The group G is isomorphic to the group labelled by [48, 31] in the Small Groups library.
Ordinary character table of $G \cong$ C4 x A4:

	$1a$	$4a$	$2a$	$4b$	$2b$	$4c$	$2c$	$4d$	$3a$	$12a$	$6a$	$12b$	$3b$	$12c$	$6b$	$12d$
χ_1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
χ_2	1	$E(4)$	-1	$-E(4)$	1	$E(4)$	-1	$-E(4)$	1	$E(4)$	-1	$-E(4)$	1	$E(4)$	-1	$-E(4)$
χ_3	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1
χ_4	1	$-E(4)$	-1	$E(4)$	1	$-E(4)$	-1	$E(4)$	1	$-E(4)$	-1	$E(4)$	1	$-E(4)$	-1	$E(4)$
χ_5	3	3	3	3	-1	-1	-1	-1	0	0	0	0	0	0	0	0
χ_6	3	$3*E(4)$	-3	$-3*E(4)$	-1	$-E(4)$	1	$E(4)$	0	0	0	0	0	0	0	0
χ_7	3	-3	3	-3	-1	1	-1	1	0	0	0	0	0	0	0	0
χ_8	3	$-3*E(4)$	-3	$3*E(4)$	-1	$E(4)$	1	$-E(4)$	0	0	0	0	0	0	0	0
χ_9	1	1	1	1	1	1	1	1	$E(3)$	$E(3)$	$E(3)$	$E(3)$	$E(3)^2$	$E(3)^2$	$E(3)^2$	$E(3)^2$
χ_{10}	1	$E(4)$	-1	$-E(4)$	1	$E(4)$	-1	$-E(4)$	$E(3)$	$E(12)^7$	$-E(3)$	$-E(12)^7$	$E(3)^2$	$E(12)^{11}$	$-E(3)^2$	$-E(12)^{11}$
χ_{11}	1	-1	1	-1	1	-1	1	-1	$E(3)$	$-E(3)$	$E(3)$	$-E(3)$	$E(3)^2$	$-E(3)^2$	$E(3)^2$	$-E(3)^2$
χ_{12}	1	$-E(4)$	-1	$E(4)$	1	$-E(4)$	-1	$E(4)$	$E(3)$	$-E(12)^7$	$-E(3)$	$E(12)^7$	$E(3)^2$	$-E(12)^{11}$	$-E(3)^2$	$E(12)^{11}$
χ_{13}	1	1	1	1	1	1	1	1	$E(3)^2$	$E(3)^2$	$E(3)^2$	$E(3)^2$	$E(3)$	$E(3)$	$E(3)$	$E(3)$
χ_{14}	1	$E(4)$	-1	$-E(4)$	1	$E(4)$	-1	$-E(4)$	$E(3)^2$	$E(12)^{11}$	$-E(3)^2$	$-E(12)^{11}$	$E(3)$	$E(12)^7$	$-E(3)$	$-E(12)^7$
χ_{15}	1	-1	1	-1	1	-1	1	-1	$E(3)^2$	$-E(3)^2$	$E(3)^2$	$-E(3)^2$	$E(3)$	$-E(3)$	$E(3)$	$-E(3)$
χ_{16}	1	$-E(4)$	-1	$E(4)$	1	$-E(4)$	-1	$E(4)$	$E(3)^2$	$-E(12)^{11}$	$-E(3)^2$	$E(12)^{11}$	$E(3)$	$-E(12)^7$	$-E(3)$	$E(12)^7$

Trivial source character table of $G \cong$ C4 x A4 at $p = 2$:

Normalisers N_i	N_1			N_2	N_3			N_4	N_5			N_6	N_7	N_8	N_9			N_{10}			N_{11}	N_{12}	N_{13}		
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	P_9			P_{10}			P_{11}	P_{12}	P_{13}		
Representatives $n_j \in N_i$	$1a$	$3a$	$3b$	$1a$	$1a$	$3a$	$3b$	$1a$	$1a$	$3a$	$3b$	$1a$	$1a$	$1a$	$1a$	$3a$	$3b$	$1a$	$3a$	$3b$	$1a$	$1a$	$1a$	$3a$	$3b$
$1\cdot\chi_1+1\cdot\chi_2+1\cdot\chi_3+1\cdot\chi_4+1\cdot\chi_5+1\cdot\chi_6+1\cdot\chi_7+1\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}$	16	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$0\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+1\cdot\chi_5+1\cdot\chi_6+1\cdot\chi_7+1\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+1\cdot\chi_{13}+1\cdot\chi_{14}+1\cdot\chi_{15}+1\cdot\chi_{16}$	16	$4*E(3)^2$	$4*E(3)$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$0\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+1\cdot\chi_5+1\cdot\chi_6+1\cdot\chi_7+1\cdot\chi_8+1\cdot\chi_9+1\cdot\chi_{10}+1\cdot\chi_{11}+1\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}$	