TM 2339 - SOYABEAN CASEIN DIGEST MEDIUM W/ YEAST EXTRACT AND LTHTh

INTENDED USE

Soyabean casein digest medium w/ yeast extract and lthth is recommended in disinfectant testing where neutralization of the chemical is important for determining its bactericidal activity.

PRODUCT SUMMARY AND EXPLANATION

Soyabean Casein Digest Agar w/ yeast extract and LTHTh is used for the detection and enumeration of microorganisms for products of sanitary importance, water miscible cosmetics, products containing antimicrobials or preservatives. Collection of samples from areas before and after the treatment with disinfectant evaluates cleaning procedures in environmental sanitation. The presence and number of microorganisms is determined by the appearance of colonies on the agar surface.

COMPOSITION

Ingredients	Gms / Ltr
Casitose	15.000
Soya peptone	5.000
Yeast extract	6.000
Sodium chloride	5.000
Sodium pyruvate	2.000
Soya lecithin	0.700
Polysorbate 80 (Tween 80)	5.000
Sodium thiosulphate, 5H2O	0.050
L-Histidine	1.000
Agar	20.500

PRINCIPLE

Casitose, soya peptone and yeast extract provides nitrogenous compounds and other essential growth factors. Sodium pyruvate protects injured cells and helps recovery. It also stimulates the growth of *Staphylococcus species.* Lecithin, polysorbate 80 (Tween 80) and thiosulphate act as neutralizing agents that neutralizes the activity of antimicrobial agents. Lecithin and polysorbate 80 neutralizes quaternary ammonium compounds and parahydroxy benzoates. Sodium thiosulphate neutralizes mercurial, halogens, aldehydes etc. Histidine acts as a reducing agent.

INSTRUCTION FOR USE

- Dissolve 60.23 grams (the equivalent weight of dehydrated medium per ltr) 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 to medium amber coloured, clear to slightly opalescent gel forms in Petri plates.

pH (at 25°C) : 7.3±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Growth w/ disinfectant	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Luxuriant	>=70%	Fair-good, (depends on concentration of quaternary ammonium compounds)	35-37°C	18-24 Hours
Pseudomonas aeruginosa	27853	50-100	Luxuriant	>=70%	Fair-good, (depends on concentration of quaternary ammonium compounds)	35-37°C	18-24 Hours
Staphylococcus aureus subsp. *aureus*	25923	50-100	Luxuriant	>=70%	Fair-good, (depends on concentration of quaternary ammonium compounds)	35-37°C	18-24 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.

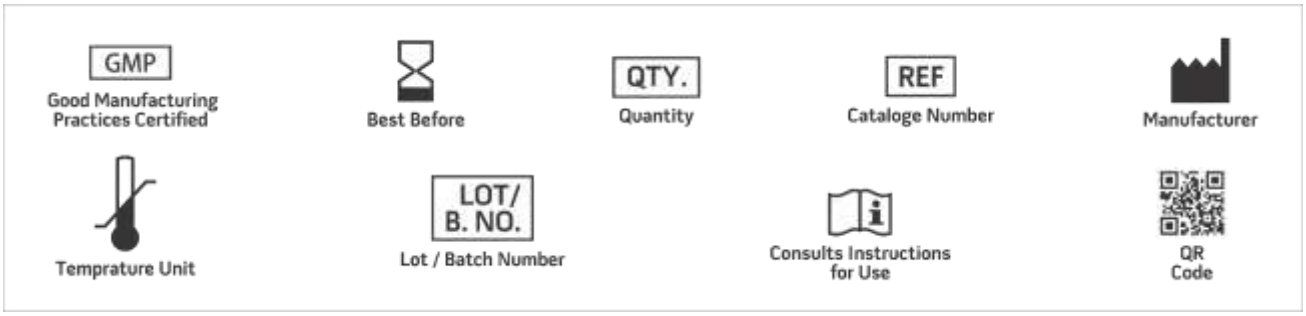
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Hall and Hartnett, 1964, Public Hlth. Rep., 79:1021.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. 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.
4. Murray PR, Baron, Pfaller, and Yolken (Eds.), 2003, In Manual of Clinical Microbiology, 8th ed., ASM, 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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