# PRODUCT INFORMATION





LMDA (Lee's Multi-Differential Agar)
Cat. No. L12-126

Date of Issue: 06/23/20

## **DESCRIPTION**

LMDA (Lee's Multi-Differential Agar) is a differential solid medium for the detection and enumeration of a variety of brewery bacteria and yeast.

### **PREPARATION**

Mix 84.8 grams of the medium in 1 liter of purified water until evenly dispersed. Heat with repeated stirring until boiling to fully dissolve. Autoclave at 121°C for 15 minutes. Cool medium to approx. 45-50°C in a water bath. Gently and thoroughly swirl the medium, without agitation, in order to uniformly suspend the calcium carbonate precipitate. Dispense the medium into sterile petri dishes.

## **DETECTION**

Dilute brewing samples (wort, beer, or water) as necessary to achieve an inoculum level of 25-60 colonies per spread plate. Pipette 0.1 to 0.2 mL aliquots of the sample and/or its dilutions onto prepared LMDA plates. Spread with sterile rod or loops. Incubate at 30°C in an anaerobic environment to detect beer spoilage organisms. If detection of yeast and acetic acid bacteria is desired, incubate aerobically at 30°C. Examine plates after 4-7 days for growth and colony morphological characteristics.

Formula* per Liter:	
Dextrose	10.0g
Citric Acid	1.10g
Monopotassium Phosphate	0.5g
Sodium Chloride	0.01g
Tomato Juice Broth	20.0g
Yeast Extract	10.0g
Peptonized Milk	20.0g
Magnesium Sulfate	0.2g
Bromocresol Green Free Acid	0.022g
Calcium Pantothenate	2.0g
Manganese Sulfate	0.01g
Ferrous Sulfate	0.01g
Tween 80	0.5g
Calcium Carbonate	5.0g
Dipotassium Phosphate	0.5g
Agar	15.0g

### Final pH: 5.5 ± 0.2 at 25°C

\* Grams per liter may be adjusted or formula supplemented to obtain desired performance.

### QUALITY CONTROL SPECIFICATIONS

- 1. The powder is homogeneous and free flowing.
- 2. Visually the prepared medium is medium to dark green and opaque, with light to heavy white precipitate.

## **STORAGE**

Store the sealed bottle containing the dehydrated medium at 2 to 30°C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect it from moisture and light. The dehydrated medium should be discarded if the color has changed from the original color.