16	$4*E(3)$	$4*E(3)^2$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+1\cdot\chi_2+1\cdot\chi_3+1\cdot\chi_4+1\cdot\chi_5+1\cdot\chi_6+1\cdot\chi_7+1\cdot\chi_8+1\cdot\chi_9+1\cdot\chi_{10}+1\cdot\chi_{11}+1\cdot\chi_{12}+1\cdot\chi_{13}+1\cdot\chi_{14}+1\cdot\chi_{15}+1\cdot\chi_{16}$	24	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+1\cdot\chi_3+0\cdot\chi_4+1\cdot\chi_5+0\cdot\chi_6+1\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}$	8	2	2	0	8	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$0\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+1\cdot\chi_5+0\cdot\chi_6+1\cdot\chi_7+0\cdot\chi_8+1\cdot\chi_9+0\cdot\chi_{10}+1\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}$	8	$2*E(3)$	$2*E(3)^2$	0	8	$2*E(3)$	$2*E(3)^2$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$0\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+1\cdot\chi_5+0\cdot\chi_6+1\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+1\cdot\chi_{13}+0\cdot\chi_{14}+1\cdot\chi_{15}+0\cdot\chi_{16}$	8	$2*E(3)^2$	$2*E(3)$	0	8	$2*E(3)^2$	$2*E(3)$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+1\cdot\chi_3+0\cdot\chi_4+1\cdot\chi_5+2\cdot\chi_6+1\cdot\chi_7+2\cdot\chi_8+1\cdot\chi_9+0\cdot\chi_{10}+1\cdot\chi_{11}+0\cdot\chi_{12}+1\cdot\chi_{13}+0\cdot\chi_{14}+1\cdot\chi_{15}+0\cdot\chi_{16}$	24	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+1\cdot\chi_2+1\cdot\chi_3+1\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}$	4	4	4	4	0	0	0	0	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$0\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+1\cdot\chi_{13}+1\cdot\chi_{14}+1\cdot\chi_{15}+1\cdot\chi_{16}$	4	$4*E(3)^2$	$4*E(3)$	4	0	0	0	0	4	$4*E(3)^2$	$4*E(3)$	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$0\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+1\cdot\chi_9+1\cdot\chi_{10}+1\cdot\chi_{11}+1\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}$	4	$4*E(3)$	$4*E(3)^2$	4	0	0	0	0	4	$4*E(3)$	$4*E(3)^2$	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+1\cdot\chi_3+0\cdot\chi_4+1\cdot\chi_5+0\cdot\chi_6+1\cdot\chi_7+0\cdot\chi_8+1\cdot\chi_9+0\cdot\chi_{10}+1\cdot\chi_{11}+0\cdot\chi_{12}+1\cdot\chi_{13}+0\cdot\chi_{14}+1\cdot\chi_{15}+0\cdot\chi_{16}$	12	0	0	4	12	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+1\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+1\cdot\chi_6+0\cdot\chi_7+1\cdot\chi_8+1\cdot\chi_9+0\cdot\chi_{10}+1\cdot\chi_{11}+0\cdot\chi_{12}+1\cdot\chi_{13}+0\cdot\chi_{14}+1\cdot\chi_{15}+0\cdot\chi_{16}$	12	0	0	4	0	0	0	8	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+1\cdot\chi_5+0\cdot\chi_6+2\cdot\chi_7+0\cdot\chi_8+1\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+1\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}$	12	0	0	0	12	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+1\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}$	4	1	1	0	4	1	1	0	0	0	0	0	0	0	4	1	1	0	0	0	0	0	0	0	0
