

CLASS IX PRACTICALS FOR SUMMATIVE ASSESSMENT SA-1

Experiment: 3. To prepare (a) a mixture (b) a compound

using iron filings and sulphur powder and distinguish between these on the basis of:

- i. appearance i.e., homogeneity and heterogeneity
- ii. behaviour towards a magnet
- iii. behaviour towards carbon disulphide as a solvent.
- iv. effect of heat.

Materials Required : Iron filling, Sulphur powder, Dil. Sulphuric acid, china dish, Test tube, burner, magnet & Carbon disulphide.

Procedure :

(a) Mixture : Take 7 iron filings & 4g sulphur powder. Grind them with the help of Pestle & mortar. Label it as "MIXTURE" 'A'

(b) Compound : Take 7g iron filling & 4g sulphur powder in a china dish. Heat it gently till a black mass is formed.

Label it as "Compound" 'B'

Experiment Observation Inference

1 Magnet Test	Experiment	Observation	Inference
	Move a magnet over the sample	sample A iron filings are attracted Sample B- No attraction takes place.	sample A mixture sample B is Compound
Carbon disulphide In 'A' mixture sulphur Test	Shake both Samples with Carbon disulphide	sample A carbon disulphide gets Dissolved. In Sample 'B' no change	Properties of sulphur are retained In 'A' mixture but not in compound 'B' A is a mixture and B is a compound
Dil. Sulphuric Acid Test	React both the samples with Dil.HCl	Mixture 'A' gives H ₂ gas which burn with pop sound Compound B gives Hydrogen Sulphide gas Having a rotten egg like smell.	Properties of iron are retained in mixture 'A' but not in compound 'B'.

Inference:

1. Properties of components are retained in mixture.
2. Properties of a components are retained in mixture.

Precaution:

1. Heating of iron & sulphur should be done gently.
2. Do not inhale hydrogen sulphide gas.
3. Carbon disulphide should be kept a way from flame.