

## TM 2377 – TOMATO JUICE AGAR, SPECIAL

### INTENDED USE

For the cultivation and enumeration of Lactobacilli from saliva and other acidophilic bacteria.

### PRODUCT SUMMARY AND EXPLANATION

Lactic acid bacteria are acid-tolerant, non-sporulating rods or cocci widely distributed in nature and historically linked to food fermentation. Lactobacilli form the normal flora of the human mouth, intestinal tract and vagina and may therefore be recovered from pathological specimens as contaminants. Tomato juice was included in media for lactobacilli and was found to be advantageous for its growth, particularly *Lactobacillus acidophilus*.

Tomato Juice Agar, Special is formulated as per Jay for the direct plate count of lactobacilli and other acidophilic bacteria, especially from saliva. Tomato Juice Agar, Special is similar to Tomato Juice Agar, except that the agar concentration is increased to 20 grams per liter and the pH is adjusted to 5.0 in the former. Tomato Juice Agar, Special is more selective than Tomato Juice Agar.

### COMPOSITION

Ingredients	Gms / Ltr
Tomato juice (400 ml)	20.000
Peptic digest of animal tissue	10.000
Peptonized milk	10.000
Agar	20.000

### PRINCIPLE

Tomato juice provides an acid environment and is also a source of carbon, and other essential nutrients. Peptonized milk provides lactose, which acts as the energy source. Peptic digest of animal tissue provides nitrogenous, carbonaceous compounds, trace elements and other essential growth nutrients. The low pH of medium inhibits many commensal bacteria and encourages growth of Lactobacilli.

### INSTRUCTION FOR USE

- Dissolve 60 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and pour into sterile Petri plates.

### QUALITY CONTROL SPECIFICATIONS

<b>Appearance of Powder</b>	: Cream to yellow homogeneous free flowing powder.
<b>Appearance of prepared medium</b>	: Medium amber coloured clear to slightly opalescent gel forms in Petri plates.
<b>pH (at 25°C)</b>	: 5.0±0.2

### INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period



<i>Lactobacillus acidophilus</i>	4356	50-100	Luxuriant	>=50%	35-37°C	18-24 Hours
<i>Lactobacillus casei</i>	9595	50-100	Luxuriant	>=50%	35-37°C	18-24 Hours
<i>Lactobacillus leichmannii</i>	4797	50-100	Luxuriant	>=50%	35-37°C	18-24 Hours
<i>Staphylococcus aureus</i>	25923	>=10 <sup>3</sup>	Inhibited	0%	35-37°C	18-24 Hours

**PACKAGING:**

In pack size of 500 gm bottles.

**STORAGE**

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.













**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

**DISPOSAL**

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

**REFERENCES**

- Murray P. R., Baron J. H., Pfaller M. A., Tenover J. C. and Tenover F. C., (Ed.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.
- Mickle F. L. and Breed R. S., 1925, Technical Bulletin 110, N.Y. State Agriculture Exp. Station, Geneva, N.Y.
- Kulp W. L., 1927, Science 66:512.
- Jay P. and Gordon S., (Eds.), 1938, Bacteriology and Immunology of Dental Caries and Dental Science and Dental Art, Lea and Febiger, Philadelphia, Pa.
- MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams & Wilkins, Baltimore, Md.
- Jay P., Pelton W. and Wisan J., 1949, Dentistry in Public Health, W. B. Saunders Company, Philadelphia, Pa.

 Good Manufacturing Practices Certified	 For In Vitro Diagnostic Use	 Quantity	 Lot / Batch Number	 Catalogue Number	 Manufacturer
 Temperature Unit	 Authorized Representative <small>MedNet GmbH Borkstrasse 10 48163 Muenster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

**\*For Lab Use Only**  
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