

INTENDED USE

Calcofluor White Reagent and 10% Potassium Hydroxide Reagent is a rapid staining method for the detection of many yeasts and pathogenic fungi in prepared slides from clinical specimens.

SUMMARY AND EXPLANATION

Calcofluor White Reagent was first described by Hageage and Harrington in 1984. Calcofluor White Reagent and 10% Potassium Hydroxide Reagent can be used to perform direct examination to identify fungal elements.

PRINCIPLE

Calcofluor White Reagent works as a non-specific fluorochrome that binds with cellulose and chitin contained in the cell walls of fungi and other organisms. The addition of 10% Potassium Hydroxide (KOH) Reagent works as a cleaning agent to remove any tissue cells.

MATERIALS PROVIDED

-	PL.392	Calcofluor White Reagent	10 ml
-	PL.393	10% Potassium Hydroxide Reagent	10 ml

Per 100ml solution:

- Calcofluor White Reagent contains 0.4ml of Fluorescent Brightner 28 and 0.05g of Evans Blue powder.
- Potassium Hydroxide Reagent contains 10g of Potassium Hydroxide.

MATERIALS REQUIRED BUT NOT PROVIDED

- Glass slides
- Inoculating loop
- Immersion oil PL.396
- Microscope

STABILITY AND STORAGE

Calcofluor White and 10% Potassium Hydroxide Reagents should be stored at 15°C - 25°C in their original containers. Product stored under these conditions will be stable until the expiry date shown on the product label.

PRECAUTIONS

- For In Vitro Diagnostic Use only.
- For professional use only.
- Directions should be read and followed carefully.
- Do not use beyond the stated expiration dates.
- Microbial contamination may decrease the accuracy of the staining.
- Safety precautions should be taken in handling, processing and discarding all clinical specimens.
- Specimens should be processed in the correct containment level conditions.
- Dispose of all material in accordance with local regulations.

PROCEDURE

1. Prepare a smear on a clean glass slide and allow to air dry.
2. Apply 1 drop of Calcofluor White Reagent and 1 drop of 10% Potassium Hydroxide Reagent onto the slide and mix.
3. Cover with a clean cover slip.
4. Allow to stand for at least 5 minutes.
5. Examine using a microscope.

QUALITY CONTROL

Internal quality control of the Calcofluor White Reagent must be performed regularly on known reference material.

Recommended Quality Control:

Positive control – *Candida albicans* NCTC® 3179 / ATCC® 10231* (PLD42)

Negative control – *Escherichia coli* NCTC® 12241 / ATCC® 25922* (PLD02)

INTERPRETATION OF RESULTS










Yeasts and fungi should fluoresce brilliant blue against a dark background.

LIMITATIONS

- Only experienced personnel should carry out the interpretation of stained slides.
- Read prepared slides as soon as possible after staining. Failure to do so may affect the results.
- Non-specific reactions may occur when tissue samples are used.

REFERENCES

- Anderson, N.L. et al. Cumitech 3B; Quality Systems in the Clinical Microbiology Laboratory. Coordinating ed., A.S. Weissfeld. *American Society for Microbiology*, Washington, D.C.
- Hageage, G.J. and Harrington, B.J. Use of calcofluor white in clinical mycology. *Journal of Laboratory Medicine*, 15, 109-12 (1984).
- Larone, D. H. Medically important fungi: a guide to identification. Washington DC: *ASM Press*, 1995.
- Levett, P.N. A comparison of five methods for the detection of *Trichomonas vaginalis* in clinical specimens. *Medical Laboratory Sciences* 1980; 37:85-8.
- Monheit, J.E., Cowan, D.F. and Moore, D.G. Rapid detection of fungi in tissues using calcofluor white and fluorescence microscopy. *The Archives of Pathology and Laboratory Medicine*. 108, 616-618 (1984).
- Murray, P. R., Baron, E. J., Jorgensen, J. H., Pfaller, M. A. and Tenover, R. C. (ed.), *Manual of clinical microbiology*, 8th edition. *ASM Press*, Washington, DC. 2003
- Nunns, D., Mandal, D., Farrand, R.J., O'Neill, H. and Henshaw, G. A comparison of acridine orange, wet microscopy and Gram staining in the diagnosis of bacterial vaginosis. *Journal of Infection* 1997; 34: 211-3.
- Payle, B., Serrano, L., Bielek, H.C. and Reyes, B.A. Albert's solution versus potassium hydroxide solution in the diagnosis of tinea versicolor. *International Journal of Dermatology*. 1994 Mar; 33(3):182-3.



	= Use by
	= Lot number
	= Catalogue number
	= Manufacturer
	= Authorized Representative in the European Community
	= Contains sufficient for <n> tests
	= In vitro diagnostic medical device
	= Temperature limitation
	= Consult instructions for use



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HAZARDS IDENTIFICATION

PL.392	 DANGER	May cause cancer. Obtain special instructions before use. Wear protective gloves/clothing/eye and face protection. If exposed or concerned: Get medical advice/attention. Dispose of contents/container in accordance with national regulations.
PL.393	 DANGER	Causes severe skin burns and eye damage. Wear protective gloves/clothing/eye and face protection. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER/doctor. Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Dispose of contents/container in accordance with national regulations.

