

The group  $G$  is isomorphic to the group labelled by [ 24, 8 ] in the Small Groups library.

Ordinary character table of  $G \cong (\text{C6 x C2}) : \text{C2}$ :

	1a	2a	2b	3a	6a	6b	6c	2c	4a
$\chi_1$	1	1	1	1	1	1	1	1	1
$\chi_2$	1	1	1	1	1	1	1	-1	-1
$\chi_3$	1	1	-1	1	1	-1	-1	1	-1
$\chi_4$	1	1	-1	1	1	-1	-1	-1	1
$\chi_5$	2	2	2	-1	-1	-1	-1	0	0
$\chi_6$	2	2	-2	-1	-1	1	1	0	0
$\chi_7$	2	-2	0	2	-2	0	0	0	0
$\chi_8$	2	-2	0	-1	1	$E(3) - E(3)^2$	$-E(3) + E(3)^2$	0	0
$\chi_9$	2	-2	0	-1	1	$-E(3) + E(3)^2$	$E(3) - E(3)^2$	0	0

Trivial source character table of  $G \cong (\text{C6 x C2}) : \text{C2}$  at  $p = 2$ :

Normalisers $N_i$	$N_1$		$N_2$		$N_3$			$N_4$	$N_5$		$N_6$	$N_7$	$N_8$
$p$ -subgroups of $G$ up to conjugacy in $G$	$P_1$		$P_2$		$P_3$			$P_4$	$P_5$		$P_6$	$P_7$	$P_8$
Representatives $n_j \in N_i$	1a	3a	1a	3a	1a	3b	3a	1a	1a	3a	1a	1a	1a
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 2 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	8	8	0	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9$	8	-4	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	4	4	4	4	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	4	-2	4	-2	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	4	4	0	0	2	2	2	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9$	4	-2	0	0	2	$2 * E(3)$	$2 * E(3)^2$	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9$	4	-2	0	0	2	$2 * E(3)^2$	$2 * E(3)$	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	4	4	0	0	0	0	0	2	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	2	2	2	2	2	2	2	0	2	2	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	2	-1	2	-1	2	-1	-1	0	2	-1	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	2	2	2	2	0	0	0	2	0	0	2	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	2	2	2	2	0	0	0	0	0	0	0	2	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	1	1	1	1	1	1	1	1	1	1	1	1	1

$P_1 = \text{Group}([\langle \rangle]) \cong 1$

$P_2 = \text{Group}([(1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24)]) \cong \text{C2}$

$P_3 = \text{Group}([(1, 3)(2, 6)(4, 9)(5, 10)(7, 13)(8, 14)(11, 17)(12, 18)(15, 20)(16, 21)(19, 23)(22, 24)]) \cong \text{C2}$

$P_4 = \text{Group}([(1, 2)(3, 13)(4, 7)(5, 16)(6, 9)(8, 12)(10, 24)(11, 22)(14, 23)(15, 19)(17, 21)(18, 20)]) \cong \text{C2}$

$P_5 = \text{Group}([(1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 3)(2, 6)(4, 9)(5, 10)(7, 13)(8, 14)(11, 17)(12, 18)(15, 20)(16, 21)(19, 23)(22, 24)]) \cong \text{C2 x C2}$

$P_6 = \text{Group}([(1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 2)(3, 13)(4, 7)(5, 16)(6, 9)(8, 12)(10, 24)(11, 22)(14, 23)(15, 19)(17, 21)(18, 20)]) \cong \text{C2 x C2}$

$P_7 = \text{Group}([(1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 13, 4, 6)(2, 9, 7, 3)(5, 24, 11, 21)(8, 23, 15, 18)(10, 16, 17, 22)(12, 20, 19, 14)]) \cong \text{C4}$

$P_8 = \text{Group}([(1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 3)(2, 6)(4, 9)(5, 10)(7, 13)(8, 14)(11, 17)(12, 18)(15, 20)(16, 21)(19, 23)(22, 24), (1, 2)(3, 13)(4, 7)(5, 16)(6, 9)(8, 12)(10, 24)(11, 22)(14, 23)(15, 19)(17, 21)(18, 20)]) \cong \text{D8}$

