

Number of vertices $n = 9$.

Adjacencies of Graph

1. vertex 1 adjacent to 4 5 6 7 8 9
2. vertex 2 adjacent to 4 5 6 7 8 9
3. vertex 3 adjacent to 4 5 6 7 8 9
4. vertex 4 adjacent to 1 2 3
5. vertex 5 adjacent to 1 2 3
6. vertex 6 adjacent to 1 2 3
7. vertex 7 adjacent to 1 2 3
8. vertex 8 adjacent to 1 2 3
9. vertex 9 adjacent to 1 2 3

Size of automorphism group of the graph=4320

Full group: $|Aut(polytope)| = 1105920$

Restricted group: $|Aut(G) \times switch| = 1105920$

Number of orbits for the full group : 2

List of orbits of facets for the full group: Total number of orbits = 2 Total number of facets = 396

1. Inequality 1 with incidence 128 and stabilizer of size 3072. Orbit size is 360

$(1,4) : -1$	$(1,5) : 1$	$(1,6) : 0$	$(1,7) : 0$	$(1,8) : 0$	$(1,9) : 0$
$(2,4) : 0$	$(2,5) : 0$	$(2,6) : 0$	$(2,7) : 0$	$(2,8) : 0$	$(2,9) : 0$
$(3,4) : 1$	$(3,5) : 1$	$(3,6) : 0$	$(3,7) : 0$	$(3,8) : 0$	$(3,9) : 0$

2. Inequality 2 with incidence 128 and stabilizer of size 30720. Orbit size is 36

$(1,4) : 0$	$(1,5) : 0$	$(1,6) : 0$	$(1,7) : 0$	$(1,8) : 0$	$(1,9) : 0$
$(2,4) : 0$	$(2,5) : 0$	$(2,6) : 0$	$(2,7) : 0$	$(2,8) : 0$	$(2,9) : 1$
$(3,4) : 0$	$(3,5) : 0$	$(3,6) : 0$	$(3,7) : 0$	$(3,8) : 0$	$(3,9) : 0$