Percentage Ex 12.2 Q13

Answer :

Let the amount of gunpowder that contains 9 kg nitre be x kg.

i.e., $\frac{75}{100} \times x = 9$

$\Rightarrow \frac{100}{75} = \frac{x}{9}$

$\Rightarrow x = \frac{900}{75}$

$\Rightarrow x = 12$

$\therefore$ The amount of gunpowder containing 9 kg nitre is 12 kg.

Let the amount of gunpowder containing 2.3 kg sulphur be y kg.

i.e., $\frac{10}{100} \times y = 2.3$

$\Rightarrow \frac{100}{10} = \frac{y}{2.3}$

$\Rightarrow y = \frac{230}{10}$

$\Rightarrow y = 23$

$\therefore$ The amount of gunpowder containing 2.3 kg sulphur is 23 kg.

Percentage Ex 12.2 Q14

Answer :

Composition of the alloy $= 15$ parts of tin $+ 105$ parts of copper $= 120$ parts

$\therefore$ Percentage of tin $= \frac{15}{120} \times 100$

$= 12.5\%$

Also, percentage of copper $= \frac{105}{120} \times 100$

$= 87.5\%$

Percentage Ex 12.2 Q15

Answer :

Percentage of copper in the alloy $= 32$

Percentage of nickel in the alloy $= 40$

Percentage of zinc in the alloy $= 100 - 32 - 40 = 28$

$\therefore$ Amount of zinc in 1 kg of the alloy $= (0.28 \times 1)$ kg

$= 280$ gm

********** END **********