

# PG No. 7 $C_{2v}$ $mm2$ [ orthorhombic ]

\* Wyckoff site: **1a**, site symmetry: **mm2**

Table 1: Wyckoff bond: **1a@1a**

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

Table 2: Wyckoff bond: **1b@1a**

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

Table 3: Wyckoff bond: **1c@1a**

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

Table 4: Wyckoff bond: **2d@1a**

No.	vector	center	mapping
1	$[X, Y, 0]$	$[0, 0, z]$	$[1, -2]$
2	$[X, -Y, 0]$	$[0, 0, z]$	$[3, -4]$

Table 5: Wyckoff bond: **2e@1a**

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

Table 6: Wyckoff bond: **2f@1a**

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

Table 7: Wyckoff bond: **4g@1a**

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

\* Wyckoff site: **2b**, site symmetry:  $\bar{4}2m$ .

Table 8: Wyckoff bond: **2a@2b**

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

Table 9: Wyckoff bond: **2b@2b**

No.	vector	center	mapping
1	$[0, Y, 0]$	$[x, 0, z]$	$[1, -3]$
2	$[0, -Y, 0]$	$[-x, 0, z]$	$[2, -4]$

Table 10: Wyckoff bond: **4c@2b**

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, 0, z]$	$[1]$
2	$[-X, -Y, Z]$	$[-x, 0, z]$	$[2]$
3	$[X, -Y, Z]$	$[x, 0, z]$	$[3]$
4	$[-X, Y, Z]$	$[-x, 0, z]$	$[4]$

\* Wyckoff site: **2c**, site symmetry:  $m\bar{3}m$ .

Table 11: Wyckoff bond: **2a@2c**

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

Table 12: Wyckoff bond: **2b@2c**

No.	vector	center	mapping
1	$[X, 0, 0]$	$[0, y, z]$	$[1, -4]$
2	$[-X, 0, 0]$	$[0, -y, z]$	$[2, -3]$

Table 13: Wyckoff bond: **4c@2c**

No.	vector	center	mapping
1	$[X, Y, Z]$	$[0, y, z]$	$[1]$
2	$[-X, -Y, Z]$	$[0, -y, z]$	$[2]$
3	$[X, -Y, Z]$	$[0, -y, z]$	$[3]$
4	$[-X, Y, Z]$	$[0, y, z]$	$[4]$

\* Wyckoff site: **4d**, site symmetry: 1

Table 14: Wyckoff bond: **4a@4d**

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