

Question #83543, Chemistry / General Chemistry | for completion

Determine the percent of oxygen in potassium sulfite.
In a 125.0 gram sample of potassium sulfite what mass is oxygen?

Answer:

K_2SO_3 potassium sulfite

$$M_r = 39 \times 2 + 32 + 16 \times 3 = 158$$

$$M_O = 16 \times 3 = 48 \text{ (O)}$$

$$w\% = m_O \times 100 \% / m_{\text{total}} = 48 \times 100 \% / 158 = 30.38 \% \text{ (O)}$$

$$m_O = m_{\text{total}} \times w\% / 100 = 125 \times 30.38 / 100 = 37.97 \text{ g (O)}$$

Answer provided by www.AssignmentExpert.com