

MPG No. 11.5.39 $4'/m'$ [Type III, tetragonal] [T tensor]

* Rank 0 tensor. * Rank 1 tensor. * Rank 2 tensor (s). * Rank 2 tensor (a). * Rank 3 tensor (s).

$$\begin{bmatrix} 0 & 0 & T_{xxz} \\ 0 & 0 & -T_{xxz} \\ 0 & 0 & 0 \\ T_{yzx} & T_{yzy} & 0 \\ -T_{yzy} & T_{yzx} & 0 \\ 0 & 0 & T_{xyz} \end{bmatrix}$$

$$T_{xxz} = -2M_{dx y}^{(1)} + T_{fbz}^{(1)}$$

$$T_{yzx} = -M_{dv}^{(1)} + T_{f3}^{(1)}$$

$$T_{yzy} = -M_{dx y}^{(1)} - T_{fbz}^{(1)}$$

$$T_{xyz} = 2M_{dv}^{(1)} + T_{f3}^{(1)}$$

* Rank 3 tensor (a).

$$\begin{bmatrix} T_{yzx} & T_{yzy} & 0 \\ T_{yzy} & -T_{yzx} & 0 \\ 0 & 0 & 0 \end{bmatrix}$$

$$T_{yzx} = M_{dv}^{(2)}$$

$$T_{yzy} = M_{dx y}^{(2)}$$

* Rank 4 tensor (sss). * Rank 4 tensor (ssa). * Rank 4 tensor (aas). * Rank 4 tensor (aaa). * Rank 4 tensor (sa). * Rank 4 tensor (as). * Rank 4 tensor (s). * Rank 4 tensor (a). * Rank 4 tensor (t).