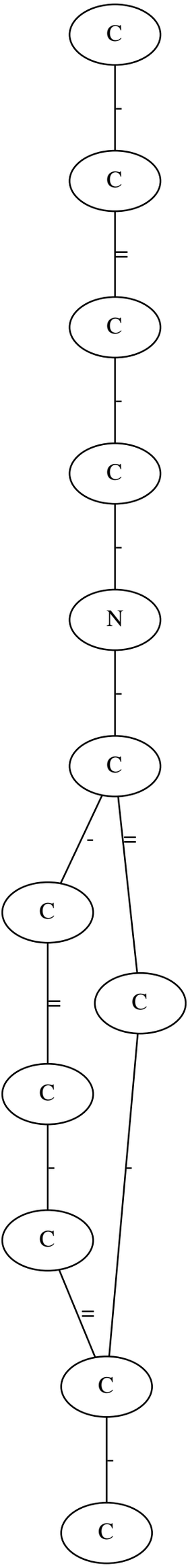chemical_1M.Q12 q54