

MSG No. 27.81  $Pc'c'2$  [ Type III, orthorhombic ]

\* symmetry operation

Table 1: Symmetry operations for 3d polar vector.

| No. | tag                          | matrix (polar)   | det | TR |
|-----|------------------------------|--|-----|----|
| 1   | $\{1 0\}$                    | $\begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \end{bmatrix}$            | 1   | 1  |
| 2   | $\{2_{001} 0\}$              | $\begin{bmatrix} -1 & 0 & 0 & 0 \\ 0 & -1 & 0 & 0 \\ 0 & 0 & 1 & 0 \end{bmatrix}$          | 1   | 1  |
| 3   | $\{m_{100}' 00\frac{1}{2}\}$ | $\begin{bmatrix} -1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \frac{1}{2} \end{bmatrix}$ | -1  | -1 |
| 4   | $\{m_{010}' 00\frac{1}{2}\}$ | $\begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & -1 & 0 & 0 \\ 0 & 0 & 1 & \frac{1}{2} \end{bmatrix}$ | -1  | -1 |