Technical Data

Soyabean Casein Digest Agar Plate w/ Lecithin, Tween 80 & 1% Glycerol Plate (γ-irradiated) (Triple pack)

MP5279GT

Intended use:

Recommended for determining efficiency of sanitization of containers, equipments, surfaces, water miscible cosmetics etc.

Composition**

Ingredients	Gms / Litre
Tryptone #	15.000
Soya peptone	5.000
Sodium chloride	5.000
Agar	15.000
Lecithin	0.700
Polysorbate 80 (Tween 80)	5.000 ml
Glycerol	10.000 ml
Final pH (at 25°C)	7.3±0.2

**Formula adjusted, standardized to suit performance parameters

Equivalent to Pancreatic digest of casein

Directions

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

Principle And Interpretation

Tryptone Soya Agar with Lecithin and Polysorbate 80 is used for the detection and enumeration of microorganisms present on surfaces of sanitary importance.

Tryptone and Soya peptone provide nitrogenous compounds and other nutrients essential for microbial replication. Lecithin and polysorbate 80 (Tween 80) are neutralizers reported to inactivate residual disinfectants from where the sample is collected (1). Lecithin neutralizes quaternary ammonium compounds and polysorbate 80 neutralizes phenolic disinfectants, hexachlorophene, formalin and with lecithin ethanol (2).

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. After counting the colonies, carry out biochemical testing for identification.

Type of specimen

Environmental monitoring samples

Specimen Collection and Handling:

For Environmental monitoring samples follow appropriate techniques for sample collection, handling and processing.

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

Read the label before opening the pack. 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.

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 Plate w/Lecithin, Polysorbate 80 & 1% Glycerol in 90 mm scored disposable plates with convex surface and absence of black particles/ cracks/ bubbles. (Gamma Irradiated) (Triple Pack)

Colour

Light yellow coloured medium

Quantity of Medium

30 ml of medium in 90 mm scored disposable plates

Reaction

7.10-7.50

Dose of irradiation (Kgy)

13.00- 20.00

Sterility Test

Passes release criteria

Cultural Response

Growth Promotion was observed after an incubation at 30-35°C for 18-24 hours for bacteria and for fungus <=5 days.

Recovery rate

Recovery rate is considered 100% for bacteria growth on Blood Agar and fungus 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 hours).

Organism	Inoculum (CFU)	Growth	Recovery	Incubation temperature	Incubation period
Bacillus subtilis subsp. *spizizenii ATCC 6633* (00003*)	50 -100	luxuriant	>=70 %	35°C	18Hours
Staphylococcus aureus subsp. *aureus ATCC 25923* (00034*)	50 -100	luxuriant	>=70 %	35°C	18Hours
Staphylococcus aureus subsp. *aureus ATCC 6538* (00032*)	50 -100	luxuriant	>=70 %	35°C	18Hours
Escherichia coli ATCC 25922 (00013*)	50 -100	luxuriant	>=70 %	35°C	18Hours
Escherichia coli ATCC 8739 (00012*)	50 -100	luxuriant	>=70 %	35°C	18Hours
Escherichia coli NCTC 9002	50 -100	luxuriant	>=70 %	35°C	18Hours
Pseudomonas aeruginosa ATCC 27853 (00025*)	50 -100	luxuriant	>=70 %	35°C	18Hours
Pseudomonas aeruginosa ATCC 9027 (00026*)	50 -100	luxuriant	>=70 %	35°C	18Hours
Salmonella Abony *NCTC 6017* (00029*)	50 -100	luxuriant	>=70 %	35°C	18Hours
Micrococcus luteus ATCC 9341	50 -100	luxuriant	>=70 %	35°C	18Hours
Streptococcus pneumoniae ATCC 6305	50 -100	luxuriant	>=70 %	35°C	18Hours
Salmonella Typhimurium *ATCC 14028* (00031*)	50 -100	luxuriant	>=70 %	35°C	18Hours

Candida albicans ATCC 10231 (00054*)	50 -100	luxuriant	>=70 %	35°C	2 Days
Candida albicans ATCC 2091 (00055*)	50 -100	luxuriant	>=70 %	35°C	2 Days
# Aspergillus brasiliensis ATCC 16404 (00053*)	50 -100	Good-luxuriant	50-70%	35°C	3 Days
Candida albicans ATCC 10231 (00054*)	50 -100	luxuriant	>=70 %	25°C	2 Days
Candida albicans ATCC 2091 (00055*)	50 -100	luxuriant	>=70 %	25°C	2 Days
# Aspergillus brasiliensis ATCC 16404 (00053*)	50 -100	Good-luxuriant	50-70%	25°C	3 Days

Key : (#)- Formerly known as *Aspergillus niger* (*) - Corresponding WDCM numbers

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. Forbes B. A., Sahm A. S. and Weissfeld D. F., 1998, Bailey and Scotts Diagnostic Microbiology, 10th Ed., Mosby Inc. St. Louis, Mo

2. Gunn B. A., Ohashi D K., Gaydos C. A., Holt E. S., 1977, J. Clin. Microbiol., 5(6) : 650.

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.

5. The United States Pharmacopoeia , 2019, The United States Pharmacopoeial Convention Inc., Rockville, MD.

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