

MPG No. 5.5.16 $2'/m'$ [Type III, monoclinic] [M tensor]

* Rank 0 tensor. * Rank 1 tensor.

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

$$M_x = M_{px}^{(1)}$$

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

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

$$\begin{bmatrix} M_{xxx} & 0 & M_{xxz} \\ M_{yyx} & 0 & M_{yyz} \\ M_{zzx} & 0 & M_{zzz} \\ 0 & M_{yzy} & 0 \\ M_{zxx} & 0 & M_{zxz} \\ 0 & M_{xyy} & 0 \end{bmatrix}$$

$$M_{xxx} = 2M_{fax}^{(1)} + M_{px}^{(1)} + 2M_{px}^{(2)}$$

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

$$M_{yyx} = -M_{fax}^{(1)} + M_{fbx}^{(1)} + M_{px}^{(1)} - 2T_{dyz}^{(1)}$$

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

$$M_{zzx} = -M_{fax}^{(1)} - M_{fbx}^{(1)} + M_{px}^{(1)} + 2T_{dyz}^{(1)}$$

$$M_{zzz} = 2M_{faz}^{(1)} + M_{pz}^{(1)} + 2M_{pz}^{(2)}$$

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

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

$$M_{zxz} = -M_{fax}^{(1)} - M_{fbx}^{(1)} + M_{px}^{(2)} - T_{dyz}^{(1)}$$

$$M_{xyy} = -M_{fax}^{(1)} + M_{fbx}^{(1)} + M_{px}^{(2)} + T_{dyz}^{(1)}$$

* Rank 3 tensor (a).

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

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

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

$$M_{zxz} = M_{px}^{(3)} + T_{dyz}^{(2)}$$

$$M_{xyy} = -M_{px}^{(3)} + T_{dyz}^{(2)}$$

* 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).