



## Nigrosin Stain, 10% w/v

S025

### Intended Use

Nigrosin stain, 10% w/v is used as staining solution for negative staining.

### Composition\*\*

#### Ingredients

Nigrosin	-
Nigrosin	10.000 gm
Formalin	0.500 ml
Distilled water	100.000 ml

\*\*Formula adjusted, standardized to suit performance parameters

### Directions

- 1) To a loopful of cerebrospinal fluid, or to a light aqueous or saline suspension of growth from an agar culture, add a loopful of Nigrosin (S025).
- 2) Mix well and cover with a thin cover glass. If only a few organisms are present, centrifugation of the cerebrospinal fluid may be necessary.
- 3) Examine promptly with a high power lens. Light may have to be reduced by lowering the condenser. Oil immersion may be used, if higher magnification is required.

### Principle And Interpretation

Negative staining method permits visualization of the usually transparent and unstainable capsule of many organisms, most importantly *Cryptococcus neoformans*. Nigrosin is used for negative Staining of bacteria (1, 2), as well as the capsule-containing fungus, *Cryptococcus neoformans*. Nigrosin consists of a suspension of fine particles of carbon. These form a dark background, against which capsules are clearly seen as a result of displacement of the carbon particles. The shapes and sizes of the organisms are seen as color-free outlines against the dark background. An advantage of using this method, rather than regular positive stains like methylene blue or carbol fuchsin, is that prior fixation by heat or alcohol is not needed, so the organisms are seen in more lifelike shapes. Furthermore, negative staining with nigrosin can reveal some microorganisms that cannot be stained by regular methods (3).

### Type of specimen

Clinical samples; food & dairy samples; Water samples

### Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (2, 3). For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines. For water samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards. After use, contaminated materials must be sterilized by autoclaving before discarding.

### Warning and Precautions :

In Vitro diagnostic Use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets

### Performance and Evaluation

Performance of the product is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

### Quality Control

#### Appearance

Blackish violet coloured solution.

#### Clarity

Clear without any particles.

**Microscopic Examination**

Negative staining is carried out. Staining characteristics of organism is observed under microscope by using oil immersion lens

**Results**

Clear halos surrounding the bacterial cells

**Storage and Shelf Life**

Store between 10- 30°C in tightly closed container and away from bright light. Use before expiry date on label. On opening, product should be properly stored in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use.

**Disposal**

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (2, 3).

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**Disclaimer :**

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