Newman's Stain Solution



Kit used for the identification and determination of bacteria and somatic cell count in milk or certain milk products.

CONTENTS

Ethyl Alcohol 54 mL
Tetrachloroethane 40 mL
Methylene Blue 1 g
Glacial Acetic Acid 6 mL
1 Instruction sheet

Storage condition: Store in the dark, 2 - 6°C

INTERPRETATION

Newman's Stain Solution is a kit used for the identification and determination of bacteria and somatic cell count in milk or certain milk products. The solution is often used for counting bacteria and somatic cell in raw milk. Spread a certain amount of milk on a slide glass with a certain area and dry it. After staining, microscopi cally examine and measure the number of stained bacteria and somatic cell using breed method.

PROCEDURE

- Use clean glass slides for smear preparation. For quantitative determination of number of organisms a
 measured quantity (0.01 mL) of the dairy product (or a known dilution of it) is evenly spread over a 1 cm²
 area of the glass slide. The smear should be rapidly dried at around 45 50°C. Cool it to room
 temperature.
- 2. Submerge slides of the fixed, dried films, singly or in multiples, into the stain for 2 minutes.
- 3. Drain off the excess stain by resting the edge of the slide on absorbent paper.
- 4. Dry the slides thoroughly (by forced air if available).
- 5. Rinse the dried stained slides thrice in water at 35 45°C and then drain and air dry before examining the film under the microscope.
- 6. Examine the film on the slide under an oil-immersion objective after placing one drop of immersion oil on the film.
- 7. Enumerate the number of cells per ml of dairy product under study.

• INTERPRETATION OF THE RESULTS

Staining Results	
Bacteria	blue
Somatic Cell	blue with dark blue nuclear

STORE

Store the kit at 2 - 6° C in its original package tightly closed and use it before the expiry date on the label. Keep away from sources of heat and avoid excessive changes of temperature.

• REFERENCE

- 1. P. D. Sharma Microbiology & Plant Pathology 332p (2010).
- 2. Refer to the QIA and MFDS.

PACKAGE

