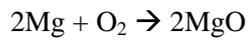


Magnesium combines with oxygen to form magnesium oxide. If 21.56 g of magnesium reacts completely with 5.41 g of oxygen, what is the percent by mass of oxygen in magnesium oxide?



$$W = \frac{M(O)}{M(\text{Mg}) + M(O)} * 100\%$$

$$W = \frac{16}{24 + 16} * 100\% = 40\%$$

$$W=40\%$$