

Percentage Ex 12.2 Q13

Answer:

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

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

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

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

$$\Rightarrow \mathbf{x} = 12$$

... 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

... 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 = $\frac{105}{120} \times 100$

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

... Amount of zinc in 1 kg of the alloy = (0.28×1) kg = 280 gm

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