TM 1614 - STANDARD NUTRIENT AGAR NO.2

INTENDED USE

For cultivation and enrichment of less fastidious bacteria in meat.

PRODUCT SUMMARY AND EXPLANATION

Fastidious organisms are organisms which require preformed organic molecules like vitamins, amino acids, nucleic acids, carbohydrates. In general, bacterial pathogens need more preformed organic molecules than do non-pathogens. Media which are highly nutritional are generally used to enrich less fastidious organism so as to isolate them from test samples. Standard Nutrient Area No.2 can be used in the detection of inhibitors during the bacteriological examination of meat. This medium can also be modified with various additives. Standard Nutrient Broth No.2 can also be used for the examination of water.

COMPOSITION

Ingredients	Gms / Ltr
Meat peptone	3.450
Casein enzymic hydrolysate	3.450
Sodium chloride	5.100
Agar	13.000

PRINCIPLE

Meat Peptone and casein enzymic hydrolysate in the medium provides the nitrogenous and carbon source with other essential nutrients. Sodium chloride maintains the osmotic equilibrium of the medium.

INSTRUCTION FOR USE

- Dissolve 25 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

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Dark amber to amber coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 7.5±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Escherichia coli	11775	50-100	Good-luxuriant	>=50%	35 - 37°C	18-48 Hours

Shigella flexneri	29903	50-100	Good-luxuriant	>=50%	35 - 37°C	18-48 Hours
Salmonella Typhimurium	13311	50-100	Good-luxuriant	>=50%	35 - 37°C	18-48 Hours
Staphylococcus aureus	6538	50-100	Good-luxuriant	>=50%	35 - 37°C	18-48 Hours
Listeria monocytogenes	19118	50-100	Fair-good	20-40 %	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

1. LevetzowR: Untersuchung auf Hemmstoffe im Rahmen der bakteriologischen Fleischuntersuchung, -Bundesgesundheitsblatt, 1971.14; 211-213.
2. Zavanella, M., Aurelia, P., a. Ferrini, A.M: Improved microbiological method for the detection of antimicrobial residues in meat- 1986. Arch Lebensmittelhyg.,37:118-120.
3. Din Deutsches Institut fur Normung e.V: Deutsche Einheitsverfahren zur Wasser-, Abwasser- und Schlammuntersuchung, Mikrobiologische Verfahren (Gruppe K). Nachweis von Pseudomonas aeruginosa (K 8). DIN 38411.

GMP Good Manufacturing Practices Certified	IVD For In Vitro Diagnostic Use	QTY. Quantity	LOT/ B. NO. Lot / Batch Number	REF Cataloge Number	Manufacturer
Temprature Unit	EC REP Authorized Representative	CE 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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