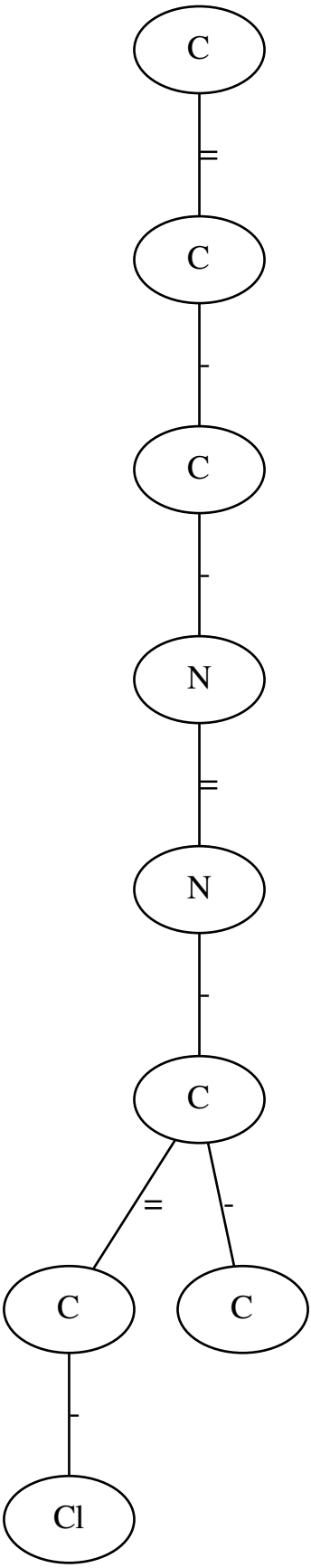chemical_1M.Q8 q20