

PG No. 22 C_{3h} $\bar{6}$ [hexagonal]

* character table

C_{3h}	1(1)	$3^+_{001}(2)$	$m_{001}(1)$	$-6^+_{001}(2)$
A'	1	1	1	1
A''	1	1	-1	-1
E'	2	-1	2	-1
E''	2	-1	-2	1

* polar \leftrightarrow axial conversion

$$A' (A'') \quad A'' (A') \quad E'' (E') \quad E' (E'')$$

* symmetric product

	A'	A''	E'	E''
A'	A'	A''	E'	E''
A''		A'	E''	E'
E'			$A' + E'$	$2A'' + E''$
E''				$A' + E'$

* anti-symmetric product

	A'	A''	E'	E''
	-	-	A'	A'