OXFORD LAB FINE CHEM LLP
ISO 9001-2008 Certified Company

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Oxford
Range of
Laboratory Chemicals

TECHNICAL DATA SHEET

Milk Agar (Modified Plate Count Agar)

Principle

Milk agar is used for the cultivation and enumeration of microorganisms in dairy products. It contains milk powder, peptone, yeast extract and agar. Peptone provides the necessary nitrogen compounds, yeast extract provides amino acids, vitamin B complexes, and accessory growth factor and milk powder is a source of casein.

Use: For enumeration of bacteria in milk and milk products, rinse waters and ice creams etc.

Contents*

Ingredients	Gram/Liter
Milk Powder	1.000
Peptone	5.000
Yeast Extract	3.000
Agar	15.000
pH at 25˚C	7.2 ±0.2

*** Formula adjusted for optimum performance and parameters**

Directions: Dissolve 24.0 grams in 1000 ml distilled water. Boil to dissolve the medium completely and sterilize by autoclaving at 15 lbs. pressure (121 °C) for 15 min, cool it to 42-45 °C. Mix well and pour into sterile petri plates. Ensure complete solidification and inoculate test sample aseptically.

Specimens' types analyzed

Food and dairy samples etc.

Precautions to be taken

These microbial media are intended for the in-vitro use only. All the handling, experiments, storage, and discarding should be performed with the help of skilled and knowledgeable technicians and as per the established guidelines. The material should be disposed only after proper sterilization by autoclaving. Please go through the MSDS of the media to avoid any accidents or in emergency.

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Performance and Evaluation

The expected performance of the medium is liable to use as per the direction on the label when stored at optimum conditions and within expiry date.

Quality Control

Appearance	**Cream to pale yellow colored, free flowing, homogeneous powder**
Reaction of 2.4% solution	**7.2 ±0.2 at 25 ˚C**
pH	**7.00- 7.40**
Gelling	**Firm comparable with 1.5% agar gel**
Color and clarity of ready medium	**Off white colored opaque gel**
Growth Promotion properties	**Best at ≤ 100 CFU at 33-37°C for 18-48 h**
Indicative properties	**Optimum at ≤ 100 CFU at 33-37°C for 18-24 h**
Negative control	**Performed using sterile distilled water**

Different Microbial Response

Organism	ATCC	Inoculum	Growth	Recovery	Incubation
Staphylococcus aureus	**25923**	**50-100**	**Luxuriant**	**≥70%**	**33-37°C, 18-48 h**
Bacillus subtilis	**6633**	**50-100**	**Luxuriant**	**≥70%**	**33-37°C, 18-48 h**
Pseudomonas aeruginosa	**25853**	**50-100**	**Luxuriant**	**≥70%**	**33-37°C, 18-48 h**

Storage and Shelf Life: The product is highly hygroscopic; keep the container tightly closed at all times and store it properly as per the conditions mentioned on the label. The declared expiry is valid only when stored as per the conditions mentioned on the label. Note: Sterilize media immediately after reconstitution.

Disposal: To avoid the contamination or propagation of any hazardous microbes the used, unusable or modified preparation of this product must be disposed after autoclaving after completion of task.

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Reference

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