$0\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+1\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+1\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}$	4	$E(3)$	$E(3)^2$	0	4	$E(3)$	$E(3)^2$	0	0	0	0	0	0	0	4	$E(3)$	$E(3)^2$	0	0	0	0	0	0	0	0
$0\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+1\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+1\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}$	4	$E(3)^2$	$E(3)$	0	4	$E(3)^2$	$E(3)$	0	0	0	0	0	0	0	4	$E(3)^2$	$E(3)$	0	0	0	0	0	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+1\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}$	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	2	2	2	0	0	0	0	0
$0\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+1\cdot\chi_{13}+0\cdot\chi_{14}+1\cdot\chi_{15}+0\cdot\chi_{16}$	2	$2*E(3)^2$	$2*E(3)$	2	2	$2*E(3)^2$	$2*E(3)$	2	2	$2*E(3)^2$	$2*E(3)$	2	2	0	0	0	0	2	$2*E(3)^2$	$2*E(3)$	0	0	0	0	0
$0\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+1\cdot\chi_9+0\cdot\chi_{10}+1\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}$	2	$2*E(3)$	$2*E(3)^2$	2	2	$2*E(3)$	$2*E(3)^2$	2	2	$2*E(3)$	$2*E(3)^2$	2	2	0	0	0	0	2	$2*E(3)$	$2*E(3)^2$	0	0	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+1\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+1\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+1\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}$	6	0	0	2	6	0	0	2	0	0	0	2	0	2	6	0	0	0	0	0	2	0	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+1\cdot\chi_7+0\cdot\chi_8+1\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+1\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}$	6	0	0	2	6	0	0	2	0	0	0	2	0	4	0	0	0	0	0	0	0	2	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$0\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+1\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}$	1	$E(3)^2$	$E(3)$	1	1	$E(3)^2$	$E(3)$	1	1	$E(3)^2$	$E(3)$	1	1	1	1	$E(3)^2$	$E(3)$	1	$E(3)^2$	$E(3)$	1	1	1	$E(3)^2$	$E(3)$
$0\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+1\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}$	1	$E(3)$	$E(3)^2$	1	1	$E(3)$	$E(3)^2$	1	1	$E(3)$	$E(3)^2$	1	1	1	1	$E(3)$	$E(3)^2$	1	$E(3)$	$E(3)^2$	1	1	1	$E(3)$	$E(3)^2$

$P_1 = Group([()]) \cong 1$
$P_2 = Group([(1,17)(2,24)(3,30)(4,31)(5,6)(7,37)(8,38)(9,10)(11,41)(12,42)(13,14)(15,16)(18,45)(19,46)(20,21)(22,23)(25,47)(26,27)(28,29)(32,48)(33,34)(35,36)(39,40)(43,44)]) \cong$ C2
