

TM 534 – NUTRITIVE CASEINATE AGAR

INTENDED USE

For enumeration of salt tolerant cocci in brined vegetables.

PRODUCT SUMMARY AND EXPLANATION

Nutritive Caseinate Agar is formulated as recommended by APHA for enumeration of salt tolerant cocci from brined vegetables. Vegetables may be preserved by salting or brining. In salting or brining, the vegetables may or may not undergo a lactic acid fermentation, depending upon the concentration of salt used. Numbers of salt tolerant cocci may be found over an extended period in brines, particularly in those containing no appreciable amount of developed acidity. These organisms are extremely salt tolerant but not acid tolerant. Salt tolerant cocci are a cause of spoilage of brined vegetables and therefore pose a problem to the food industry. It thus becomes important to isolate these organisms for sterility checking of packed brined vegetables.

COMPOSITION

Ingredients	Gms / Ltr
Isoelectric casein	3.000
Peptonized milk	7.000
Bromo cresol purple	0.040
Dextrose	1.000
Agar	12.000

PRINCIPLE

The medium consists Isoelectric casein and peptonized milk which provide essential growth nutrients for bacterial metabolism. Dextrose upon utilization produces acid and is indicated by the pH indicator bromo cresol purple, which turns yellow. This helps in the differentiation of cocci. Count colonies that are grayish white, entire, glistening and of moderate size and similar colonies that are light orange to yellow in colour. Subsurface colonies are lenticular to elliptical in shape.

INSTRUCTION FOR USE

- Dissolve 23.04 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.
Note: After sterilization the medium may look slightly opalescent.

QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder** : Cream to yellow coloured homogeneous free flowing powder.
- Appearance of prepared medium** : Reddish purple coloured slightly opalescent gel forms in Petri plates.
- pH (at 25°C)** : 6.5 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Enterococcus faecalis</i>	29212	50-100	Luxuriant	>=70%	32-35°C	48-72 Hours
<i>Pediococcus cerevisiae</i>	10791	50-100	Luxuriant	>=70%	32-35°C	48-72 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. Speck M. L., (Ed.), 1984, Compendium of Methods for the Microbiological Examination of Foods, 2nd Ed., APHA, Washington, D.C.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

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

***For Lab Use Only**
Revision: 08 Nov., 2019