

The group G is isomorphic to the group $2.\mathrm{PSL}(2,3)$.
Ordinary character table of $G \cong 2.\mathrm{PSL}(2,3) \cong \mathrm{SL}(2,7)$:

	1 <i>a</i>	2 <i>a</i>	4 <i>a</i>	3 <i>a</i>	6 <i>a</i>	8 <i>a</i>	8 <i>b</i>	7 <i>a</i>	14 <i>a</i>	7 <i>b</i>	14 <i>b</i>
χ_1	1	1	1	1	1	1	1	1	1	1	1
χ_2	3	3	−1	0	0	1	1	$E(7) + E(7)^2 + E(7)^4$	$E(7) + E(7)^2 + E(7)^4$	$E(7)^3 + E(7)^5 + E(7)^6$	$E(7)^3 + E(7)^5 + E(7)^6$
χ_3	3	3	−1	0	0	1	1	$E(7)^3 + E(7)^5 + E(7)^6$	$E(7)^3 + E(7)^5 + E(7)^6$	$E(7) + E(7)^2 + E(7)^4$	$E(7) + E(7)^2 + E(7)^4$
χ_4	6	6	2	0	0	0	0	−1	−1	−1	−1
χ_5	7	7	−1	1	1	−1	−1	0	0	0	0
χ_6	8	8	0	−1	−1	0	0	1	1	1	1
χ_7	4	−4	0	1	−1	0	0	$−E(7) − E(7)^2 − E(7)^4$	$E(7) + E(7)^2 + E(7)^4$	$−E(7)^3 − E(7)^5 − E(7)^6$	$E(7)^3 + E(7)^5 + E(7)^6$
χ_8	4	−4	0	1	−1	0	0	$−E(7)^3 − E(7)^5 − E(7)^6$	$E(7)^3 + E(7)^5 + E(7)^6$	$−E(7) − E(7)^2 − E(7)^4$	$E(7) + E(7)^2 + E(7)^4$
χ_9	6	−6	0	0	0	$E(8) − E(8)^3$	$−E(8) + E(8)^3$	−1	1	−1	1
χ_{10}	6	−6	0	0	0	$−E(8) + E(8)^3$	$E(8) − E(8)^3$	−1	1	−1	1
χ_{11}	8	−8	0	−1	1	0	0	1	−1	1	−1

Trivial source character table of $G \cong 2.\mathrm{PSL}(2,3) \cong \mathrm{SL}(2,7)$ at $p = 2$:

Normalisers N_i	N_1										N_2										N_3	N_4	N_5	N_6	N_7		
p -subgroups of G up to conjugacy in G	P_1										P_2										P_3	P_4	P_5	P_6	P_7		
Representatives $n_j \in N_i$	1a	3a	7a				7b				1a	3a	7a				7b				1a	1a	3a	1a	3a	1a	1a
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	16	4	2				2				0	0	0				0				0	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11}$	32	2	$4 * E(7) + 4 * E(7)^2 + 2 * E(7)^3 + 4 * E(7)^4 + 2 * E(7)^5 + 2 * E(7)^6$				$2 * E(7) + 2 * E(7)^2 + 4 * E(7)^3 + 2 * E(7)^4 + 4 * E(7)^5 + 4 * E(7)^6$				0	0	0				0				0	0	0	0	0	0	
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11}$	32	2	$2 * E(7) + 2 * E(7)^2 + 4 * E(7)^3 + 2 * E(7)^4 + 4 * E(7)^5 + 4 * E(7)^6$				$4 * E(7) + 4 * E(7)^2 + 2 * E(7)^3 + 4 * E(7)^4 + 2 * E(7)^5 + 2 * E(7)^6$				0	0	0				0				0	0	0	0	0	0	
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11}$	16	−2	2				2				0	0	0				0				0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	8	2	1				1				8	2	1				1				0	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	16	1	$2 * E(7) + 2 * E(7)^2 + E(7)^3 + 2 * E(7)^4 + E(7)^5 + E(7)^6$				$E(7) + E(7)^2 + 2 * E(7)^3 + E(7)^4 + 2 * E(7)^5 + 2 * E(7)^6$				16	1	$2 * E(7) + 2 * E(7)^2 + E(7)^3 + 2 * E(7)^4 + E(7)^5 + E(7)^6$				$E(7) + E(7)^2 + 2 * E(7)^3 + E(7)^4 + 2 * E(7)^5 + 2 * E(7)^6$				0	0	0	0	0	0	
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	16	1	$E(7) + E(7)^2 + 2 * E(7)^3 + E(7)^4 + 2 * E(7)^5 + 2 * E(7)^6$				$2 * E(7) + 2 * E(7)^2 + E(7)^3 + 2 * E(7)^4 + E(7)^5 + E(7)^6$				16	1	$E(7) + E(7)^2 + 2 * E(7)^3 + E(7)^4 + 2 * E(7)^5 + 2 * E(7)^6$				$2 * E(7) + 2 * E(7)^2 + E(7)^3 + 2 * E(7)^4 + E(7)^5 + E(7)^6$				0	0	0	0	0	0	
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	8	−1	1				1				8	−1	1				1				0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 2 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	20	2	−1				−1				20	2	−1				−1				4	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	14	2	0				0				14	2	0				0				2	2	2	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	6	0	−1				−1				6	0	−1				−1				2	2	−1	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	14	2	0				0				14	2	0				0				2	0	0	2	2	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	6	0	−1				−1				6	0	−1				−1				2	0	0	2	−1	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 2 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	26	2	−2				−2				26	2	−2				−2				2	0	0	0	0	2	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	1	1	1				1				1	1	1				1				1	1	1	1	1	1	1

