Technical Data

Soyabean Casein Digest Agar Plate w/1% Glycerol and LTHTh (γ-irradiated,Triple Pack)

MP1691AGT

Intended Use:

Recommended for determining efficiency of sanitization of containers, equipment surfaces, water miscible cosmetics, etc. It can also be used to enumerate the organisms from water insoluble products and fatty products containing preservatives or antimicrobials.

Composition**

Ingredients	g / L
Tryptone	15.000
Soya peptone	5.000
Sodium chloride	5.000
Lecithin	0.700
Polysorbate 80 (Tween 80)	5.000
Histidine	0.500
Glycerol	10.00
Sodium thiosulphate	0.500
Agar	15.000
Final pH (at 25°C)	7.3±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Either streak, inoculate or surface spread the test inoculum (50-100 CFU) aseptically on the plate.

Principle And Interpretation

Soyabean Casein Digest Agar w/LTHTh is used for the detection and enumeration of microorganisms for products of sanitary importance, water miscible cosmetics, products containing antimicrobials or preservatives (1) Tryptone and soya peptone provide nitrogenous compounds and other nutrients essential for microbial replication. Lecithin, polysorbate 80 (Tween 80) and thiosulphate act as neutralizing agents reported to neutralize 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.

Type of specimen

Swabs of containers, Equipment surfaces, Water miscible cosmetics etc.

Specimen Collection and Handling

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 (2).

Warning and Precautions

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium
2. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's unique requirement.
3. It is recommended to store the plates at 24-30°C to avoid minimum condensation.
4. Further serological and biochemical testing is required for complete identification.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Sterile Soyabean Casein Digest Agar w/1% Glycerol and LTHTh in 90mm lockable disposable plate with smooth surface and absence of black particles/cracks/ bubbles (γ-irradiated,Triple Pack).

Colour of medium

Light to medium Amber coloured medium

Quantity of medium

32 ml of medium in 90 mm disposable plates.

pH

7.10-7.50

Dose of irradiation

13-20 kgy

Sterility Check

Passes release criteria

Cultural Response

Cultural characteristics observed after an incubation for bacterial cultures at 30-35°C for 18-24 hours and for fungal cultures at 20-25°C & 30-35°C for <=5 days.

Recovery rate

Recovery is considered 100% for bacterial growth on Soyabean Casein Digest Agar and fungal growth on Sabouraud Dextrose Agar.

Growth promoting properties

Growth of microorganism comparable to that previously obtained with previously tested and approved lot of medium occurs at the specified temperature for not more than the shortest period of time specified inoculating <=100 cfu(at 30-35°C for 18-24 hours)for bacteria. Growth is also observed at 20-25°C for <=5 days for fungus.

Neutralization Test

The smaller zone of inhibition compared to SCDA indicates neutralization of quarternary ammonium compounds by this medium.

Organism	Inoculum (CFU)	Growth	Recovery	Incubation temperature	Incubation period
****Bacillus spizizenii* ATCC 6633 (00003*)	50 -100	luxuriant	>=70%	30 -35 °C	18 -24 hrs
Staphylococcus aureus subsp. *aureus* ATCC 25923 (00034*)	50 -100	luxuriant	>=70%	30 -35 °C	18 -24 hrs
Staphylococcus aureus subsp. *aureus* ATCC 6538 (00032*)	50 -100	luxuriant	>=70%	30 -35 °C	18 -24 hrs
Escherichia coli ATCC 25922 (00013*)	50 -100	luxuriant	>=70%	30 -35 °C	18 -24 hrs
Escherichia coli ATCC 8739 (00012*)	50 -100	luxuriant	>=70%	30 -35 °C	18 -24 hrs
Pseudomonas aeruginosa ATCC 27853 (00025*)	50 -100	luxuriant	>=70%	30 -35 °C	18 -24 hrs
^*Pseudomonas paraeruginos*a ATCC 9027 (00026*)	50 -100	luxuriant	>=70%	30 -35 °C	18 -24 hrs
$*Kocuria rhizophila* ATCC 9341	50 -100	luxuriant	>=70%	30 -35 °C	18 -24 hrs
Salmonella Typhimurium ATCC 14028 (00031*)	50 -100	luxuriant	>=70%	30 -35 °C	18 -24 hrs

Salmonella Abony NCTC 6017 (00029*)	50 -100	luxuriant	>=70%	30 -35 °C	18 -24 hrs
Candida albicans ATCC 2091 (00055*)	50 -100	luxuriant	>=70%	30 -35 °C	18 -24 hrs
Candida albicans ATCC 10231 (00054*)	50 -100	luxuriant	>=70%	30 -35 °C	18 -24 hrs
#Aspergillus brasiliensis ATCC 16404 (00053*)	50 -100	luxuriant	>=70%	30 -35 °C	18 -24 hrs
Candida albicans ATCC 2091 (00055*)	50 -100	luxuriant	>=70%	20 -25 °C	<=3 d
Candida albicans ATCC 10231 (00054*)	50 -100	luxuriant	>=70%	20 -25 °C	<=3 d
#Aspergillus brasiliensis ATCC 16404 (00053*)	50 -100	luxuriant	>=70%	20 -25 °C	<=3 d
Clostridium sporogenes ATCC 19404 (00008*)	50 -100	luxuriant	>=70%	30 -35 °C	48hrs

Key : (*) Corresponding WDCM numbers,

^ Formerly known as *Pseudomonas aeruginosa*

\# Formerly known as *Aspergillus niger*

** Formerly known as *Bacillus subtilis* subsp. *spizizenii*

$ Formerly known as *Micrococcus luteus*

Storage and Shelf Life

On receipt store between 20-30°C Use before expiry date on the label. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

Reference

1.Hall and Hartnett, 1964, Public Hlth. Rep., 79:1021.

2.Murray PR, Baron, Pfaller, and Yolken (Eds.), 2003, In Manual of Clinical Microbiology, 8th ed., ASM, Washington, D.C.

3.Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.

4.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.

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