

PG No. 41  $C_3(c)$  3 [ trigonal ]

Table 1: Representation matrices

Irrep.			
$A$	$1 : \begin{bmatrix} 1 \\ \end{bmatrix}$	$3_{001}^+ : \begin{bmatrix} 1 \\ \end{bmatrix}$	$3_{001}^- : \begin{bmatrix} 1 \\ \end{bmatrix}$
$E^{(a)}$	$1 : \begin{bmatrix} 1 \\ \end{bmatrix}$	$3_{001}^+ : \begin{bmatrix} -\frac{1}{2} - \frac{\sqrt{3}i}{2} \\ \end{bmatrix}$	$3_{001}^- : \begin{bmatrix} -\frac{1}{2} + \frac{\sqrt{3}i}{2} \\ \end{bmatrix}$
$E^{(b)}$	$1 : \begin{bmatrix} 1 \\ \end{bmatrix}$	$3_{001}^+ : \begin{bmatrix} -\frac{1}{2} + \frac{\sqrt{3}i}{2} \\ \end{bmatrix}$	$3_{001}^- : \begin{bmatrix} -\frac{1}{2} - \frac{\sqrt{3}i}{2} \\ \end{bmatrix}$