PG No. 26 D_{3h} $\bar{6}m2$ (-6m2 setting) [hexagonal]

* Wyckoff site: `2a`, site symmetry: `3m`.

Table 1: Wyckoff bond: `2a@2a`

No.	vector	center	mapping
1	[0, 0, Z]	[0, 0, z]	`[1,2,3,7,8,9]`
2	[0, 0, $-Z$]	[0, 0, $-z$]	`[4,5,6,10,11,12]`

Table 2: Wyckoff bond: `6b@2a`

No.	vector	center	mapping
1	[X, $2X$, Z]	[0, 0, z]	`[1,8]`
2	[$-2X$, $-X$, Z]	[0, 0, z]	`[2,7]`
3	[X, $-X$, Z]	[0, 0, z]	`[3,9]`
4	[X, $2X$, $-Z$]	[0, 0, $-z$]	`[4,11]`
5	[$-2X$, $-X$, $-Z$]	[0, 0, $-z$]	`[5,10]`
6	[X, $-X$, $-Z$]	[0, 0, $-z$]	`[6,12]`

Table 3: Wyckoff bond: `6c@2a`

No.	vector	center	mapping
1	[X, 0, 0]	[0, 0, z]	`[1,-8]`
2	[0, X, 0]	[0, 0, z]	`[2,-7]`
3	[$-X$, $-X$, 0]	[0, 0, z]	`[3,-9]`
4	[X, 0, 0]	[0, 0, $-z$]	`[4,-11]`
5	[0, X, 0]	[0, 0, $-z$]	`[5,-10]`
6	[$-X$, $-X$, 0]	[0, 0, $-z$]	`[6,-12]`

Table 4: Wyckoff bond: `12d@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]`
7	[$-Y$, $-X$, Z]	[0, 0, z]	`[7]`
8	[$-X+Y$, Y, Z]	[0, 0, z]	`[8]`
9	[X, $X-Y$, Z]	[0, 0, z]	`[9]`
10	[$-Y$, $-X$, $-Z$]	[0, 0, $-z$]	`[10]`

continued ...

Table 4

No.	vector	center	mapping
11	$[-X+Y, Y, -Z]$	$[0, 0, -z]$	`[11]`
12	$[X, X-Y, -Z]$	$[0, 0, -z]$	`[12]`

* Wyckoff site: `3b`, site symmetry: `mm2`

Table 5: Wyckoff bond: `3a@3b`

No.	vector	center	mapping
1	$[X, -X, 0]$	$[x, -x, 0]$	`[1,4,7,10]`
2	$[X, 2X, 0]$	$[x, 2x, 0]$	`[2,5,9,12]`
3	$[-2X, -X, 0]$	$[-2x, -x, 0]$	`[3,6,8,11]`

Table 6: Wyckoff bond: `3b@3b`

No.	vector	center	mapping
1	$[X, X, 0]$	$[x, -x, 0]$	`[1,4,-7,-10]`
2	$[-X, 0, 0]$	$[x, 2x, 0]$	`[2,5,-9,-12]`
3	$[0, -X, 0]$	$[-2x, -x, 0]$	`[3,6,-8,-11]`

Table 7: Wyckoff bond: `3c@3b`

No.	vector	center	mapping
1	$[0, 0, Z]$	$[x, -x, 0]$	`[1,-4,7,-10]`
2	$[0, 0, Z]$	$[x, 2x, 0]$	`[2,-5,9,-12]`
3	$[0, 0, Z]$	$[-2x, -x, 0]$	`[3,-6,8,-11]`

Table 8: Wyckoff bond: `6d@3b`

No.	vector	center	mapping
1	$[X, Y, 0]$	$[x, -x, 0]$	`[1,4]`
2	$[-Y, X-Y, 0]$	$[x, 2x, 0]$	`[2,5]`
3	$[-X+Y, -X, 0]$	$[-2x, -x, 0]$	`[3,6]`
4	$[-Y, -X, 0]$	$[x, -x, 0]$	`[7,10]`
5	$[-X+Y, Y, 0]$	$[-2x, -x, 0]$	`[8,11]`
6	$[X, X-Y, 0]$	$[x, 2x, 0]$	`[9,12]`

Table 9: Wyckoff bond: `6e@3b`

No.	vector	center	mapping
1	$[X, -X, Z]$	$[x, -x, 0]$	`[1,7]`
2	$[X, 2X, Z]$	$[x, 2x, 0]$	`[2,9]`
3	$[-2X, -X, Z]$	$[-2x, -x, 0]$	`[3,8]`
4	$[X, -X, -Z]$	$[x, -x, 0]$	`[4,10]`
5	$[X, 2X, -Z]$	$[x, 2x, 0]$	`[5,12]`
6	$[-2X, -X, -Z]$	$[-2x, -x, 0]$	`[6,11]`

Table 10: Wyckoff bond: `6f@3b`

No.	vector	center	mapping
1	$[X, X, Z]$	$[x, -x, 0]$	`[1,-10]`
2	$[-X, 0, Z]$	$[x, 2x, 0]$	`[2,-12]`
3	$[0, -X, Z]$	$[-2x, -x, 0]$	`[3,-11]`
4	$[X, X, -Z]$	$[x, -x, 0]$	`[4,-7]`
5	$[-X, 0, -Z]$	$[x, 2x, 0]$	`[5,-9]`
6	$[0, -X, -Z]$	$[-2x, -x, 0]$	`[6,-8]`

