

The group is isomorphic to the group labelled by [ 32, 9 ] in the Small Groups library.  
Ordinary character table of  $G \cong (\text{C8} \times \text{C2}) : \text{C2}$ :

	1a	4a	2a	4b	2b	2c	8a	4c	2d	4d	2e	8b	8c	8d
$\chi_1$	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_2$	1	-1	-1	1	1	1	1	-1	-1	1	1	1	1	1
$\chi_3$	1	-1	1	1	1	1	-1	-1	1	1	1	-1	-1	-1
$\chi_4$	1	1	-1	1	1	1	-1	1	-1	1	1	-1	-1	-1
$\chi_5$	1	$-E(4)$	-1	1	-1	1	$E(4)$	$E(4)$	1	-1	-1	$-E(4)$	$E(4)$	$-E(4)$
$\chi_6$	1	$E(4)$	-1	1	-1	1	$-E(4)$	$-E(4)$	1	-1	-1	$E(4)$	$-E(4)$	$E(4)$
$\chi_7$	1	$-E(4)$	1	1	-1	1	$-E(4)$	$E(4)$	-1	-1	-1	$E(4)$	$-E(4)$	$E(4)$
$\chi_8$	1	$E(4)$	1	1	-1	1	$E(4)$	$-E(4)$	-1	-1	-1	$-E(4)$	$E(4)$	$-E(4)$
$\chi_9$	2	0	0	-2	-2	2	0	0	0	2	-2	0	0	0
$\chi_{10}$	2	0	0	-2	2	2	0	0	0	-2	2	0	0	0
$\chi_{11}$	2	0	0	0	-2	-2	$-E(8) - E(8)^3$	0	0	0	2	$E(8) + E(8)^3$	$E(8) + E(8)^3$	$-E(8) - E(8)^3$
$\chi_{12}$	2	0	0	0	-2	-2	$E(8) + E(8)^3$	0	0	0	2	$-E(8) - E(8)^3$	$-E(8) - E(8)^3$	$E(8) + E(8)^3$
$\chi_{13}$	2	0	0	0	2	-2	$-E(8) + E(8)^3$	0	0	0	-2	$E(8) + E(8)^3$	$E(8) - E(8)^3$	$E(8) - E(8)^3$
$\chi_{14}$	2	0	0	0	2	-2	$E(8) - E(8)^3$	0	0	0	-2	$E(8) - E(8)^3$	$-E(8) + E(8)^3$	$-E(8) + E(8)^3$

Trivial source character table of  $G \cong (\text{C8} \times \text{C2}) : \text{C2}$  at  $p = 2$ :

Normalisers $N_i$	$N_1$	$N_2$	$N_3$	$N_4$	$N_5$	$N_6$	$N_7$	$N_8$	$N_9$	$N_{10}$	$N_{11}$	$N_{12}$	$N_{13}$	$N_{14}$	$N_{15}$	$N_{16}$	$N_{17}$	$N_{18}$	$N_{19}$	$N_{20}$	$N_{21}$	$N_{22}$	$N_{23}$	$N_{24}$	$N_{25}$
$p$ -subgroups of $G$ up to conjugacy in $G$	$P_1$	$P_2$	$P_3$	$P_4$	$P_5$	$P_6$	$P_7$	$P_8$	$P_9$	$P_{10}$	$P_{11}$	$P_{12}$	$P_{13}$	$P_{14}$	$P_{15}$	$P_{16}$	$P_{17}$	$P_{18}$	$P_{19}$	$P_{20}$	$P_{21}$	$P_{22}$	$P_{23}$	$P_{24}$	$P_{25}$
Representatives $n_j \in N_i$	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 2 \cdot \chi_9 + 2 \cdot \chi_{10} + 2 \cdot \chi_{11} + 2 \cdot \chi_{12} + 2 \cdot \chi_{13} + 2 \cdot \chi_{14}$	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 2 \cdot \chi_9 + 2 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 2 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 2 \cdot \chi_{13} + 2 \cdot \chi_{14}$	16	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 2 \cdot \chi_{10} + 2 \cdot \chi_{11} + 2 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	16	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14}$	16	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14}$	16	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 2 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	8	8	8	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	8	8	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 2 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	8	8	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14}$	8	0	8	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	8	0	0	8	2	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	8	8	0	0	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	8	8	0	0	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14}$	8	0	8	0	2	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	4	4	4	4	2	2	4	0	0	0	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	4	4	0	0	4	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	4	4	0	0	0	4	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	4	4	0	0	2	2	0	0	4	0	0	2	2	0	0	0	2	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	4	4	4	4	0	0	4	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	4	4	4	4	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	4	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	2	2	2	2	2	2	2	2	2	0	2	2	2	2	2	0	2	2	0	2	0	2	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	2	2	2	2	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	2	2	0	0	2	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	2	2	2	2	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	2	2	0	0	2	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