$P_3 = Group([(1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48)]) \cong$ C2
$P_4 = Group([(1,31)(2,38)(3,42)(4,17)(5,16)(6,15)(7,46)(8,24)(9,23)(10,22)(11,47)(12,30)(13,29)(14,28)(18,48)(19,37)(20,36)(21,35)(25,41)(26,40)(27,39)(32,45)(33,44)(34,43)]) \cong$ C2
$P_5 = Group([(1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48), (1,17)(2,24)(3,30)(4,31)(5,6)(7,37)(8,38)(9,10)(11,41)(12,42)(13,14)(15,16)(18,45)(19,46)(20,21)(22,23)(25,47)(26,27)(28,29)(32,48)(33,34)(35,36)(39,40)(43,44)]) \cong$ C2 x C2
$P_6 = Group([(1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48), (1,17)(2,24)(3,30)(4,31)(5,6)(7,37)(8,38)(9,10)(11,41)(12,42)(13,14)(15,16)(18,45)(19,46)(20,21)(22,23)(25,47)(26,27)(28,29)(32,48)(33,34)(35,36)(39,40)(43,44)]) \cong$ C2 x C2
$P_7 = Group([(1,31)(2,38)(3,42)(4,17)(5,16)(6,15)(7,46)(8,24)(9,23)(10,22)(11,47)(12,30)(13,29)(14,28)(18,48)(19,37)(20,36)(21,35)(25,41)(26,40)(27,39)(32,45)(33,44)(34,43), (1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48)]) \cong$ C2 x C2
$P_8 = Group([(1,9,4,22)(2,15,8,5)(3,20,12,35)(6,24,16,38)(7,28,19,13)(10,31,23,17)(11,33,25,43)(14,37,29,46)(18,39,32,26)(21,42,36,30)(27,45,40,48)(34,47,44,41), (1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48)]) \cong$ C4
$P_9 = Group([(1,2,4,8)(3,7,12,19)(5,9,15,22)(6,10,16,23)(11,18,25,32)(13,20,28,35)(14,21,29,36)(17,24,31,38)(26,33,39,43)(27,34,40,44)(30,37,42,46)(41,45,47,48), (1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48)]) \cong$ C4
$P_{10} = Group([(1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48), (1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48), (1,17)(2,24)(3,30)(4,31)(5,6)(7,37)(8,38)(9,10)(11,41)(12,42)(13,14)(15,16)(18,45)(19,46)(20,21)(22,23)(25,47)(26,27)(28,29)(32,48)(33,34)(35,36)(39,40)(43,44)]) \cong$ C2 x C2 x C2
$P_{11} = Group([(1,2,4,8)(3,7,12,19)(5,9,15,22)(6,10,16,23)(11,18,25,32)(13,20,28,35)(14,21,29,36)(17,24,31,38)(26,33,39,43)(27,34,40,44)(30,37,42,46)(41,45,47,48), (1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48), (1,17)(2,24)(3,30)(4,31)(5,6)(7,37)(8,38)(9,10)(11,41)(12,42)(13,14)(15,16)(18,45)(19,46)(20,21)(22,23)(25,47)(26,27)(28,29)(32,48)(33,34)(35,36)(39,40)(43,44)]) \cong$ C4 x C2
$P_{12} = Group([(1,10,4,23)(2,16,8,6)(3,21,12,36)(5,24,15,38)(7,29,19,14)(9,31,22,17)(11,34,25,44)(13,37,28,46)(18,40,32,27)(20,42,35,30)(26,45,39,48)(33,47,43,41), (1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48), (1,17)(2,24)(3,30)(4,31)(5,6)(7,37)(8,38)(9,10)(11,41)(12,42)(13,14)(15,16)(18,45)(19,46)(20,21)(22,23)(25,47)(26,27)(28,29)(32,48)(33,34)(35,36)(39,40)(43,44)]) \cong$ C4 x C2
