

The group G is isomorphic to the group labelled by [720, 409] in the Small Groups library.
 Ordinary character table of $G \cong \text{SL}(2,9)$:

	1a	2a	3a	3b	4a	5a	5b	6a	6b	8a	8b	10a	10b
χ_1	1	1	1	1	1	1	1	1	1	1	1	1	1
χ_2	4	-4	1	-2	0	-1	-1	-1	2	0	0	1	1
χ_3	4	-4	-2	1	0	-1	-1	2	-1	0	0	1	1
χ_4	5	5	-1	2	1	0	0	-1	2	-1	-1	0	0
χ_5	5	5	2	-1	1	0	0	2	-1	-1	-1	0	0
χ_6	8	8	-1	-1	0	$-E(5)^2 - E(5)^3$	$-E(5) - E(5)^4$	-1	-1	0	0	$-E(5)^2 - E(5)^3$	$-E(5) - E(5)^4$
χ_7	8	-8	-1	-1	0	$-E(5) - E(5)^4$	$-E(5)^2 - E(5)^3$	1	1	0	0	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$
χ_8	8	-8	-1	-1	0	$-E(5)^2 - E(5)^3$	$-E(5) - E(5)^4$	1	1	0	0	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$
χ_9	8	8	-1	-1	0	$-E(5) - E(5)^4$	$-E(5)^2 - E(5)^3$	-1	-1	0	0	$-E(5) - E(5)^4$	$-E(5)^2 - E(5)^3$
χ_{10}	9	9	0	0	1	-1	-1	0	0	1	1	-1	-1
χ_{11}	10	10	1	1	-2	0	0	1	1	0	0	0	0
χ_{12}	10	-10	1	1	0	0	0	-1	-1	$-E(8) + E(8)^3$	$E(8) - E(8)^3$	0	0
χ_{13}	10	-10	1	1	0	0	0	-1	-1	$E(8) - E(8)^3$	$-E(8) + E(8)^3$	0	0

Trivial source character table of $G \cong \text{SL}(2,9)$ at $p = 5$

<i>Normalisers</i> N_i	N_1									N_2			
<i>p</i> - subgroups of G up to conjugacy in G	P_1									P_2			
<i>Representatives</i> $n_j \in N_i$	1a	2a	3a	3b	4a	6a	6b	8a	8b	1a	2a	4a	4a
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13}$	10	10	1	1	2	1	1	2	2	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13}$	20	-20	-1	-4	0	1	4	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13}$	20	-20	-4	-1	0	4	1	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13}$	5	5	2	-1	1	2	-1	-1	-1	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13}$	5	5	-1	2	1	-1	2	-1	-1	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13}$	25	25	-2	-2	1	-2	-2	1	1	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13}$	10	10	1	1	-2	1	1	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13}$	10	-10	1	1	0	-1	-1	$-E(8) + E(8)^3$	$E(8) - E(8)^3$	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13}$	10	-10	1	1	0	-1	-1	$E(8) - E(8)^3$	$-E(8) + E(8)^3$	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13}$	1	1	1	1	1	1	1	1	1	1	1	1	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13}$	16	-16	-2	-2	0	2	2	0	0	1	-1	$E(4)$	$-E(4)$
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13}$	16	-16	-2	-2	0	2	2	0	0	1	-1	$-E(4)$	$E(4)$
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13}$	16	16	-2	-2	0	-2	-2	0	0	1	1	-1	-1

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

$$P_2 = \text{Group}([(1, 10, 79, 42, 58)(2, 20, 72, 43, 46)(3, 64, 68, 52, 39)(4, 18, 80, 41, 56)(5, 24, 70, 44, 48)(6, 9, 34, 17, 49)(7, 50, 66, 62, 31)(8, 19, 40, 23, 59)(11, 60, 67, 53, 37)(12, 32, 16, 51, 13)(14, 54, 65, 63, 33)(15, 21, 38, 22, 61)(25, 27, 45, 74, 69)(26, 36, 57, 73, 78)(28, 47, 76, 71, 29)(30, 35, 55, 75, 77)]) \cong C_5$$

$$N_1 = \text{Group}([(1, 3, 10, 13, 4, 11, 18, 6)(2, 7, 20, 15, 5, 14, 24, 8)(9, 25, 19, 30, 12, 29, 21, 26)(16, 31, 50, 34, 17, 33, 54, 32)(22, 37, 60, 40, 23, 39, 64, 38)(27, 45, 70, 48, 28, 47, 72, 46)(35, 55, 79, 58, 36, 57, 80, 56)(41, 63, 69, 66, 42, 62, 71, 65)(43, 53, 78, 68, 44, 52, 77, 67)(49, 73, 61, 76, 51, 75, 59, 74), (1, 2, 4, 5)(3, 9, 11, 12)(6, 16, 13, 17)(7, 19, 14, 21)(8, 22, 15, 23)(10, 27, 18, 28)(20, 35, 24, 36)(25, 41, 29, 42)(26, 43, 30, 44)(31, 49, 33, 51)(32, 52, 34, 53)(37, 59, 39, 61)(38, 62, 40, 63)(45, 69, 47, 71)(46, 58, 48, 56)(50, 64, 54, 60)(55, 77, 57, 78)(65, 68, 66, 67)(70, 76, 72, 74)(73, 80, 75, 79)]) \cong \text{SL}(2,9)$$

$$N_2 = \text{Group}([(1, 10, 79, 42, 58)(2, 20, 72, 43, 46)(3, 64, 68, 52, 39)(4, 18, 80, 41, 56)(5, 24, 70, 44, 48)(6, 9, 34, 17, 49)(7, 50, 66, 62, 31)(8, 19, 40, 23, 59)(11, 60, 67, 53, 37)(12, 32, 16, 51, 13)(14, 54, 65, 63, 33)(15, 21, 38, 22, 61)(25, 27, 45, 74, 69)(26, 36, 57, 73, 78)(28, 47, 76, 71, 29)(30, 35, 55, 75, 77), (1, 2, 4, 5)(3, 31, 11, 33)(6, 61, 13, 59)(7, 37, 14, 39)(8, 49, 15, 51)(9, 22, 12, 23)(10, 46, 18, 48)(16, 19, 17, 21)(20, 56, 24, 58)(25, 57, 29, 55)(26, 47, 30, 45)(27, 36, 28, 35)(32, 40, 34, 38)(41, 70, 42, 72)(43, 80, 44, 79)(50, 53, 54, 52)(60, 63, 64, 62)(65, 68, 66, 67)(69, 73, 71, 75)(74, 78, 76, 77)]) \cong C_5 : C_4$$