

* character table

$C_{3v}(1)$	$1(1)$	$3^+_{001}(2)$	$m_{120}(3)$
A_1	1	1	1
A_2	1	1	-1
E	2	-1	0

* polar \leftrightarrow axial conversion

$A_1 (A_2) \quad A_2 (A_1) \quad E (E)$

* symmetric product

	A_1	A_2	E
A_1	A_1	A_2	E
A_2		A_1	E
E			$A_1 + E$

* anti-symmetric product

A_1	A_2	E
-	-	A_2