



1A-158

Methylene blue, alkaline, Löffler
In Vitro Diagnostic



Description

The product is a dry stain for professional use in histology and bacteriology. It is a stain mixed with potassium hydroxide.

The product is supplied in 4 different pack sizes: 1A-158.00010 (10g bottle), 1A-158.00025 (25g bottle) 1A-158.00100 (100g bottle) and 1A-158.00250 (250g bottle)

Main components

Methylene blue (C.I. 52015)	98%
KOH (CAS 1310-58-3)	2%

Intended use

Methylene blue, alkaline, Löffler is used for the examination of bacteriological and histological sample material such as microbiological smears or histological sections.

It is a dry stain for the preparation of a staining solution for the professional user. It is used for counterstaining after prior Ziehl-Neelsen staining.

Sample material and sample preparation

Samples may only be taken by qualified personnel. All samples must be handled according to the state of the art. All samples must be clearly labelled.

Sample material: air-dried, heat-fixed smears of bacteriological material such as sputum, fine needle aspiration biopsy (FNAB) smears, irrigation fluids, imprints, effusions, pus, exudates, liquid and solid cultures. Sections of formalin-fixed, paraffin-embedded tissue (3 - 4 µm thick paraffin sections).

Test principle

After Ziehl-Neelsen staining of the acid-fast rod-shaped bacteria, counterstaining with methylene blue allows visualisation of the non-acid-fast microorganisms.

Staining

For the staining, the dry stain "Methylene blue, alkaline, Löffler" is dissolved in water. Histological sections must be deparaffinised before staining and transferred to distilled water through a descending ethanol series.

First, staining is performed with Ziehl-Neelsen carbolic fuchsin solution. After subsequent rinsing in tap water and exposure to hydrochloric acid alcohol, counterstaining is performed with methylene blue and air-dried after rinsing again with tap water.

The samples can be covered with a synthetic covering medium for subsequent microscopy.

To ensure the differentiability of the target structures, suitable control preparations must be carried along with the staining.

The usual staining protocols known from the literature must be used.

Staining may only be performed by qualified personnel.

Result

Acid-fast rod-shaped bacteria: red

Background: blue

Precautions

When extracting the product, care must be taken to avoid contamination of the storage vessel. Once the solution has been extracted, it must not be returned to the canister. If turbidity or solids appear, discard the product. The product is intended for single use and must not be reused.

Storage

Store the unopened containers in a dry place at 15 to 25°C, avoiding direct sunlight.

The shelf life is 5 years, see also the best-before date (BBD) on the label. After opening the containers, the shelf life corresponds to the best-before date, provided that the storage conditions are observed and the solution is handled properly.

Safety notice

If any serious incidents occur in connection with the product, please report them to the manufacturer and the national authority.

Literature

Romeis, Microscopic Technique, Editors: Maria Mulisch, Ulrich Welsch, 2010, Springer Spektrum, 18th edition