$$P_1 = \text{Group}([\ ])$$

$$P_2 = \text{Group}([(1, 6)(2, 10)(3, 13)(4, 15)(5, 16)(7, 19)(8, 21)(9, 22)(11, 24)(12, 25)(14, 26)(17, 28)(18, 29)(20, 30)(23, 31)(27, 32)]) \cong \text{C2}$$

$$P_3 = \text{Group}([(1, 5)(2, 9)(3, 12)(4, 14)(6, 16)(7, 18)(8, 20)(10, 22)(11, 23)(13, 25)(15, 26)(17, 27)(19, 29)(21, 30)(24, 31)(28, 32)]) \cong \text{C2}$$

$$P_4 = \text{Group}([(1, 16)(2, 22)(3, 25)(4, 26)(5, 6)(7, 29)(8, 30)(9, 10)(11, 31)(12, 13)(14, 15)(17, 32)(18, 19)(20, 21)(23, 24)(27, 28)]) \cong \text{C2}$$

$$P_5 = \text{Group}([(1, 3)(2, 7)(4, 24)(5, 12)(6, 13)(8, 28)(9, 18)(10, 19)(11, 15)(14, 31)(16, 25)(17, 21)(20, 32)(22, 29)(23, 26)(27, 30)]) \cong \text{C2}$$

$$P_6 = \text{Group}([(1, 12)(2, 18)(3, 5)(4, 31)(6, 25)(7, 9)(8, 32)(10, 29)(11, 26)(13, 16)(14, 24)(15, 23)(17, 30)(19, 22)(20, 28)(21, 27)]) \cong \text{C2}$$

$$P_7 = \text{Group}([(1, 6)(2, 10)(3, 13)(4, 15)(5, 16)(7, 19)(8, 21)(9, 22)(11, 24)(12, 25)(14, 26)(17, 28)(18, 29)(20, 30)(23, 31)(27, 32)]) \cong \text{C2} \times \text{C2}$$

$$P_8 = \text{Group}([(1, 6)(2, 10)(3, 13)(4, 15)(5, 16)(7, 19)(8, 21)(9, 22)(11, 24)(12, 25)(14, 26)(17, 28)(18, 29)(20, 30)(23, 31)(27, 32)]) \cong \text{C4}$$

$$P_9 = \text{Group}([(1, 6)(2, 10)(3, 13)(4, 15)(5, 16)(7, 19)(8, 21)(9, 22)(11, 24)(12, 25)(14, 26)(17, 28)(18, 29)(20, 30)(23, 31)(27, 32)]) \cong \text{C4}$$

$$P_{10} = \text{Group}([(1, 2, 5, 9)(3, 17, 12, 27)(4, 21, 14, 30)(6, 10, 16, 22)(7, 23, 18, 11)(8, 26, 20, 15)(13, 28, 25, 32)(19, 31, 29, 24)]) \cong \text{C4}$$

$$P_{11} = \text{Group}([(1, 3)(2, 7)(4, 24)(5, 12)(6, 13)(8, 28)(9, 18)(10, 19)(11, 15)(14, 31)(16, 25)(17$$