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TM 2379 – TOMATO JUICE MEDIUM BASE

INTENDED USE

For isolation and identification of Lactobacilli encountered in wine.

PRODUCT SUMMARY AND EXPLANATION

Wine may also be made from fruit and fruit juices. Mickle and Breed first described the use of tomato juice in the culture media for Lactobacilli. Tomato Juice Medium Base is the modification of the medium devised by Yoshizumi, used for isolation of the slow growing Lactobacilli from wines. These Lactobacilli take part in the malolactic fermentation and spoilage. Ability of tomato juice to enhance the recovery of Lactobacilli was observed by Kulp.

COMPOSITION

Ingredients	Gms / Ltr	
Peptone, special	5.000	
Yeast extract	5.000	
Dextrose	10.000	
Monopotassium phosphate	0.500	
Potassium chloride	0.125	
Calcium chloride	0.125	
Sodium chloride	0.125	
Magnesium sulphate	0.125	
Manganese sulphate	0.003	
Bromo cresol green	0.030	
Tomato juice solids, from	150.000	
Agar	15.000	

PRINCIPLE

Tomato juice acts as a source of carbon, nutrients and proteins. Peptone special and yeast extract provide nitrogenous compounds and amino acids which stimulate the growth of spoilage strains. Low pH of the medium encourages growth of Lactobacilli while inhibiting the growth of accompanying bacteria. Bromocresol green acts as an inhibitory dye. Cycloheximide and sorbic acid act as fungistats, inhibiting the growth of yeasts. Monopotassium phosphate buffers the medium. Magnesium sulphate, manganese sulphate and potassium chloride provide inorganic ions. Sodium chloride maintains osmotic balance in the medium.

INSTRUCTION FOR USE

- Dissolve 20 grams in 500 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Aseptically add the rehydrated contents of one vial of Lactobacilli Supplement, or Sorbic acid (1.2g/l).
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

A- 902A, RIICO Industrial Area, Phase III, Bhiwadi-301019.



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Appearance of Powder	: Cream to light green homogeneous free flowing powder.		
Appearance of prepared medium	: Bluish green coloured clear to slightly opalescent gel forms in Petri plates.		
pH (at 25°C)	: 5.0±0.2		

INTERPRETATION

Cultural characteristics observed after incubation with added one vial of Lactobacilli Supplement.

Microorganism	ATCC	lnoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Lactobacillus bulgaricus	11842	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours
Lactobacillus casei	7469	50-100	Luxuriant	>=70%	35-37°C	18-48 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

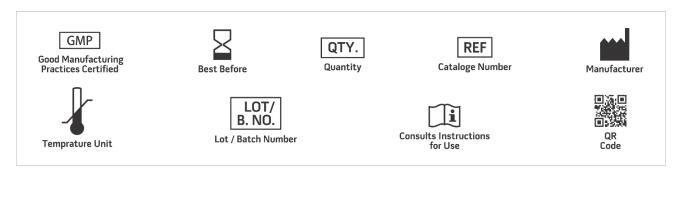
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PRODUCT DATA SHEET



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

