

Lactophenol Picric Acid

Intended use

Used for wet mount and staining of fungi.

Summary

Lactophenol Picric Acid reagent is used for staining as well as for wet mounting of fungi. Wet mount preparation is the most widely used method of staining and observing fungi and is simple to prepare. The preparation has three components: Lactic acid preserves the fungal structure and clears the tissue while phenol acts as a disinfectant. Picric acid has antibacterial as well as antifungal properties. It stains the fungal spores and hyphae a pale to dark yellow color.

Principle

It is formulated with lactophenol, which serves as the mounting fluid and the dye picric acid. Lactic Acid preserves the fungal structure and clears the tissue while phenol acts as a disinfectant. The high concentration of phenol deactivates lytic cellular enzymes; thus, the cells do not lyse. Picric acid is an acid dye that stains the chitin present in the cell walls. The stain imparts pale to dark yellow color fungal hyphae.

Reagent / Contents

Phenol 100 g
Lactic acid 100 mL
Glycerol 200 mL
Picric acid, saturated aqueous solution 100 mL

Appearance

Yellow coloured, viscous solution with phenolic odor.

Storage and Stability

Store at 15°C-30°C in tightly closed container and away from bright light. Stability of Lactophenol Picric Acid is as per the expiry date mentioned on the label.

Materials required but not provided

Clean grease-free glass slide, loops, forceps, staining rack, blotting paper, immersion oil, microscope.

Type of Specimen

Isolated fungal colony on culture plates can be used from following specimens.

Clinical specimen: Blood, urine, CSF, pus, wounds, lesions, body tissues, sputum etc.

Environment: Air, water, soil, sludge, wastewater, food, dairy samples.

Procedure

- 1. Place 2-3 drops of Lactophenol Picric Acid.
- 2. Add fungal culture to the drops of Lactophenol Picric Acid.
- 3. Carefully tease the fungal culture using forceps as to prepare a thin preparation.
- 4. Place a cover slip on the preparation.
- 5. Wait for 5 minutes.
- 6. Observe under microscope.

Interpretation of Results

Fungal spores and hyphae are stained pale to dark yellow.

Warning

Microxpress® Lactophenol Picric Acid is a reagent for laboratory use only.

Phenol is toxic in nature and causes burns. Avoid contact with skin and eyes.

Warranty

This product is designed to perform as described on the label and pack insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

^{**}Formula adjusted, standardized to suit performance parameters.

References

- 1. Dixon, D.M, 1991. Medically important dematiaceous fungi & their identification, Mycoses, 34:1-18.
- 2. Mackie and McCartney, Practical Medical Microbiology
- 3. Merck Index.
- 4. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation

Cat No.ProductPack Size207120400100Lactophenol Picric Acid100 mL

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.