# M17 AGAR

Medium for the cultivation and enumeration of lactic streptococci in milk and dairy products.

| TYPICAL FORMULA | (g/l) |
|---|---|
| Tryptone | 2.5 |
| Peptone | 2.5 |
| Soy Peptone | 5.0 |
| Meat Extract | 5.0 |
| Yeast Extract | 2.5 |
| Sodium Glycerophosphate | 19.0 |
| Magnesium Sulfate | 0.25 |
| Ascorbic Acid | 0.5 |
| Lactose | 5.0 |
| Agar | 15.0 |
| Final pH 7.2 ± 0.2 | |

## DESCRIPTION

M17 AGAR is a medium used for the cultivation and enumeration of lactic streptococci in milk and dairy products.

## PRINCIPLE

Tryptone, peptones, and meat extract provide nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is a source of group B vitamins. Sodium glycerophosphate increases the buffering capacity of the medium and maintains the pH above 5.7 guaranteeing the growth conditions of the lactic streptococci. Ascorbic acid stimulates the growth of lactic streptococci. Magnesium sulfate provides essential ions for growth. Lactose is the fermentable carbohydrate as energy source. Agar is the solidifying agent.

## PREPARATION

Dissolve the contents of the bottle in a boiling water bath to 100°C (with the caps slightly unscrewed) until complete dissolution of the medium. Verify, once melted, the good homogeneity of the medium by inverting the bottle after having screwed the cap. If necessary, put the bottle in a water bath to obtain the complete melting. Cool to 45-50°C, mix well without forming bubbles. Pour into sterile Petri dishes under aseptic conditions. Allow to dry thoroughly the plates to avoid the formation of condensation which can promote medium contamination. Store plates upside down in airtight boxes or polythene bags tightly sealed.

## TECHNIQUE

Inoculate streaking the sample onto the surface of the medium. Incubate at 30+/-2°C for 48 hours, or up to weeks if required.

## INTERPRETATION OF RESULTS

Examine incubated plates for typical colonies and carry on with identification tests by means of standard biochemical method.

## STORAGE

10-25°C away from light, until the expiry date on the label or until signs of deterioration or contamination are evident.

## WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is designed for professional use only and must be used by properly trained operators.

## DISPOSAL OF WASTE

Disposal of waste must be carried out according to the national and local regulations in force.

## REFERENCES

• American Public Health Association, Standard Methods for the examination and wastewater. Terzaghi, B.E and Sandine, WE. Improved medium for lactic streptococci and their bacteriophages.

## PRODUCT SPECIFICATIONS

### NAME
M17 AGAR

### PRESENTATION
Glass bottles containing 100 ml of medium

### STORAGE
10-25°C

### PACKAGING

| Ref. | Content | Packaging |
|------|---------|-----------|
| 402110 | 6 bottles x 100 ml | 6 bottles in cardboard box |

### pH OF THE MEDIUM
7.2 ± 0.2

### USE
M17 AGAR is a medium used for the cultivation and enumeration of lactic streptococci in milk and dairy products

### TECHNIQUE
Refer to technical sheet of the product

### APPEARANCE OF THE MEDIUM
Light to medium amber, very slightly to slightly opalescent, no significant precipitate

### SHELFLIFE
730 days

### QUALITY CONTROL
1. Control of general characteristics, label and print

2. Sterility control
   7 days at 22 ± 1°C, in aerobiosis
   7 days at 36 ± 1°C, in aerobiosis

3. Microbiological control
   Inoculum for productivity: 10-100 CFU/ml
   Inoculum for selectivity: $10^4$-$10^5$ CFU/ml
   Inoculum for specificity: ≤$10^4$ CFU/ml
   Incubation Conditions: 18-24 h at 36 ± 1°C

| Microorganism | | Growth |
|---------------|---|--------|
| *Streptococcus lactis* | ATCC 19435 | Good |
| *Lactibacillus casei* | ATCC 393 | Moderate |

### TABLE OF SYMBOLS

| LOT Batch code | Do not reuse | Manufacturer | Use by | Fragile, handle with care |
|----------------|--------------|--------------|--------|---------------------------|
| REF Catalogue number | Temperature limitation | Contains Sufficient for \<n\> tests | Caution, consult instructions for use | |

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