PG No. 37 $D_{3h}(1)$ $\bar{6}m2$ (-62m setting)   [hexagonal]

* character table

$D_{3h}(1)$	$1(1)$	$2_{100}(3)$	$3^+_{001}(2)$	$m_{001}(1)$	$m_{120}(3)$	$-6^+_{001}(2)$
A'_1	1	1	1	1	1	1
A'_2	1	-1	1	1	-1	1
A''_1	1	1	1	-1	-1	-1
A''_2	1	-1	1	-1	1	-1
E'	2	0	-1	2	0	-1
E''	2	0	-1	-2	0	1

* polar $\leftrightarrow$ axial conversion

$A'_1\ (A''_1)$ $A'_2\ (A''_2)$ $A''_2\ (A'_2)$ $A''_1\ (A'_1)$ $E''\ (E')$ $E'\ (E'')$

* symmetric product

	A'_1	A'_2	A''_1	A''_2	E'	E''
A'_1	A'_1	A'_2	A''_1	A''_2	E'	E''
A'_2		A'_1	A''_2	A''_1	E'	E''
A''_1			A'_1	A'_2	E''	E'
A''_2				A'_1	E''	E'
E'					$A'_1 + E'$	$A''_1 + A''_2 + E''$
E''						$A'_1 + E'$

* anti-symmetric product

A'_1	A'_2	A''_1	A''_2	E'	E''
$-$	$-$	$-$	$-$	A'_2	A'_2