MPG No. 8.4.27 $m'm'm$ (m'm'm setting) [Type III, orthorhombic] [M tensor]

* Rank 0 tensor. * Rank 1 tensor.

$$\begin{bmatrix} 0 & 0 & M_z \end{bmatrix}$$

$$M_z = M_{pz}^{(1)}$$

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

$$\begin{bmatrix} 0 & 0 & M_{xxz} \\ 0 & 0 & M_{yyz} \\ 0 & 0 & M_{zzz} \\ 0 & M_{yzy} & 0 \\ M_{zxx} & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$$

$$M_{xxz} = -M_{faz}^{(1)} + M_{fbz}^{(1)} + M_{pz}^{(1)} - 2T_{dxy}^{(1)}$$
$$M_{yyz} = -M_{faz}^{(1)} - M_{fbz}^{(1)} + M_{pz}^{(1)} + 2T_{dxy}^{(1)}$$
$$M_{zzz} = 2M_{faz}^{(1)} + M_{pz}^{(1)} + 2M_{pz}^{(2)}$$
$$M_{yzy} = -M_{faz}^{(1)} - M_{fbz}^{(1)} + M_{pz}^{(2)} - T_{dxy}^{(1)}$$
$$M_{zxx} = -M_{faz}^{(1)} + M_{fbz}^{(1)} + M_{pz}^{(2)} + T_{dxy}^{(1)}$$

* Rank 3 tensor (a).

$$\begin{bmatrix} 0 & M_{yzy} & 0 \\ M_{zxx} & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$$

$$M_{yzy} = M_{pz}^{(3)} + T_{dxy}^{(2)}$$
$$M_{zxx} = -M_{pz}^{(3)} + T_{dxy}^{(2)}$$

* 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).