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

$$\begin{bmatrix} T_{xx} & 0 & 0 \\ 0 & -T_{xx} & 0 \\ 0 & 0 & 0 \end{bmatrix}$$

$$T_{xx} = T_{dv}^{(1)}$$

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

$$\begin{bmatrix} 0 & 0 & T_{xxz} \\ 0 & 0 & -T_{xxz} \\ 0 & 0 & 0 \\ 0 & T_{yzy} & 0 \\ -T_{yzy} & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$$

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

* Rank 3 tensor (a).

$$\begin{bmatrix} 0 & T_{yzy} & 0 \\ T_{yzy} & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$$

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

* Rank 4 tensor (sss).

$$\begin{bmatrix} T_{xxxx} & 0 & T_{xxzz} & 0 & 0 & 0 \\ 0 & -T_{xxxx} & -T_{xxzz} & 0 & 0 & 0 \\ T_{xxzz} & -T_{xxzz} & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & T_{yzyz} & 0 & 0 \\ 0 & 0 & 0 & 0 & -T_{yzyz} & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix}$$

$$T_{xxxx} = 2T_{dv}^{(1)} + 4T_{dv}^{(2)} + T_{gv}^{(1)}$$
$$T_{xxzz} = T_{dv}^{(1)} - T_{gv}^{(1)}$$
$$T_{yzyz} = -T_{dv}^{(2)} + T_{gv}^{(1)}$$

* Rank 4 tensor (ssa).

$$\begin{bmatrix} 0 & T_{xxyy} & T_{xxzz} & 0 & 0 & 0 \\ -T_{xxyy} & 0 & -T_{xxzz} & 0 & 0 & 0 \\ -T_{xxzz} & T_{xxzz} & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix}$$

$$T_{xxyy} = 4M_{f3}^{(1)} - 2T_{dv}^{(3)}$$
$$T_{xxzz} = -4M_{f3}^{(1)} - T_{dv}^{(3)}$$

* Rank 4 tensor (aas).

$$\begin{bmatrix} T_{yzyz} & 0 & 0 \\ 0 & -T_{yzyz} & 0 \\ 0 & 0 & 0 \end{bmatrix}$$

$$T_{yzyz} = 2T_{dv}^{(4)}$$

* Rank 4 tensor (aaa). * Rank 4 tensor (sa).

$$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \\ T_{yzyz} & 0 & 0 \\ 0 & T_{yzyz} & 0 \\ 0 & 0 & T_{xyxy} \end{bmatrix}$$

$$T_{yzyz} = M_{f3}^{(2)} - T_{dv}^{(5)}$$
$$T_{xyxy} = M_{f3}^{(2)} + 2T_{dv}^{(5)}$$

* Rank 4 tensor (as).

$$\begin{bmatrix} 0 & 0 & 0 & T_{yzyz} & 0 & 0 \\ 0 & 0 & 0 & 0 & T_{yzyz} & 0 \\ 0 & 0 & 0 & 0 & 0 & T_{xyxy} \end{bmatrix}$$

$$T_{yzyz} = M_{f3}^{(3)} - T_{dv}^{(6)}$$
$$T_{xyxy} = M_{f3}^{(3)} + 2T_{dv}^{(6)}$$

* Rank 4 tensor (s).

$$\begin{bmatrix} T_{xxxx} & T_{xxyy} & T_{xxzz} & 0 & 0 & 0 & 0 & 0 & 0 \\ -T_{xxyy} & -T_{xxxx} & -T_{xxzz} & 0 & 0 & 0 & 0 & 0 & 0 \\ T_{zzxx} & -T_{zzxx} & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & T_{yzyz} & 0 & 0 & T_{yzzy} & 0 & 0 \\ 0 & 0 & 0 & 0 & -T_{yzzy} & 0 & 0 & -T_{yzyz} & 0 \\ 0 & 0 & 0 & 0 & 0 & T_{xyxy} & 0 & 0 & -T_{xyxy} \end{bmatrix}$$

$$T_{xxxx} = 2T_{dv}^{(1)} + 4T_{dv}^{(2)} + T_{gv}^{(1)}$$
$$T_{xxyy} = 4M_{f3}^{(1)} - 2T_{dv}^{(3)}$$
$$T_{xxzz} = -4M_{f3}^{(1)} + T_{dv}^{(1)} - T_{dv}^{(3)} - T_{gv}^{(1)}$$
$$T_{zzxx} = 4M_{f3}^{(1)} + T_{dv}^{(1)} + T_{dv}^{(3)} - T_{gv}^{(1)}$$
$$T_{yzyz} = M_{f3}^{(2)} - T_{dv}^{(2)} - T_{dv}^{(5)} + T_{gv}^{(1)}$$
$$T_{yzzy} = -M_{f3}^{(2)} - T_{dv}^{(2)} + T_{dv}^{(5)} + T_{gv}^{(1)}$$
$$T_{xyxy} = M_{f3}^{(2)} + 2T_{dv}^{(5)}$$

* Rank 4 tensor (a).

$$\begin{bmatrix} 0 & 0 & 0 & T_{yzyz} & 0 & 0 & T_{yzzy} & 0 & 0 \\ 0 & 0 & 0 & 0 & T_{yzzy} & 0 & 0 & T_{yzyz} & 0 \\ 0 & 0 & 0 & 0 & 0 & T_{xyxy} & 0 & 0 & T_{xyxy} \end{bmatrix}$$

$$T_{yzyz} = M_{f3}^{(3)} + 2T_{dv}^{(4)} - T_{dv}^{(6)}$$
$$T_{yzzy} = M_{f3}^{(3)} - 2T_{dv}^{(4)} - T_{dv}^{(6)}$$
$$T_{xyxy} = M_{f3}^{(3)} + 2T_{dv}^{(6)}$$

* Rank 4 tensor (t).

$$\begin{bmatrix} T_{xxxx} & 0 & 0 \\ 0 & -T_{xxxx} & 0 \\ 0 & 0 & 0 \\ 0 & 0 & T_{yyzz} \\ T_{zzxx} & 0 & 0 \\ 0 & -T_{yyzz} - T_{zzxx} & 0 \\ 0 & T_{yzzy} & 0 \\ 0 & 0 & T_{zxxz} \\ -T_{yzzy} - T_{zxxz} & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$$

$$T_{xxxx} = 2T_{dv}^{(1)} + 4T_{dv}^{(2)} + T_{gv}^{(1)}$$
$$T_{yyzz} = -T_{dv}^{(1)} + T_{dv}^{(3)} + T_{gv}^{(1)}$$
$$T_{zzxx} = T_{dv}^{(1)} + T_{dv}^{(3)} - T_{gv}^{(1)}$$
$$T_{yzzy} = -T_{dv}^{(2)} + T_{dv}^{(5)} + T_{gv}^{(1)}$$
$$T_{zxxz} = T_{dv}^{(2)} + T_{dv}^{(5)} - T_{gv}^{(1)}$$