

Answer on Question #49562 – Chemistry– Other

Question:

Describe the composition of a compound.

Answer:

Composition of a compound is commonly expressed as the mass percentage of each element present in it. To determine the mass percentage of an element in any compound, we should know the mass of that element present in a certain known mass of the compound.

Let us suppose, $W(g)$ of a compound contain $w (g)$ of an element A. Then,

$$\begin{aligned} \text{Mass percentage of the element A} &= \text{Mass of element A} / \text{Mass of the compound} \times 100 \\ &= w_g / W_g \times 100 = w / W \times 100 \end{aligned}$$

To do this, you need to know mass of a compound is chemically analyzed, and the mass of each element present in it is determined by a suitable chemical method. For example, the masses of hydrogen and oxygen in water can be determined by electrolyzing water. The volumes of hydrogen and oxygen are measured, and their masses calculated.

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