

SG No. 92 D_4^4 $P4_1212$ [tetragonal]

* plus set: +[0, 0, 0]

* Wyckoff site: 4a, site symmetry: . . 2

Table 1: Wyckoff bond: 4a@4a

No.	vector	center	mapping
1	[$X, -X, Z$]	[$x, x, 0$]	[1, -7]
2	[$-X, X, Z$]	[$-x, -x, \frac{1}{2}$]	[2, -8]
3	[X, X, Z]	[$\frac{1}{2} - x, x + \frac{1}{2}, \frac{1}{4}$]	[3, -5]
4	[$-X, -X, Z$]	[$x + \frac{1}{2}, \frac{1}{2} - x, \frac{3}{4}$]	[4, -6]

Table 2: Wyckoff bond: 4b@4a

No.	vector	center	mapping
1	[$X, X, 0$]	[$x, x, 0$]	[1, 7]
2	[$-X, -X, 0$]	[$-x, -x, \frac{1}{2}$]	[2, 8]
3	[$-X, X, 0$]	[$\frac{1}{2} - x, x + \frac{1}{2}, \frac{1}{4}$]	[3, 5]
4	[$X, -X, 0$]	[$x + \frac{1}{2}, \frac{1}{2} - x, \frac{3}{4}$]	[4, 6]

Table 3: Wyckoff bond: 8c@4a

No.	vector	center	mapping
1	[X, Y, Z]	[$x, x, 0$]	[1]
2	[$-X, -Y, Z$]	[$-x, -x, \frac{1}{2}$]	[2]
3	[$-Y, X, Z$]	[$\frac{1}{2} - x, x + \frac{1}{2}, \frac{1}{4}$]	[3]
4	[$Y, -X, Z$]	[$x + \frac{1}{2}, \frac{1}{2} - x, \frac{3}{4}$]	[4]
5	[$-X, Y, -Z$]	[$\frac{1}{2} - x, x + \frac{1}{2}, \frac{1}{4}$]	[5]
6	[$X, -Y, -Z$]	[$x + \frac{1}{2}, \frac{1}{2} - x, \frac{3}{4}$]	[6]
7	[$Y, X, -Z$]	[$x, x, 0$]	[7]
8	[$-Y, -X, -Z$]	[$-x, -x, \frac{1}{2}$]	[8]

* Wyckoff site: 8b, site symmetry: 1

Table 4: Wyckoff bond: 8a@8b

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

continued ...

Table 4

No.	vector	center	mapping
6	$[X, -Y, -Z]$	$[x + \frac{1}{2}, \frac{1}{2} - y, \frac{3}{4} - z]$	[6]
7	$[Y, X, -Z]$	$[y, x, -z]$	[7]
8	$[-Y, -X, -Z]$	$[-y, -x, \frac{1}{2} - z]$	[8]