

remel

LACTOPHENOL ANILINE BLUE

INTENDED USE

Remel Lactophenol Aniline Blue is a stain recommended for use in wet mount preparations for microscopic examination of fungi.

SUMMARY AND EXPLANATION

Linder recommended lactophenol as a mounting fluid for examination and preservation of fungi.¹ He reported lactophenol would kill organisms without causing cytoplasmic plasmolysis. Lactophenol Aniline Blue is recommended by Koneman, Roberts, and Wright for direct mounting and staining of fungi.²

PRINCIPLE

Phenol precipitates cytoplasmic proteins and inactivates enzyme systems within the fungal cell. Glycerol prevents drying, allowing for examination of the stain 18-24 hours after preparation. Lactic acid is a clearing agent. Aniline blue is a dye which stains the hyaline fungal structures, making them more distinct.

REAGENTS (CLASSICAL FORMULA)*

Aniline Blue (CAS 61489-48-3).....	0.5 g
Glycerin (CAS 56-81-5)	400.0 ml
Lactic Acid (CAS 50-21-5)	200.0 ml
Phenol (CAS 108-95-2)	200.0 ml
Demineralized Water (CAS 7732-18-5)	200.0 ml

*Adjusted as required to meet performance standards.

PRECAUTIONS

DANGER! POISON, may be harmful or fatal if swallowed. Corrosive, may cause burns or irritation to skin, eyes, and respiratory tract. Avoid breathing vapor and eye/skin contact.

This product is for *In Vitro* diagnostic use and should be used by properly trained individuals. Precautions should be taken against the dangers of microbiological hazards by properly sterilizing specimens, containers, and media after use. Directions should be read and followed carefully. Refer to Material Safety Data Sheet for additional information.

STORAGE

This product is ready for use and no further preparation is necessary. Store product in its original container at 2-25°C until used. Protect from light.

PRODUCT DETERIORATION

This product should not be used if (1) the color has changed, (2) the expiration date has passed, or (3) there are other signs of deterioration.

SPECIMEN COLLECTION, STORAGE, AND TRANSPORT

Specimens should be collected and handled following recommended guidelines.^{3,4}

MATERIALS REQUIRED BUT NOT SUPPLIED

(1) Loop sterilization device, (2) Inoculating loop, swab, collection containers, (3) Incubators, alternative environmental systems, (4) Supplemental media, (5) Quality control organisms, (6) Glass slides, coverslips, (7) Microscope, (8) Teasing needle, (9) Clear tape.

PROCEDURE

Tease Mount:

- Place a drop of Lactophenol Aniline Blue in the center of a glass slide.
- Remove a fragment of the fungal colony with a sterile teasing needle or inoculating needle and place it in the drop of stain.
- Gently tease apart the fungal mass and apply a cover slip.
- Examine the preparation under low and high dry magnification.

Cellophane Tape Mount:

- Fold a strip of clear tape, sticky side out, and hold the ends of the tape securely with forceps.
- Press the sticky side of the loop very firmly against the surface of the fungal colony and pull the tape gently away; aerial hyphae will adhere to the tape.
- Place the open strip of tape in a small drop of Lactophenol Aniline Blue on a glass slide. The entire sticky side of the tape should adhere to the slide.
- Examine the preparation under low and high dry magnification.

INTERPRETATION OF THE TEST

Yeast cells, mycelia and fruiting structures stain blue and are visible microscopically.

QUALITY CONTROL

All lot numbers of Lactophenol Aniline Blue have been tested using the following quality control organism and have been found to be acceptable. Testing of control organisms should be performed in accordance with established laboratory quality control procedures. If aberrant quality control results are noted, patient results should not be reported.

CONTROL

Trichophyton mentagrophytes
ATCC® 9533

RESULTS

Hyphae visible microscopically, good morphology

LIMITATIONS

- Lactophenol Aniline Blue may be adequate for presumptive identification, however, colonial morphology and further microscopic examination may be necessary for definitive identification. Consult appropriate references for further instructions.³⁻⁶
- Molds examined in teased mounts must be well teased in order to clearly demonstrate characteristic fruiting structures.^{2,5} However, the teasing procedure may disrupt the fruiting structures to make recognition impossible.
- Phenol will cause cellophane tape mounts to deteriorate rapidly; mounts prepared by this methodology are not suitable for extended storage.




BIBLIOGRAPHY

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PACKAGING

REF R40028, Lactophenol Aniline Blue25ml/Btl

Symbol Legend

REF	Catalog Number
IVD	In Vitro Diagnostic Medical Device
LAB	For Laboratory Use
	Consult Instructions for Use (IFU)
	Temperature Limitation (Storage Temp.)
LOT	Batch Code (Lot Number)
	Use By (Expiration Date)

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CAS (Chemical Abstracts Service Registry No.)

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