$P_{13} = Group([(1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48), (1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48), (1,17)(2,24)(3,30)(4,31)(5,6)(7,37)(8,38)(9,10)(11,41)(12,42)(13,14)(15,16)(18,45)(19,46)(20,21)(22,23)(25,47)(26,27)(28,29)(32,48)(33,34)(35,36)(39,40)(43,44), (1,2,4,8)(3,7,12,19)(5,9,15,22)(6,10,16,23)(11,18,25,32)(13,20,28,35)(14,21,29,36)(17,24,31,38)(26,33,39,43)(27,34,40,44)(30,37,42,46)(41,45,47,48)]) \cong$ C4 x C2 x C2

$N_1 = Group([(1,2,4,8)(3,7,12,19)(5,9,15,22)(6,10,16,23)(11,18,25,32)(13,20,28,35)(14,21,29,36)(17,24,31,38)(26,33,39,43)(27,34,40,44)(30,37,42,46)(41,45,47,48), (1,3,11)(2,7,18)(4,12,25)(5,14,41)(6,30,26)(8,19,32)(9,21,45)(10,37,33)(13,27,17)(15,29,47)(16,42,39)(20,34,24)(22,36,48)(23,46,43)(28,40,31)(35,44,38), (1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48), (1,5)(2,9)(3,13)(4,15)(6,17)(7,20)(8,22)(10,24)(11,26)(12,28)(14,30)(16,31)(18,33)(19,35)(21,37)(23,38)(25,39)(27,41)(29,42)(32,43)(34,45)(36,46)(40,47)(44,48), (1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48)]) \cong$ C4 x A4
$N_2 = Group([(1,17)(2,24)(3,30)(4,31)(5,6)(7,37)(8,38)(9,10)(11,41)(12,42)(13,14)(15,16)(18,45)(19,46)(20,21)(22,23)(25,47)(26,27)(28,29)(32,48)(33,34)(35,36)(39,40)(43,44), (1,2,4,8)(3,7,12,19)(5,9,15,22)(6,10,16,23)(11,18,25,32)(13,20,28,35)(14,21,29,36)(17,24,31,38)(26,33,39,43)(27,34,40,44)(30,37,42,46)(41,45,47,48), (1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48), (1,5)(2,9)(3,13)(4,15)(6,17)(7,20)(8,22)(10,24)(11,26)(12,28)(14,30)(16,31)(18,33)(19,35)(21,37)(23,38)(25,39)(27,41)(29,42)(32,43)(34,45)(36,46)(40,47)(44,48)]) \cong$ C4 x C2 x C2
$N_3 = Group([(1,2,4,8)(3,7,12,19)(5,9,15,22)(6,10,16,23)(11,18,25,32)(13,20,28,35)(14,21,29,36)(17,24,31,38)(26,33,39,43)(27,34,40,44)(30,37,42,46)(41,45,47,48), (1,3,11)(2,7,18)(4,12,25)(5,14,41)(6,30,26)(8,19,32)(9,21,45)(10,37,33)(13,27,17)(15,29,47)(16,42,39)(20,34,24)(22,36,48)(23,46,43)(28,40,31)(35,44,38), (1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48), (1,5)(2,9)(3,13)(4,15)(6,17)(7,20)(8,22)(10,24)(11,26)(12,28)(14,30)(16,31)(18,33)(19,35)(21,37)(23,38)(25,39)(27,41)(29,42)(32,43)(34,45)(36,46)(40,47)(44,48), (1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48)]) \cong$ C4 x A4
$N_4 = Group([(1,31)(2,38)(3,42)(4,17)(5,16)(6,15)(7,46)(8,24)(9,23)(10,22)(11,47)(12,30)(13,29)(14,28)(18,48)(19,37)(20,36)(21,35)(25,41)(26,40)(27,39)(32,45)(33,44)(34,43), (1,2,4,8)(3,7,12,19)(5,9,15,22)(6,10,16,23)(11,18,25,32)(13,20,28,35)(14,21,29,36)(17,24,31,38)(26,33,39,43)(27,34,40,44)(30,37,42,46)(41,45,47,48), (1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48), (1,5)(2,9)(3,13)(4,15)(6,17)(7,20)(8,22)(10,24)(11,26)(12,28)(14,30)(16,31)(18,33)(19,35)(21,37)(23,38)(25,39)(27,41)(29,42)(32,43)(34,45)(36,46)(40,47)(44,48), (1,17)(2,24)(3,30)(4,31)(5,6)(7,37)(8,38)(9,10)(11,41)(12,42)(13,14)(15,16)(18,45)(19,46)(20,21)(22,23)(25,47)(26,27)(28,29)(32,48)(33,34)(35,36)(39,40)(43,44)]) \cong$ C4 x C2 x C2
