* character table

C_6	1(1)	$2_{001}(1)$	$3_{001}^{+}(2)$	$6_{001}^{+}(2)$
A	1	1	1	1
B	1	-1	1	-1
E_1	2	-2	-1	1
E_2	2	2	-1	-1

* polar ↔ axial conversion

A (A) B (B) E_1 (E_1) E_2 (E_2)

* symmetric product

	A	B	E_1	E_2
A	A	B	E_1	E_2
B		A	E_2	E_1
E_1			$A + E_2$	$2B + E_1$
E_2				$A + E_2$

* anti-symmetric product

A	B	E_1	E_2
$-$	$-$	A	A