

# PERCENTAGE COMPOSITION

**Percentage composition compares the mass of one part of a substance to the mass of the whole.**

**Calculating percentage composition:**

- Do a formula/molecular mass calculation.
- Divide the total atomic mass for each element by the total formula mass of the compound.

**Example:** Calculate the percentage composition of  $\text{C}_2\text{H}_5\text{OH}$

$$\text{C} = [(2 \times 12.01) / 46.08] \times 100 =$$

$$\text{H} = [(6 \times 1.01) / 46.08] \times 100 =$$

$$\text{O} = [(1 \times 16.00) / 46.08] \times 100 =$$

## Homework:

Calculate the percentage composition of:

