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Aim :→

To detect the presence of extra element Dixtrose in the given sample (Dextrose ∓ Anhydrous Purified)

Reference :→

Dr. Jain K.S "A Practical Book of Pharmaceutical organic chemistry Nirali Publication.

Requirement :→

(a) Glassware :→ Beaker, Glassrod, test tube, Pipette, Measuring cylinder.

(b) Chemical :→ Dextros, Distilled water, conc. H_2SO_4.

Theory :→

Dextrose is the name of the simple sugar that is made from corn and is chemically identical to glucose. or blood sugar.

Dextrose is often used in baking product as a sweetener and commonly found in item such as processed food and corn syrup dextrose also has medical purpose it is dissolved in a solution that are given intravenously when can be combined with other drugs or used to increase a person's blood sugar.

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Observation :-

S. No.	Experiment	Observation
1.	5 ml of water + Dextrose anhydrous	Turn red litmus to blue

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Dextrose anhydrous is a form of glucose made from starch of corn just like sugar. it sweet in nature but contain around 20% less sweetness as compared to sugar made from sugarcane.

Dextrose anhydrous does not contain any water, produced in crystalline or powder form.

Dextrose like fructose and glucose is a monosaccharide also known as simple sugar. Simple sugar can be combined to produce complex sugar. Such as sucrose. Human body metabolizes each unit of simple sugar whereas complexes sugar are not easily metabolized by body. Dextrose anhydrous is widely used as a nutrition supplement and a sweetener in food production.

Procedure :-

(i) First of all, clean all the glasswares properly before used as dry it well.

(ii) Take sample of dextrose by weighing 1 gm of each.

(iii) Now take water and heat it for few minute.

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S.No.	Experiment	Observation
1.	Physical State	Solid
2.	Colour	White
3.	Odour	Odourless
4.	Solubility test	

1.	Sample + cold water	Partially dissolve
2.	Sample + Hot water	Easily dissolve
3.	Sample + hot conc. H_2SO_4	Burn the sample

(iv) Now add hot water and cold water each of 3 ml to a different test tube.

(v) Now take 3 ml of conc. H_2SO_4 and heat it well.

(vi) Add hot conc. H_2SO_4 in another test tube.

(vii) Now add sample of dextrose in each of test tube.

(viii) Note the observation.

Result :-

The given sample of dextrose anhydrous in three test tube, one was hot & water and ~~food~~ found sample was easily dissolved, 2nd was cold water and found sample were partially dissolved and lastly was hot conc. H_2SO_4 and found that sample were ~~bo~~ burn and studied successfully.