

SG No. 20 D_2^5 $C222_1$ [orthorhombic]

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

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

Table 1: Wyckoff bond: 4a@4a

No.	vector	center	mapping
1	$[0, Y, Z]$	$[x, 0, 0]$	$[1, -4]$
2	$[0, -Y, Z]$	$[-x, 0, \frac{1}{2}]$	$[2, -3]$

Table 2: Wyckoff bond: 4b@4a

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

Table 3: Wyckoff bond: 8c@4a

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

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

Table 4: Wyckoff bond: 4a@4b

No.	vector	center	mapping
1	$[X, 0, Z]$	$[0, y, \frac{1}{4}]$	$[1, -3]$
2	$[-X, 0, Z]$	$[0, -y, \frac{3}{4}]$	$[2, -4]$

Table 5: Wyckoff bond: 4b@4b

No.	vector	center	mapping
1	$[0, Y, 0]$	$[0, y, \frac{1}{4}]$	$[1, 3]$
2	$[0, -Y, 0]$	$[0, -y, \frac{3}{4}]$	$[2, 4]$

Table 6: Wyckoff bond: 8c@4b

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

* Wyckoff site: 8c, site symmetry: 1

Table 7: Wyckoff bond: 8a@8c

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