Answer on Question #53116 – Chemistry – General Chemistry

Task:

Calculate the percent composition of the compounds that are formed from these reactants

a) 222.6 g N combines completely with 77.4 g O;
b) 2.62 g Na and 4.04 g Cl are formed by the decomposition of table salt.

Answer:

a) Total mass of the compound is:
222.6 + 77.4 = 300 g

Percent of Nitrogen in the compound:

N% = (222.6/300) x 100 = **74.20%**

Percent of Oxygen in the compound:

O% = (77.4/300) x 100 = **25.80%**

b) Total mass of the compound is:
2.62 + 4.04 = 6.66 g

Percent of Sodium (Na) in the compound:

Na% = (2.62/6.66) x 100 = **39.34%**

Percent of Chlorine in the compound:

Cl% = (4.04/6.66) x 100 = **60.66%**