$N_5 = Group([(1,17)(2,24)(3,30)(4,31)(5,6)(7,37)(8,38)(9,10)(11,41)(12,42)(13,14)(15,16)(18,45)(19,46)(20,21)(22,23)(25,47)(26,27)(28,29)(32,48)(33,34)(35,36)(39,40)(43,44), (1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48), (1,2,4,8)(3,7,12,19)(5,9,15,22)(6,10,16,23)(11,18,25,32)(13,20,28,35)(14,21,29,36)(17,24,31,38)(26,33,39,43)(27,34,40,44)(30,37,42,46)(41,45,47,48), (1,3,11)(2,7,18)(4,12,25)(5,14,41)(6,30,26)(8,19,32)(9,21,45)(10,37,33)(13,27,17)(15,29,47)(16,42,39)(20,34,24)(22,36,48)(23,46,43)(28,40,31)(35,44,38)]) \cong$ C4 x A4
$N_6 = Group([(1,17)(2,24)(3,30)(4,31)(5,6)(7,37)(8,38)(9,10)(11,41)(12,42)(13,14)(15,16)(18,45)(19,46)(20,21)(22,23)(25,47)(26,27)(28,29)(32,48)(33,34)(35,36)(39,40)(43,44), (1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48), (1,2,4,8)(3,7,12,19)(5,9,15,22)(6,10,16,23)(11,18,25,32)(13,20,28,35)(14,21,29,36)(17,24,31,38)(26,33,39,43)(27,34,40,44)(30,37,42,46)(41,45,47,48), (1,5)(2,9)(3,13)(4,15)(6,17)(7,20)(8,22)(10,24)(11,26)(12,28)(14,30)(16,31)(18,33)(19,35)(21,37)(23,38)(25,39)(27,41)(29,42)(32,43)(34,45)(36,46)(40,47)(44,48)]) \cong$ C4 x C2 x C2
$N_7 = Group([(1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48), (1,31)(2,38)(3,42)(4,17)(5,16)(6,15)(7,46)(8,24)(9,23)(10,22)(11,47)(12,30)(13,29)(14,28)(18,48)(19,37)(20,36)(21,35)(25,41)(26,40)(27,39)(32,45)(33,44)(34,43), (1,2,4,8)(3,7,12,19)(5,9,15,22)(6,10,16,23)(11,18,25,32)(13,20,28,35)(14,21,29,36)(17,24,31,38)(26,33,39,43)(27,34,40,44)(30,37,42,46)(41,45,47,48)]) \cong$ C4 x C2 x C2
$N_8 = Group([(1,9,4,22)(2,15,8,5)(3,20,12,35)(6,24,16,38)(7,28,19,13)(10,31,23,17)(11,33,25,43)(14,37,29,46)(18,39,32,26)(21,42,36,30)(27,45,40,48)(34,47,44,41), (1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48), (1,2,4,8)(3,7,12,19)(5,9,15,22)(6,10,16,23)(11,18,25,32)(13,20,28,35)(14,21,29,36)(17,24,31,38)(26,33,39,43)(27,34,40,44)(30,37,42,46)(41,45,47,48), (1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48)]) \cong$ C4 x C2 x C2
$N_9 = Group([(1,2,4,8)(3,7,12,19)(5,9,15,22)(6,10,16,23)(11,18,25,32)(13,20,28,35)(14,21,29,36)(17,24,31,38)(26,33,39,43)(27,34,40,44)(30,37,42,46)(41,45,47,48), (1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48), (1,3,11)(2,7,18)(4,12,25)(5,14,41)(6,30,26)(8,19,32)(9,21,45)(10,37,33)(13,27,17)(15,29,47)(16,42,39)(20,34,24)(22,36,48)(23,46,43)(28,40,31)(35,44,38), (1,5)(2,9)(3,13)(4,15)(6,17)(7,20)(8,22)(10,24)(11,26)(12,28)(14,30)(16,31)(18,33)(19,35)(21,37)(23,38)(25,39)(27,41)(29,42)(32,43)(34,45)(36,46)(40,47)(44,48)]) \cong$ C4 x A4
