# Product Name: M 17 Agar

Medium for selective enumeration of *Streptococcus thermophilus* and for the improved growth of lactic streptococci and their bacteriophages.

### TYPICAL FORMULA (G/L)

Tryptone	2.5
Soytone	5.0
Meat Extract	5.0
Lactose	5.0
Peptone	2.5
Ascorbic Acid	0.5
Yeast Extract	2.5
Magnesium Sulfate	0.25
Disodium-β -glycerophosphate	19.0
Agar	15.0
Final pH = $7.2 \pm 0.2$ at $25^{\circ}$ C.	

#### **DIRECTIONS**

Suspend 57.25 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Dispense in the appropriate containers. Autoclave at 121°C for 15 minutes.

#### DESCRIPTION

M 17 Agar is used for cultivation and maintenance of *Streptococci* and their bacteriophages. Also used for the cultivation and maintenance of starter cultures for cheese and yogurt manufacture as well as detecting *streptococcal* mutants that are unable to ferment lactose.

### **TECHNIQUE**

Inoculate plates of M 17 Agar with a loopful from each dilution of the specimen or of the homogenized sample of yogurt or cheese. Otherwise add 1 mL aliquots of the dilution into an empty Petri dish and prepare pour plates with 14 mL of sterile molten M 17 Agar cooled at 45-50°C. Incubate for 18-48 hours at 36  $\pm$  1°C. Streptococcus thermophilus colonies are visible after 18-24 hours incubation and after 48 hours form colonies of 1-2 mm diameter. Lactobacillus bulgaricus do not grow or produces very restricted colonies.

## QUALITY CONTROL

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: beige to medium tan.

Prepared medium

Appearance: slightly opalescent without significant precipitate.

Color: light to medium amber.

Incubation conditions:  $36 \pm 1^{\circ}\text{C}/18-48$  hours.

Microorganism	ATCC	Growth
Lactobacillus bulgaricus	11842	none to poor
Streptococcus thermophilus	14485	good



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### **STORAGE**

The powder is very hygroscopic: store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared media at  $2-6^{\circ}$ C.

## **REFERENCES**

- 1. International Dairy Federation. 1981. Joint IDF/ISO/AOAC Group E44.
- 2. Terzaghi, B.E., and W.E. Sandine. 1975. Appl. Microbiol. 29: 807-813.

### **PACKAGING**

Cat. No : MB-M1192 M 17 Agar	500 G
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