

Study Point Coaching Classes

CHEMISTRY-DPP-CLASS-XI

(Calculation Of Empirical formula And Molecular Formula)

1. A hydrocarbon contains 75% of carbon. Then its molecular formula is?

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- 2. A 25.0g sample of an unknown hydrocarbon is composed of 12.16g carbon, 2,027g hydrogen, and 10.81g oxygen. If its molar mass is 148/mol, what is the molecular formula for this compound?
- 3. The Empirical formula of a compound is CH_2 . Its molecular mass is 70.g/mol. What is its molecular formula?
- 4. Calculate the empirical formula of a compound 52.14% C, 13.12% H, and 34.73% O.
- 5. Calculate the empirical and molecular formulas of a compound that contains 80.0% C, 20.0% H, and has a molar mass (molecular mass) of 30.00g.
- 6. What is the empirical formula of a compound that contains 46.3% lithium and 53.7% oxygen?
- 7. What is the empirical formula of a compound that contains 15.9% boron and 84.1% fluorine?
- 8. Compound X contains 69.9% carbon, 6.86% hydrogen and 23.3% oxygen. Determine the empirical formula of X.
- 9. Oxalic acid has the empirical formula CHO₂. Its molar mass is 90 g/mol. What is the molecular formula of oxalic acid?
- 10.a) Find the empirical formula for a compound consisting of 29.4% calcium, 23.5% sulphur and 47.1% oxygen.
 - b) Find the molecular formula if the molecular mass of the compound is 408.42 g/mol.