

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).