 0]$	[4]
5	$[-Y, X - Y, -Z]$	$[-y, x - y, 0]$	[5]
6	$[-X + Y, -X, -Z]$	$[-x + y, -x, 0]$	[6]

\* Wyckoff site: **6c**, site symmetry: **1**

Table 6: Wyckoff bond: **6a@6c**

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	$[X, Y, -Z]$	$[x, y, -z]$	[4]
5	$[-Y, X - Y, -Z]$	$[-y, x - y, -z]$	[5]
6	$[-X + Y, -X, -Z]$	$[-x + y, -x, -z]$	[6]