Table 11: Wyckoff bond: `12g@3b`

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, -x, 0]$	`[1]`
2	$[-Y, X-Y, Z]$	$[x, 2x, 0]$	`[2]`
3	$[-X+Y, -X, Z]$	$[-2x, -x, 0]$	`[3]`
4	$[X, Y, -Z]$	$[x, -x, 0]$	`[4]`
5	$[-Y, X-Y, -Z]$	$[x, 2x, 0]$	`[5]`
6	$[-X+Y, -X, -Z]$	$[-2x, -x, 0]$	`[6]`
7	$[-Y, -X, Z]$	$[x, -x, 0]$	`[7]`
8	$[-X+Y, Y, Z]$	$[-2x, -x, 0]$	`[8]`
9	$[X, X-Y, Z]$	$[x, 2x, 0]$	`[9]`
10	$[-Y, -X, -Z]$	$[x, -x, 0]$	`[10]`
11	$[-X+Y, Y, -Z]$	$[-2x, -x, 0]$	`[11]`
12	$[X, X-Y, -Z]$	$[x, 2x, 0]$	`[12]`

* Wyckoff site: `6c`, site symmetry: `.m.`

Table 12: Wyckoff bond: `6a@6c`

No.	vector	center	mapping
1	$[X, -X, Z]$	$[x, -x, z]$	`[1,7]`

continued ...

Table 12

No.	vector	center	mapping
2	$[X, 2X, Z]$	$[x, 2x, z]$	`[2,9]`
3	$[-2X, -X, Z]$	$[-2x, -x, z]$	`[3,8]`
4	$[X, -X, -Z]$	$[x, -x, -z]$	`[4,10]`
5	$[X, 2X, -Z]$	$[x, 2x, -z]$	`[5,12]`
6	$[-2X, -X, -Z]$	$[-2x, -x, -z]$	`[6,11]`

Table 13: Wyckoff bond: `6b@6c`

No.	vector	center	mapping
1	$[X, X, 0]$	$[x, -x, z]$	`[1,-7]`
2	$[-X, 0, 0]$	$[x, 2x, z]$	`[2,-9]`
3	$[0, -X, 0]$	$[-2x, -x, z]$	`[3,-8]`
4	$[X, X, 0]$	$[x, -x, -z]$	`[4,-10]`
5	$[-X, 0, 0]$	$[x, 2x, -z]$	`[5,-12]`
6	$[0, -X, 0]$	$[-2x, -x, -z]$	`[6,-11]`

Table 14: Wyckoff bond: `12c@6c`

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, -x, z]$	`[1]`
2	$[-Y, X-Y, Z]$	$[x, 2x, z]$	`[2]`
3	$[-X+Y, -X, Z]$	$[-2x, -x, z]$	`[3]`
4	$[X, Y, -Z]$	$[x, -x, -z]$	`[4]`
5	$[-Y, X-Y, -Z]$	$[x, 2x, -z]$	`[5]`
6	$[-X+Y, -X, -Z]$	$[-2x, -x, -z]$	`[6]`
7	$[-Y, -X, Z]$	$[x, -x, z]$	`[7]`
8	$[-X+Y, Y, Z]$	$[-2x, -x, z]$	`[8]`
9	$[X, X-Y, Z]$	$[x, 2x, z]$	`[9]`
10	$[-Y, -X, -Z]$	$[x, -x, -z]$	`[10]`
11	$[-X+Y, Y, -Z]$	$[-2x, -x, -z]$	`[11]`
12	$[X, X-Y, -Z]$	$[x, 2x, -z]$	`[12]`

* Wyckoff site: `6d`, site symmetry: `m..`

Table 15: Wyckoff bond: `6a@6d`

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]`

continued ...

Table 15

No.	vector	center	mapping
4	$[-Y, -X, 0]$	$[-y, -x, 0]$	`[7,10]`
5	$[-X+Y, Y, 0]$	$[-x+y, y, 0]$	`[8,11]`
6	$[X, X-Y, 0]$	$[x, x-y, 0]$	`[9,12]`

Table 16: Wyckoff bond: `6b@6d`

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]`
4	$[0, 0, Z]$	$[-y, -x, 0]$	`[7,-10]`
5	$[0, 0, Z]$	$[-x+y, y, 0]$	`[8,-11]`
6	$[0, 0, Z]$	$[x, x-y, 0]$	`[9,-12]`

Table 17: Wyckoff bond: `12c@6d`

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, y, 0]$	`[1]`
2	$[-Y, X-Y, Z]$	$[-y, x-y, 0]$	`[2]`
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]`
7	$[-Y, -X, Z]$	$[-y, -x, 0]$	`[7]`
8	$[-X+Y, Y, Z]$	$[-x+y, y, 0]$	`[8]`
9	$[X, X-Y, Z]$	$[x, x-y, 0]$	`[9]`
10	$[-Y, -X, -Z]$	$[-y, -x, 0]$	`[10]`
11	$[-X+Y, Y, -Z]$	$[-x+y, y, 0]$	`[11]`
12	$[X, X-Y, -Z]$	$[x, x-y, 0]$	`[12]`

* Wyckoff site: `12e`, site symmetry: `1`

Table 18: Wyckoff bond: `12a@12e`

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]`

continued ...

Table 18

No.	vector	center	mapping
6	$[-X+Y,\ -X,\ -Z]$	$[-x+y,\ -x,\ -z]$	[6]
7	$[-Y,\ -X,\ Z]$	$[-y,\ -x,\ z]$	[7]
8	$[-X+Y,\ Y,\ Z]$	$[-x+y,\ y,\ z]$	[8]
9	$[X,\ X-Y,\ Z]$	$[x,\ x-y,\ z]$	[9]
10	$[-Y,\ -X,\ -Z]$	$[-y,\ -x,\ -z]$	[10]
11	$[-X+Y,\ Y,\ -Z]$	$[-x+y,\ y,\ -z]$	[11]
12	$[X,\ X-Y,\ -Z]$	$[x,\ x-y,\ -z]$	[12]