

The group G is isomorphic to the group labelled by [24, 3] in the Small Groups library.
 Ordinary character table of $G \cong \text{SL}(2,3)$:

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

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

Normalisers N_i	N_1			N_2			N_3			N_4		
	P_1			P_2			P_3			P_4		
Representatives $n_j \in N_i$	1a	3a	3b	1a	3a	3b	1a	1a	3a	3b		
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7$	8	2	2	0	0	0	0	0	0	0		
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7$	8	$2 * E(3)$	$2 * E(3)^2$	0	0	0	0	0	0	0		
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7$	8	$2 * E(3)^2$	$2 * E(3)$	0	0	0	0	0	0	0		
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	4	1	1	4	1	1	0	0	0	0		
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	4	$E(3)$	$E(3)^2$	4	$E(3)$	$E(3)^2$	0	0	0	0		
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	4	$E(3)^2$	$E(3)$	4	$E(3)^2$	$E(3)$	0	0	0	0		
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	6	0	0	6	0	0	2	0	0	0		
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	1	1	1	1	1	1	1	1	1	1		
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	1	$E(3)$	$E(3)^2$	1	$E(3)$	$E(3)^2$	1	1	$E(3)$	$E(3)^2$		
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	1	$E(3)^2$	$E(3)$	1	$E(3)^2$	$E(3)$	1	1	$E(3)^2$	$E(3)$		

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

$$P_2 = \text{Group}([(1,5)(2,9)(3,11)(4,12)(6,15)(7,17)(8,18)(10,19)(13,21)(14,22)(16,23)(20,24)]) \cong C_2$$

$$P_3 = \text{Group}([(1,5)(2,9)(3,11)(4,12)(6,15)(7,17)(8,18)(10,19)(13,21)(14,22)(16,23)(20,24), (1,11,5,3)(2,17,9,7)(4,10,12,19)(6,21,15,13)(8,16,18,23)(14,20,22,24)]) \cong C_4$$

$$P_4 = \text{Group}([(1,5)(2,9)(3,11)(4,12)(6,15)(7,17)(8,18)(10,19)(13,21)(14,22)(16,23)(20,24), (1,11,5,3)(2,17,9,7)(4,10,12,19)(6,21,15,13)(8,16,18,23)(14,20,22,24), (1,19,5,10)(2,23,9,16)(3,4,11,12)(6,24,15,20)(7,8,17,18)(13,14,21,22)]) \cong Q_8$$

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

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

$$N_3 = \text{Group}([(1,11,5,3)(2,17,9,7)(4,10,12,19)(6,21,15,13)(8,16,18,23)(14,20,22,24), (1,5)(2,9)(3,11)(4,12)(6,15)(7,17)(8,18)(10,19)(13,21)(14,22)(16,23)(20,24), (1,4,5,12)(2,8,9,18)(3,10,11,19)(6,14,15,22)(7,16,17,23)(13,20,21,24)]) \cong Q_8$$

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