

1. What is the molecular formula of the molecule that has an empirical formula of CH_2O and a molar mass of 120.1 g/mol?
2. What is the molecular formula of the molecule that has an empirical formula of CH_2Cl and a molar mass of 247.5 g/mol?
3. Determine the formula for the hydrate from the given information:
 - a. 0.391 g Li_2SiF_6 , 0.0903 g H_2O
 - b. 76.9 % CaSO_3 , 23.1 % H_2O