The group G is isomorphic to the group labelled by [50, 4] in the Small Groups library.
Ordinary character table of $G \cong$ (C5 x C5) : C2:

	$1a$	$5a$	$5b$	$2a$	$5c$	$5d$	$5e$	$5f$	$5g$	$5h$	$5i$	$5j$	$5k$	$5l$
χ_1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
χ_2	1	1	1	-1	1	1	1	1	1	1	1	1	1	1
χ_3	2	2	2	0	$E(5)^2+E(5)^3$	$E(5)^2+E(5)^3$	$E(5)^2+E(5)^3$	$E(5)^2+E(5)^3$	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	$E(5)+E(5)^4$	$E(5)+E(5)^4$	$E(5)+E(5)^4$	$E(5)+E(5)^4$
χ_4	2	2	2	0	$E(5)+E(5)^4$	$E(5)+E(5)^4$	$E(5)+E(5)^4$	$E(5)+E(5)^4$	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	$E(5)^2+E(5)^3$	$E(5)^2+E(5)^3$	$E(5)^2+E(5)^3$	$E(5)^2+E(5)^3$
χ_5	2	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	0	2	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	2	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$
χ_6	2	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	0	2	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	2	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$
χ_7	2	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	0	$E(5)^2+E(5)^3$	2	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	$E(5)+E(5)^4$	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	2	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$
χ_8	2	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	0	$E(5)+E(5)^4$	2	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	$E(5)^2+E(5)^3$	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	2	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$
χ_9	2	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	0	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	2	$E(5)+E(5)^4$	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	2	$E(5)^2+E(5)^3$
χ_{10}	2	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	0	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	2	$E(5)^2+E(5)^3$	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	2	$E(5)+E(5)^4$
χ_{11}	2	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	0	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	2	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	2
χ_{12}	2	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	0	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	2	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	2
χ_{13}	2	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	0	$E(5)+E(5)^4$	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	2	$E(5)^2+E(5)^3$	$E(5)^2+E(5)^3$	2	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	$E(5)+E(5)^4$
χ_{14}	2	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	0	$E(5)^2+E(5)^3$	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	2	$E(5)+E(5)^4$	$E(5)+E(5)^4$	2	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	$E(5)^2+E(5)^3$

Trivial source character table of $G \cong$ (C5 x C5) : C2 at $p = 5$:

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 $n_j \in N_i$	$1a$	$2a$	$1a$	$2a$	$1a$	$2a$	$1a$	$2a$	$1a$	$2a$	$1a$	$2a$	$1a$	$2a$	$1a$	$2a$
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14}$	25	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14}$	25	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	5	1	5	1	0	0	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	5	-1	5	-1	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	5	1	0	0	5	1	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	5	-1	0	0	5	-1	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	5	1	0	0	0	0	5	1	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	5	-1	0	0	0	0	5	-1	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	5	1	0	0	0	0	0	0	5	1	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	5	-1	0	0	0	0	0	0	5	-1	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14}$	5	1	0	0	0	0	0	0	0	0	5	1	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14}$	5	-1	0	0	0	0	0	0	0	0	5	-1	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	5	1	0	0	0	0	0	0	0	0	0	0	5	1	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	5	-1	0	0	0	0	0	0	0	0	0	0	5	-1	0	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
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1

$P_1 = Group([()]) \cong 1$
$P_2 = Group([(1,2,3,4,5)]) \cong$ C5
$P_3 = Group([(6,7,8,9,10)]) \cong$ C5
$P_4 = Group([(1,2,3,4,5)(6,7,8,9,10)]) \cong$ C5
$P_5 = Group([(1,2,3,4,5)(6,8,10,7,9)]) \cong$ C5
$P_6 = Group([(1,2,3,4,5)(6,9,7,10,8)]) \cong$ C5
$P_7 = Group([(1,2,3,4,5)(6,10,9,8,7)]) \cong$ C5
$P_8 = Group([(1,2,3,4,5),(6,7,8,9,10)]) \cong$ C5 x C5

$N_1 = Group([(2,5)(3,4)(7,10)(8,9),(1,2,3,4,5),(6,7,8,9,10)]) \cong$ (C5 x C5) : C2
$N_2 = Group([(2,5)(3,4)(7,10)(8,9),(1,2,3,4,5),(6,7,8,9,10)]) \cong$ (C5 x C5) : C2
$N_3 = Group([(2,5)(3,4)(7,10)(8,9),(1,2,3,4,5),(6,7,8,9,10)]) \cong$ (C5 x C5) : C2
$N_4 = Group([(2,5)(3,4)(7,10)(8,9),(1,2,3,4,5),(6,7,8,9,10)]) \cong$ (C5 x C5) : C2
$N_5 = Group([(2,5)(3,4)(7,10)(8,9),(1,2,3,4,5),(6,7,8,9,10)]) \cong$ (C5 x C5) : C2
$N_6 = Group([(2,5)(3,4)(7,10)(8,9),(1,2,3,4,5),(6,7,8,9,10)]) \cong$ (C5 x C5) : C2
$N_7 = Group([(2,5)(3,4)(7,10)(8,9),(1,2,3,4,5),(6,7,8,9,10)]) \cong$ (C5 x C5) : C2
$N_8 = Group([(2,5)(3,4)(7,10)(8,9),(1,2,3,4,5),(6,7,8,9,10)]) \cong$ (C5 x C5) : C2