



# Product Specification

cdhfinechemical.com

## NIGROSINE 10% SOLUTION FOR NEGATIVE STAINING

**PRODUCT CODE** 869200

### Intended Use

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

### Principle And Interpretation

Negative staining is one of the many staining techniques that can be employed for viewing of bacterial cell morphology and size. The advantages of the negative stain include the use of only one stain and the absence of heat fixation of the sample. Negative staining employs the use of an acidic stain and, due to repulsion between the negative charges of the stain and the bacterial surface, the dye will not penetrate the cell. In negative staining, the results yield a clear cell with a dark background. Negative staining method also permits visualization of the usually transparent and unstainable capsule of many organisms, most importantly *Cryptococcus neoformans*. Nigrosin is used for negative Staining of bacteria, 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.

### PARAMETER

### LIMIT

Description	Blackish violet coloured solution
Suitability test	Passes test.

### 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.
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.

### Results

Clear halos surrounding the bacterial cells

**Note(s) : Assay (if applicable) method mentioned.**

### WARNING

**Hazard statements :** Not hazardous. No hazards.

**Precautionary statements**

**Prevention:** -----

**Response:** ---

IMDG Code :

UN No. :

IATA :

**Disposal:** .....

**Hazard Pictogram(s) :--**

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