



# Technical Data

## Modified Lactobacillus Agar

M1445

### Intended Use:

Recommended for isolation and enumeration of Lactobacilli.

### Composition\*\*

Ingredients	g / L
Yeast extract	5.000
Dextrose (Glucose)	5.000
Tryptone	5.000
Potassium dihydrogen phosphate	0.500
Dipotassium hydrogen phosphate	0.500
Magnesium sulphate	0.300
Ferrous sulphate	0.100
Sodium chloride	0.050
Manganese sulphate	0.100
Copper sulphate	0.010
Zinc sulphate	0.010
Cobalt sulphate	0.010
Agar	15.000
Final pH ( at 25°C)	6.0±0.2

\*\*Formula adjusted, standardized to suit performance parameters

### Directions

Suspend 31.58 grams in 1000 ml purified/distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

### Principle And Interpretation

Modified Lactobacillus Agar is used for isolation and enumeration of Lactobacilli from oral specimens, faecal specimens, food and dairy products (1).

Tryptone supply nitrogenous and carbonaceous sources, long chain amino acids, vitamins and other essential growth nutrients. Yeast extract provides vitamin B complex and dextrose is the fermentable carbohydrate and energy source. The phosphate provide buffering action and sodium chloride maintains osmotic balance.

### Type of specimen

Clinical samples - Oral specimen; Faeces; Food and dairy samples

### Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (2,3). For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (4,5). After use, contaminated materials must be sterilized by autoclaving before discarding.

### Warning and Precautions

In Vitro diagnostic use. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

### Limitations

1. Further biochemical and serological tests must be carried out for further identification.

### Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

## Quality Control

### Appearance

Cream to yellow homogeneous free flowing powder

### Gelling

Firm, comparable with 1.5% Agar gel

### Colour and Clarity of prepared medium

Yellow clear to slightly opalescent with slight suspended particles

### Reaction

Reaction of 3.16% w/v aqueous solution at 25°C. pH : 6.0±0.2

### pH

5.80-6.20

### Cultural Response

Cultural characteristics observed in presence of Carbon dioxide (CO<sub>2</sub>) after an incubation at 35- 37°C for 48 hours.

### Organism

### Growth

*Lactobacillus acidophilus* luxuriant  
ATCC 4356 (00098\*)

*Lactobacillus plantarum* luxuriant  
ATCC 8014

Key: \* Corresponding WDCM numbers.

## Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

## Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (2,3).

## Reference

1. deMan J, Rogosa M and Shape M., 1960. J Appl. Bacteriol., 23:130.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
4. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
5. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.

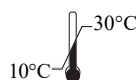
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