

TM 2376 – TOMATO JUICE AGAR

INTENDED USE

For cultivation and enumeration of Lactobacilli.

PRODUCT SUMMARY AND EXPLANATION

Tomato juice was included in media for lactobacilli and was found to be advantageous for its growth, particularly *Lactobacillus acidophilus*. Tomato Juice Agar is a modified formula by Kulp and White recommended for the isolation, cultivation and enumeration of Lactobacilli, especially *L. acidophilus* from clinical specimens and foodstuffs.

COMPOSITION

Ingredients	Gms / Ltr
Tomato juice (400 ml)	20.000
Tryptone	10.000
Peptonized SM powder	10.000
Agar	11.000

PRINCIPLE

Tomato juice provides an acid environment and is also a source of carbon, and other essential nutrients. Peptonized SM powder provides lactose, which acts as the energy source. Tryptone 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 51.0 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.

Appearance of prepared medium: Medium amber coloured clear to slightly opalescent gel forms in Petri plates.

pH (at 25°C) : 6.1±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Lactobacillus acidophilus	4356	50-100	Luxuriant	>=70%	35-37°C	40-48 Hours











Lactobacillus casei	9595	50-100	Luxuriant	>=70%	35-37°C	40-48 Hours
Lactobacillus leichmannii	4797	50-100	Luxuriant	>=70%	35-37°C	40-48 Hours
Staphylococcus aureus subsp. aureus	25923	50-100	Luxuriant	>=70%	35-37°C	40-48 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

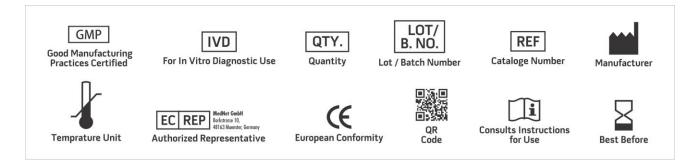
After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1.Kulp W. L., 1927, Science 66:512.

2.Kulp W. L. and White V., 1932, Science 76:17.

3. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams & Wilkins, Baltimore, Md. 4. Mickle F. L. and Breed R. S., 1925, Technical Bulletin 110, N.Y. State Agriculture Exp. Station, Geneva, N.Y.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only Revision: 08 Nov., 2019





