

The group G is isomorphic to the group labelled by [120, 5] in the Small Groups library.

Ordinary character table of $G \cong \text{SL}(2,5)$:

	1a	2a	4a	3a	6a	5a	10a	5b	10b
χ_1	1	1	1	1	1	1	1	1	1
χ_2	3	3	-1	0	0	$-E(5) - E(5)^4$	$-E(5) - E(5)^4$	$-E(5)^2 - E(5)^3$	$-E(5)^2 - E(5)^3$
χ_3	3	3	-1	0	0	$-E(5)^2 - E(5)^3$	$-E(5)^2 - E(5)^3$	$-E(5) - E(5)^4$	$-E(5) - E(5)^4$
χ_4	4	4	0	1	1	-1	-1	-1	-1
χ_5	5	5	1	-1	-1	0	0	0	0
χ_6	2	-2	0	-1	1	$E(5) + E(5)^4$	$-E(5) - E(5)^4$	$E(5)^2 + E(5)^3$	$-E(5)^2 - E(5)^3$
χ_7	2	-2	0	-1	1	$E(5)^2 + E(5)^3$	$-E(5)^2 - E(5)^3$	$E(5) + E(5)^4$	$-E(5) - E(5)^4$
χ_8	4	-4	0	1	-1	-1	1	-1	1
χ_9	6	-6	0	0	0	1	-1	1	-1

Trivial source character table of $G \cong \text{SL}(2,5)$ at $p = 3$:

Normalisers N_i	N_1						N_2				
p -subgroups of G up to conjugacy in G	P_1						P_2				
Representatives $n_j \in N_i$	1a	5a	5b	4a	10a	2a	10b	1a	4a	2a	4b
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	6	1	1	2	1	6	1	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	3	$-E(5) - E(5)^4$	$-E(5)^2 - E(5)^3$	-1	$-E(5) - E(5)^4$	3	$-E(5)^2 - E(5)^3$	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	3	$-E(5)^2 - E(5)^3$	$-E(5) - E(5)^4$	-1	$-E(5)^2 - E(5)^3$	3	$-E(5) - E(5)^4$	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	9	-1	-1	1	-1	9	-1	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9$	6	$2 * E(5) + E(5)^2 + E(5)^3 + 2 * E(5)^4$	$E(5) + 2 * E(5)^2 + 2 * E(5)^3 + E(5)^4$	0	$-2 * E(5) - E(5)^2 - E(5)^3 - 2 * E(5)^4$	-6	$-E(5) - 2 * E(5)^2 - 2 * E(5)^3 - E(5)^4$	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9$	6	$E(5) + 2 * E(5)^2 + 2 * E(5)^3 + E(5)^4$	$2 * E(5) + E(5)^2 + E(5)^3 + 2 * E(5)^4$	0	$-E(5) - 2 * E(5)^2 - 2 * E(5)^3 - E(5)^4$	-6	$-2 * E(5) - E(5)^2 - E(5)^3 - 2 * E(5)^4$	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9$	6	1	1	0	-1	-6	-1	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	1	1	1	1	1	1	1	1	1	1	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	4	-1	-1	0	-1	4	-1	1	-1	1	-1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9$	4	-1	-1	0	1	-4	1	1	$E(4)$	-1	$-E(4)$
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9$	4	-1	-1	0	1	-4	1	1	$-E(4)$	-1	$E(4)$

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

$$P_2 = \text{Group}([(1, 7, 4)(2, 5, 6)(3, 16, 14)(8, 15, 13)(9, 20, 12)(10, 11, 19)(17, 23, 22)(18, 21, 24)]) \cong \text{C3}$$

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

$$N_2 = \text{Group}([(1, 7, 4)(2, 5, 6)(3, 16, 14)(8, 15, 13)(9, 20, 12)(10, 11, 19)(17, 23, 22)(18, 21, 24), (1, 2, 7, 5, 4, 6)(3, 13, 16, 8, 14, 15)(9, 10, 20, 11, 12, 19)(17, 24, 23, 18, 22, 21), (1, 17, 5, 18)(2, 21, 4, 23)(3, 9, 8, 11)(6, 24, 7, 22)(10, 16, 12, 15)(13, 19, 14, 20)]) \cong \text{C3} : \text{C4}$$