$N_{10} = Group([(1,17)(2,24)(3,30)(4,31)(5,6)(7,37)(8,38)(9,10)(11,41)(12,42)(13,14)(15,16)(18,45)(19,46)(20,21)(22,23)(25,47)(26,27)(28,29)(32,48)(33,34)(35,36)(39,40)(43,44), (1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48), (1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48), (1,2,4,8)(3,7,12,19)(5,9,15,22)(6,10,16,23)(11,18,25,32)(13,20,28,35)(14,21,29,36)(17,24,31,38)(26,33,39,43)(27,34,40,44)(30,37,42,46)(41,45,47,48), (1,3,11)(2,7,18)(4,12,25)(5,14,41)(6,30,26)(8,19,32)(9,21,45)(10,37,33)(13,27,17)(15,29,47)(16,42,39)(20,34,24)(22,36,48)(23,46,43)(28,40,31)(35,44,38)]) \cong$ C4 x A4
$N_{11} = Group([(1,17)(2,24)(3,30)(4,31)(5,6)(7,37)(8,38)(9,10)(11,41)(12,42)(13,14)(15,16)(18,45)(19,46)(20,21)(22,23)(25,47)(26,27)(28,29)(32,48)(33,34)(35,36)(39,40)(43,44), (1,2,4,8)(3,7,12,19)(5,9,15,22)(6,10,16,23)(11,18,25,32)(13,20,28,35)(14,21,29,36)(17,24,31,38)(26,33,39,43)(27,34,40,44)(30,37,42,46)(41,45,47,48), (1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48), (1,5)(2,9)(3,13)(4,15)(6,17)(7,20)(8,22)(10,24)(11,26)(12,28)(14,30)(16,31)(18,33)(19,35)(21,37)(23,38)(25,39)(27,41)(29,42)(32,43)(34,45)(36,46)(40,47)(44,48)]) \cong$ C4 x C2 x C2
$N_{12} = Group([(1,17)(2,24)(3,30)(4,31)(5,6)(7,37)(8,38)(9,10)(11,41)(12,42)(13,14)(15,16)(18,45)(19,46)(20,21)(22,23)(25,47)(26,27)(28,29)(32,48)(33,34)(35,36)(39,40)(43,44), (1,10,4,23)(2,16,8,6)(3,21,12,36)(5,24,15,38)(7,29,19,14)(9,31,22,17)(11,34,25,44)(13,37,28,46)(18,40,32,27)(20,42,35,30)(26,45,39,48)(33,47,43,41), (1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48), (1,2,4,8)(3,7,12,19)(5,9,15,22)(6,10,16,23)(11,18,25,32)(13,20,28,35)(14,21,29,36)(17,24,31,38)(26,33,39,43)(27,34,40,44)(30,37,42,46)(41,45,47,48)]) \cong$ C4 x C2 x C2
$N_{13} = Group([(1,2,4,8)(3,7,12,19)(5,9,15,22)(6,10,16,23)(11,18,25,32)(13,20,28,35)(14,21,29,36)(17,24,31,38)(26,33,39,43)(27,34,40,44)(30,37,42,46)(41,45,47,48), (1,17)(2,24)(3,30)(4,31)(5,6)(7,37)(8,38)(9,10)(11,41)(12,42)(13,14)(15,16)(18,45)(19,46)(20,21)(22,23)(25,47)(26,27)(28,29)(32,48)(33,34)(35,36)(39,40)(43,44), (1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48), (1,4)(2,8)(3,12)(5,15)(6,16)(7,19)(9,22)(10,23)(11,25)(13,28)(14,29)(17,31)(18,32)(20,35)(21,36)(24,38)(26,39)(27,40)(30,42)(33,43)(34,44)(37,46)(41,47)(45,48), (1,3,11)(2,7,18)(4,12,25)(5,14,41)(6,30,26)(8,19,32)(9,21,45)(10,37,33)(13,27,17)(15,29,47)(16,42,39)(20,34,24)(22,36,48)(23,46,43)(28,40,31)(35,44,38)]) \cong$ C4 x A4