

MPG No. 11.3.37 $4'/m$ [Type III, tetragonal] [M tensor]

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

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

$$M_{xxz} = M_{fbz}^{(1)} - 2T_{dxy}^{(1)}$$

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

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

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

* Rank 3 tensor (a).

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

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

$$M_{yzy} = T_{dxy}^{(2)}$$

* 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).