Percent Composition Worksheet

In Notebook Define: Percent Composition

1) What is the percent composition of nitrogen in AgNO₃?
2) What is the percent composition of carbon in C₂H₅O?
3) What is the percent composition of hydrogen in H₂SO₄?
4) What is the percent composition of sulfur in sulfur hexafluoride?
5) What is the percent composition of iron in iron (II) sulfide?
6) What is the percent composition of lithium in lithium phosphate?

EMPIRICAL FORMULA - MOLECULAR FORMULA

In Notebook Define: Empirical Formula and Molecular Formula

7 - What is the empirical formula of a compound that is 67.6% Hg, 10.8% S, and 21.6% O.

8 - What is the empirical formula of a compound that is 25.9% Nitrogen and 74.1% Oxygen?

9 - What is the empirical formula of a compound formed by 3.31 g of aluminum that combines with iodine to give 50.01g of the compound.

10 - Putrescine, a substance produced by decaying animals, has the percent composition of 54.5 % Carbon, 13.6 % Hydrogen, and 31.82 % Nitrogen. If there are approximately 88 grams of putrescine, find the molecular formula.

11 - An analysis of a compound gives the following mass percentages: 17.5 % Sodium, 39.7 % Chromium, and 42.8 % Oxygen. What is the empirical formula of this compound?

12 - What is the molecular formula of C₂HCl if its gfm is 181.5 grams?

13 - What is the molecular formula of CH₄N if its gfm is 60.0 grams?

14 - You find that 7.36 g of a compound has decomposed to give 6.93 g of oxygen. The rest of the compound is hydrogen. If the molecular mass of the compound is 34.0 g/mol, what is its molecular formula?

15 - The compound methyl butanoate smells like apples. Its percent composition is 58.8% C, 9.8 % H, and 31.4 % O. If its gram molecular mass is 102 g/mol, what is its molecular formula?