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ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย



APPENDIX

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

Reagents Test Solution (TS) Spray Reagents.**Acetic anhydride-Sulphuric acid TS (68)**

A mixture of 9 volumes of acetic anhydride and 1 volume of sulphuric acid.

Aniline Blue Solution (69)

A saturated aqueous solution is useful in staining sieve tubes. Sections should be placed in this solution for 24 hours and then washed to remove excess of stain.

Anisaldehyde-Sulphuric acid spray reagent (68)

1 ml conc. Sulphuric acid is added to a solution of 0.5 ml anisaldehyde in 50 ml acetic acid. Freshly prepared before use.

Treatment after spraying

Heated at 105° - 110° C until the spots attain maximum colour intensity. The pink background can be bleached by exposure to steam (water-bath).

Chloral Hydrate TS (69)

A solution prepared by dissolving 25 g in 10 ml of water is an excellent clearing agent.

Chlorzinciodine TS (69)

Dissolve 25 g of anhydrous zinc chloride and 8 g of potassium iodide in 8.5 g of water and add iodine crystals to saturation.

Fehling 's Solution (Alkaline Cupric tartrate TS) (69) this consists of two solutions A and B

The Copper Solution (A)

Dissolve 34.66 g of small unefflorescence crystals of cupric

sulfate in sufficient distilled water to make the mixture 500 ml.

The Alkaline Tartrate Solution (B)

Dissolve 173 g of crystallized potassium and sodium tartrate and 50 g of sodium hydroxide in sufficient distilled water to make the solution measure 500 ml. Mix exactly equal volumes of solution A and B when required.

Ferric TS (70)

Dissolve 5 g of ferric chloride in 100 ml of water.

Glycerol-ethanol TS (70)

Mix equal volumes of glycerol, water and ethanol (~750 g /l)

Hydrochloric acid (~420 g /l) TS (70)

Saturated hydrochloric acid

Hydrochloric acid (~70 g/l) TS (70)

Dilute 260 ml of hydrochloric acid (~250 g/l) TS with sufficient water to produce 1000 ml (approximately 2 mol/l)

Iodine TS (69)

Dissolve 1 g of iodine and 3 g of potassium iodide in 50 ml of water

Orthophosphoric Acid (68)

85% phosphoric acid and ethanol are mixed 1:1(Volume)(~750g/l)

Treatment after spraying

Heated at 120° c until the spots attain maximum colour density.

Phloroglucinol TS (70)

Dissolve 1 g of phloroglucinol in 100 ml of ethanol (~750 g/l)

Sulphuric acid (70)

Concentrated sulphuric acid, containing from 93 to 95 percent of H₂SO₄

VITA

Mrs. Vanida Chantarateptawan was born on August 5, 1954, in Bangkok, Thailand. She obtained her Bachelor of Science in Pharmacy from the Faculty of Pharmaceutical Sciences, Chulalongkorn University in 1977. At present she has been a Medical Scientist in the Division of Medicinal Plant Research and Development, Department of Medical Sciences, Ministry of Public Health, Nonthaburi, Thailand.



ศูนย์วิทยทรัพยากร
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