

MPG No. 15.1.53 $4/mmm$ [Type I, tetragonal] [M tensor]

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

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

$$M_{yzx} = -3T_{du}^{(1)}$$

* Rank 3 tensor (a).

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

$$M_{yzx} = -T_{du}^{(2)} + T_s^{(1)}$$

$$M_{xyz} = 2T_{du}^{(2)} + T_s^{(1)}$$

* 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).