# **Moeller Color Kit**



Complete kit used for bacteria Moeller staining.

## CONTENTS (4 Bottles)

(The reagents are contained in PP bottles, sealed by thermoinduction.)5% Chromium Trioxide Solution100 mLFuchsin Solution100 mLMethylene Blue Solution100 mL95% Ethyl Alcohol100 mL1 Instruction sheet100 mL

## PROCEDURE

#### Preparation and fixing

On clean slides, make a smear of the culture or pathological material. Leave to dry in the air and fix by heat, passing rapidly over the flame. Do not overheat the sample when fixing. Other fixing methods may be used.

#### **Staining**

- 1. Cover the slide with the 5% Chromium Trioxide Solution. Wait 3-5 minutes, then rinse gently with water.
- 2. Cover the slide with Fuchsin Solution. Heating the solution slowly until it boils for 5 minutes, then rinse gently with water.
- 3. Rinse with 95% Ethyl Alcohol.
- 4. Cover the slide with the Methylene Blue Solution. Wait 30-60 seconds, then rinse delicately with water.
- 5. Dry.
- 6. Examine the preparation under the microscope with the objective for immersion.

### INTERPRETATION

Moeller staining involves the use of a steamed dye reagent in order to increase the stainability of the spores; Chromium trioxide is a strong oxidizing agent that is not soluble in most organic solvents and tends to explode in the presence of organic compounds and solvents. Fuchsin is the primary stain used in this method. Endospores are stained red, while the counterstain, Methylene blue stains the vegetative bacteria blue.

#### PRECAUTION

5% Chromium Trioxide Solution contains substances classified as hazardous by current legislation. It recommended that the Safety Data Sheets be consulted on their use. It is intended for use in a professional environment and must be used in the laboratory by properly trained personal, using safety methods. Chromium trioxide is highly toxic, corrosive, and carcinogenic. It is the main example of hexavalent chromium, an environmental hazard. Chromium trioxide, being a powerful oxidizer, will ignite organic materials such as alcohols on contact.

### • QUALITY CONTROL FOR USE

Each lot of Moeller Color Kit is subjected to quality control using a culture of *Clostridium perfringens* ATCC 13124 for the test for spore forming bacteria (red color).



# STORE

Store Moeller Color Kit at 10-25°C in the original packaging. Keep away from sources of heat and avoid excessive changes of temperature. In such conditions the product Moeller Color Kit will be valid until the expiry date shown on the label. Do not use beyond that date. Eliminate without using if there are signs of deterioration (changes in the color of the solutions or presence of substantial precipitates).

# PACKAGE

Cat. No : MB-88313 Moeller Color Kit 4 x 100 mL