

KÜHNE'S METHYLENE BLUE PHENICATED SOLUTION

Principle

Methylene blue is the common name for 3,7-Bis(Dimethylamino)Phenothiazine-5-Inium Chloride. It is an aromatic heterocyclic aniline compound. Its applications are varied, as a redox indicator, as a dye for nucleic acids (in gel electrophoresis or in transfers to membranes) and one of its most important uses is in in vitro diagnosis, for staining biological samples in bacteriology, cytology, haematology and histology and subsequent microscopic observation.

In bacteriology, a quick and easy way to determine the shape, size and disposition of bacteria is to perform a simple staining. As the name suggests, simple staining is a very simple staining procedure involving a single staining solution. Any basic aniline dye such as methylene blue, safranin or violet glass can be used, to which a mordant, phenol, is added to colour the bacterial cells.

Material

Sample of microorganisms, in the field of clinical analysis from samples of human origin.

Reagents

Code	Description
131074	Water
251002	Immersion oil (*)
251172	Kühne's Methylene Blue Phenicated solution(*)

Procedure

The use of the prepared solution is extremely simple. It is used on microscopy slides, with dry smear samples, fixed by application of heat. At this point, the preparation only has to be covered with the Methylene Blue Phenicated solution according to Kühne for the precise time, then washed under running water and left to dry. The preparation is now stained and ready for observation under the microscope.

1. Prepare the microbial smear and fix it in the flame.
2. Heat fixation. Important: do not overheat the preparation. Make short passes and rest.
3. Cover the microbiological smear directly with the sample for 15-45 seconds.
4. Wash under running water.
5. Allow to dry.
6. Observation under the microscope with the immersion lens.

Results

The microorganisms are dyed blue.

Technical note

The microscope used should correspond to the requirements of a clinical diagnostic laboratory. If an automatic staining device is used, the operating instructions of the appliance manufacturer and the software must be observed.

Sample preparation

All samples should be treated according to the state of the technology. All samples must be unambiguously labeled.

Diagnostics

Diagnosis should be established only by authorized and qualified persons. Each application should involve appropriate controls to rule out erroneous results.

Storage

The staining solution should be stored at room temperature

Expiration

The product stored at the indicated temperature and in a tightly closed container is usable until the expiration date indicated on the package.

Notes on use

To avoid errors, the staining must be carried out by specialized personnel. For professional use only. The national directives on safety at work and quality assurance must be complied with.

Advise on disposal of waste

Solutions used and expired solutions should be disposed of as hazardous waste and local waste disposal regulations must be observed. If further questions are asked about disposal, they may be processed through E-Mail: info.es@itwreagents.com. Inside the EU are valid the requirements based on Council Directive 67/548/EEC on the approximation of the laws, regulations and laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances in the relevant version.

Classification of hazardous substances

Observe the classification of dangerous substances on the label and the information on the safety data sheet.

Manufacturer

Panreac Química S.L.U.
an ITW Company
C/Garraf, 2 – Polígono Pla de la Bruguera

E-08211 Castellar del Vallès

(Barcelona) España

Tel. (+34) 937 489 400

Fax (+34) 937 489 401

(*) In Vitro Diagnostic Medical Device