$P_1 = Group([(())]) \cong 1$
 $P_2 = Group([(1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)]) \cong \mathrm{C}2$
 $P_3 = Group([(1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16), (1,2,4,3)(5,9,7,10)(6,11,8,12)(13,16,15,14)]) \cong \mathrm{C}4$
 $P_4 = Group([(1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16), (1,2,4,3)(5,9,7,10)(6,11,8,12)(13,16,15,14), (1,13,4,15)(2,14,3,16)(5,6,7,8)(9,12,10,11)]) \cong \mathrm{Q}8$
 $P_5 = Group([(1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16), (1,2,4,3)(5,9,7,10)(6,11,8,12)(13,16,15,14), (1,7,4,5)(2,9,3,10)(6,16,8,14)(11,13,12,15)]) \cong \mathrm{Q}8$
 $P_6 = Group([(1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16), (1,2,4,3)(5,9,7,10)(6,11,8,12)(13,16,15,14), (1,12,2,6,4,11,3,8)(5,16,9,15,7,14,10,13)]) \cong \mathrm{C}8$
 $P_7 = Group([(1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16), (1,2,4,3)(5,9,7,10)(6,11,8,12)(13,16,15,14), (1,13,4,15)(2,14,3,16)(5,6,7,8)(9,12,10,11), (1,7,4,5)(2,9,3,10)(6,16,8,14)(11,13,12,15)]) \cong \mathrm{Q}16$

$N_1 = Group([(1,2,4,3)(5,9,7,10)(6,11,8,12)(13,16,15,14), (2,5,6)(3,7,8)(9,13,14)(10,15,16)]) \cong \mathrm{SL}(2,7)$
 $N_2 = Group([(1,2,4,3)(5,9,7,10)(6,11,8,12)(13,16,15,14), (2,5,6)(3,7,8)(9,13,14)(10,15,16)]) \cong \mathrm{SL}(2,7)$
 $N_3 = Group([(1,2,4,3)(5,9,7,10)(6,11,8,12)(13,16,15,14), (1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16), (1,5,4,7)(2,10,3,9)(6,14,8,16)(11,15,12,13), (1,6,3,12,4,8,2,11)(5,15,10,16,7,13,9,14)]) \cong \mathrm{Q}16$
 $N_4 = Group([(1,13,4,15)(2,14,3,16)(5,6,7,8)(9,12,10,11), (1,2,4,3)(5,9,7,10)(6,11,8,12)(13,16,15,14), (1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16), (2,13,14)(3,15,16)(6,12,9)(8,11,10), (1,5,4,7)(2,8,3,6)(9,13,10,15)(11,16,12,14)]) \cong \mathrm{C}2 \cdot \mathrm{S}4 = \mathrm{SL}(2,3) \cdot \mathrm{C}2$
 $N_5 = Group([(1,7,4,5)(2,9,3,10)(6,16,8,14)(11,13,12,15), (1,2,4,3)(5,9,7,10)(6,11,8,12)(13,16,15,14), (1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16), (2,5,9)(3,7,10)(6,14,12)(8,16,11), (1,6,3,12,4,8,2,11)(5,15,10,16,7,13,9,14)]) \cong \mathrm{C}2 \cdot \mathrm{S}4 = \mathrm{SL}(2,3) \cdot \mathrm{C}2$
 $N_6 = Group([(1,12,2,6,4,11,3,8)(5,16,9,15,7,14,10,13), (1,2,4,3)(5,9,7,10)(6,11,8,12)(13,16,15,14), (1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16), (1,5,4,7)(2,10,3,9)(6,14,8,16)(11,15,12,13)]) \cong \mathrm{Q}16$
 $N_7 = Group([(1,7,4,5)(2,9,3,10)(6,16,8,14)(11,13,12,15), (1,13,4,15)(2,14,3,16)(5,6,7,8)(9,12,10,11), (1,2,4,3)(5,9,7,10)(6,11,8,12)(13,16,15,14), (1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)]) \cong \mathrm{Q}16$