

# PG No. 10 $S_4$ $\bar{4}$ [ tetragonal ]

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

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

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

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

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

Table 3: Wyckoff bond: **4c@2a**

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

\* Wyckoff site: **4b**, site symmetry:  $1$

Table 4: Wyckoff bond: **4a@4b**

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