

* character table ($\omega = e^{2\pi i/3}$)

| $T(c)$ | 1(1) | 2 ₀₀₁ (3) | 3 ⁺ ₁₁₁ (4) | 3 ⁻ ₁₁₁ (4) |
|-----------|------|----------------------|-----------------------------------|-----------------------------------|
| A | 1 | 1 | 1 | 1 |
| $E^{(a)}$ | 1 | 1 | ω^* | ω |
| $E^{(b)}$ | 1 | 1 | ω | ω^* |
| T | 3 | -1 | 0 | 0 |

* polar \leftrightarrow axial conversion

$$A (A) \quad E^{(a)} (E^{(a)}) \quad E^{(b)} (E^{(b)}) \quad T (T)$$

* symmetric product

| | A | $E^{(a)}$ | $E^{(b)}$ | T |
|-----------|-----|-----------|-----------|-----------------------------|
| A | A | $E^{(a)}$ | $E^{(b)}$ | T |
| $E^{(a)}$ | | $E^{(b)}$ | A | T |
| $E^{(b)}$ | | | $E^{(a)}$ | T |
| T | | | | $A + E^{(a)} + E^{(b)} + T$ |

* anti-symmetric product

| A | $E^{(a)}$ | $E^{(b)}$ | T |
|-----|-----------|-----------|-----|
| - | - | - | T |