



# **Product Specification**

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# **NEWMAN'S STAIN** SOLN.

PRODUCT CODE 868820

#### Intended Use

Newman's Stain, Modified is used for staining of bacteria and somatic cell count in milk or certain milk products

#### Principle And Interpretation

It is based on the examination of stained thin film of a measured volume of milk spread over a specified area on a glass slide. The method is useful for rapid estimation of the total bacterial population (including live and dead cells) of a sample of milk. In this test, milk smear is prepared on one square centimeter area. The smear is stained with Newman's stain and examined under microscope. Each microscopic field examined represents a quantitative aliquot of the milk sample. The number of microscopic fields occurring in one square centimeter area of the milk smear will vary as the diameter of the microscopic field varies with different microscope.

PARAMETER LIMIT

Description Dark blue coloured solution.

Suitability test (Suitability for Passes test.

bacteria & bovine cell in milk)

### Directions

- 1. 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 sq.cm 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°C to 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.

#### Results

Bacteria: Blue cells observed.

Somatic cells: Blue with distinct nuclear lobes observed.

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

WARNING

Hazard statements: -
Precautionary statements

Prevention: -
Response: -
Disposal: -
Hazard Pictogram(s):

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