TM 2342 - STANDARD METHODS AGAR W/ STARCH

INTENDED USE
For the detection of aerobic bacterial spores.

PRODUCT SUMMARY AND EXPLANATION
Standard Methods Agar w/Starch is formulated as described by Buchbinder et al which is recommended by APHA and FDA.
APHA recommends the use of pour plate technique. The samples are diluted and appropriate dilutions are added in Petri plates. Sterile molten agar is added to these plates and plates are rotated gently to ensure uniform mixing of the sample with agar. The poured plate count method is preferred to the surface inoculation method, since it gives higher results. Standard Methods Agar w/Starch is also suitable for enumerating bacterial count of sterile rooms.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	5.000
Yeast extract	2.500
Dextrose (Glucose)	1.000
Soluble starch	1.000
Agar	15.000

PRINCIPLE
Tryptone provides amino acids and other complex nitrogenous substances. Yeast extract supplies Vitamin B complex.

INSTRUCTION FOR USE
- Dissolve 24.50 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.
- 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 : Light yellow coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 0.0±0

INTERPRETATION
Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Starch hydrolysis After addition of iodine	Incubation Temperature	Incubation Period

Bacillus subtilis subsp. spizizenii	6633	50-100	Luxuriant	>=70%	Positive reaction, clearing around The colony	35 - 37°C	18 - 48 Hours
Escherichia coli	25922	50-100	Luxuriant	>=70%	Negative reaction	35 - 37°C	18 - 48 Hours
Staphylococcus aureus subsp.	25923	50-100	Luxuriant	>=70%	Negative reaction	35 - 37°C	18 - 48 Hours
Streptococcus pyogenes	19615	50-100	Luxuriant	>=70%	Negative reaction	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. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
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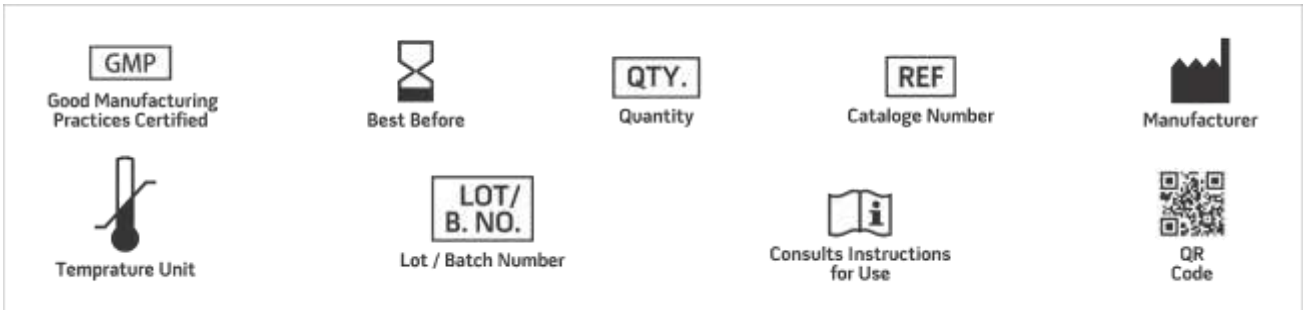
3. Buchbinder L., Baris Y., Aldd E., Reynolds E., Dilon E., Pessin V., Pincas L. and Strauss A., 1951, Publ. Hlth. Rep., 66:327.
4. FDA Bacteriological Analytical Manual, 2005, 18th Ed., AOAC, Washington, DC.
5. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
6. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
7. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
8. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.



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

***For Lab Use Only**

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