$N_1 = \text{Group}([(1, 2)(3, 13)(4, 7)(5, 16)(6, 9)(8, 12)(10, 24)(11, 22)(14, 23)(15, 19)(17, 21)(18, 20), (1, 3)(2, 6)(4, 9)(5, 10)(7, 13)(8, 14)(11, 17)(12, 18)(15, 20)(16, 21)(19, 23)(22, 24), (1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 5, 12)(2, 8, 16)(3, 10, 18)(4, 11, 19)(6, 14, 21)(7, 15, 22)(9, 17, 23)(13, 20, 24)]) \cong (\text{C6 x C2}) : \text{C2}$

$N_2 = \text{Group}([(1, 2)(3, 13)(4, 7)(5, 16)(6, 9)(8, 12)(10, 24)(11, 22)(14, 23)(15, 19)(17, 21)(18, 20), (1, 3)(2, 6)(4, 9)(5, 10)(7, 13)(8, 14)(11, 17)(12, 18)(15, 20)(16, 21)(19, 23)(22, 24), (1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 5, 12)(2, 8, 16)(3, 10, 18)(4, 11, 19)(6, 14, 21)(7, 15, 22)(9, 17, 23)(13, 20, 24)]) \cong (\text{C6 x C2}) : \text{C2}$

$N_3 = \text{Group}([(1, 3)(2, 6)(4, 9)(5, 10)(7, 13)(8, 14)(11, 17)(12, 18)(15, 20)(16, 21)(19, 23)(22, 24), (1, 12, 5)(2, 16, 8)(3, 18, 10)(4, 19, 11)(6, 21, 14)(7, 22, 15)(9, 23, 17)(13, 24, 20), (1, 11, 12, 4, 5, 19)(2, 15, 16, 7, 8, 22)(3, 17, 18, 9, 10, 23)(6, 20, 21, 13, 14, 24)]) \cong \text{C6 x C2}$

$N_4 = \text{Group}([(1, 2)(3, 13)(4, 7)(5, 16)(6, 9)(8, 12)(10, 24)(11, 22)(14, 23)(15, 19)(17, 21)(18, 20), (1, 7)(2, 4)(3, 6)(5, 22)(8, 19)(9, 13)(10, 21)(11, 16)(12, 15)(14, 18)(17, 24)(20, 23)]) \cong \text{C2 x C2}$

$N_5 = \text{Group}([(1, 3)(2, 6)(4, 9)(5, 10)(7, 13)(8, 14)(11, 17)(12, 18)(15, 20)(16, 21)(19, 23)(22, 24), (1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 2)(3, 13)(4, 7)(5, 16)(6, 9)(8, 12)(10, 24)(11, 22)(14, 23)(15, 19)(17, 21)(18, 20), (1, 5, 12)(2, 8, 16)(3, 10, 18)(4, 11, 19)(6, 14, 21)(7, 15, 22)(9, 17, 23)(13, 20, 24)]) \cong (\text{C6 x C2}) : \text{C2}$

$N_6 = \text{Group}([(1, 2)(3, 13)(4, 7)(5, 16)(6, 9)(8, 12)(10, 24)(11, 22)(14, 23)(15, 19)(17, 21)(18, 20), (1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 3)(2, 6)(4, 9)(5, 10)(7, 13)(8, 14)(11, 17)(12, 18)(15, 20)(16, 21)(19, 23)(22, 24)]) \cong \text{D8}$

$N_7 = \text{Group}([(1, 13, 4, 6)(2, 9, 7, 3)(5, 24, 11, 21)(8, 23, 15, 18)(10, 16, 17, 22)(12, 20, 19, 14), (1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 2)(3, 13)(4, 7)(5, 16)(6, 9)(8, 12)(10, 24)(11, 22)(14, 23)(15, 19)(17, 21)(18, 20)]) \cong \text{D8}$

$N_8 = \text{Group}([(1, 2)(3, 13)(4, 7)(5, 16)(6, 9)(8, 12)(10, 24)(11, 22)(14, 23)(15, 19)(17, 21)(18, 20), (1, 3)(2, 6)(4, 9)(5, 10)(7, 13)(8, 14)(11, 17)(12, 18)(15, 20)(16, 21)(19, 23)(22, 24), (1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24)]) \cong \text{D8}$