PRODUCT SPECIFICATION SHEET

Tryptone Soya Agar Plate w/ Lecithin & Polysorbate 80 (γ -irradiated, Triple Pack, pack of 10) (EP004IT)

Intended Use

Tryptone Soya Agar Plate w/ Lecithin & Polysorbate 80 (γ-irradiated, Triple Pack, pack of 10) (EP004IT) for determining efficiency of sanitization of containers, equipments, surface, water miscible cosmetics etc.

Product Summary and Explanation

Tryptone Soya Agar with Lecithin and Polysorbate 80 is used for the detection and enumeration of microorganisms present on surfaces of sanitary importances.[1,2,3] This media may be employed to establish and monitor cleaning techniques and schedules.[4-7] Tryptone Soya Agar Plate w/ Lecithin & Polysorbate 80 is also recommended for the Aerobic Plate Count (Microbial Limit Test) for water-miscible cosmetic products containing preservatives.[8]

Principles of the Procedure

Soyabean Casein Digest Agar Plate contains casein enzymic hydrolysate and papaic digest of soyabean meal which provides amino acids, long chain peptides and essential nutrients required for the growth of microorganisms. Sodium chloride maintains the osmotic balance. Lecithin and polysorbate 80 (Tween 80) are neutralizers reported to inactivate residual disinfectants from where the sample is collected.[9] Lecithin neutralizes quaternary ammonium compounds and polysorbate 80 neutralizes phenolic disinfectants, hexachlorophene, formalin and with lecithin ethanol.[10]

Formula / Liter

Ingredients	Gms / Litr
Casein enzymic hydrolysate	15.0
Papaic digest of soyabean meal	5.0
Sodium chloride	5.0
Lecithin	0.7
Polysorbate 80 (Tween 80)	5.0
Agar	15.0
Formula may be adjusted and/or supplemented as required to meet performance specifications	

Precautions

1. Prepared plated media are For *in vitro* Diagnostic Use or For Laboratory Use as labeled.
2. Directions for use should be read and followed carefully.
3. If excessive moisture is observed, invert the bottom over an off-set lid and allow to air dry in order to prevent formation of a seal between the top and bottom of the plate during incubation.
4. Observe aseptic techniques and established precautions against microbiological hazards throughout all procedures, since it must be assumed that all specimens/samples collected might contain infectious microorganisms.

Product Deterioration

Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

Directions

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

Quality Control Specifications

Appearance	Sterile Tryptone Soya Agar w/ Lecithin & Polysorbate 80 in 90 mm plates (γ-irradiated) (Triple packed)
Colour	Light yellow coloured medium
Reaction	7.10- 7.50
Quantity of medium	25 ml of medium in 90 mm plates

Dose of irradiation : 10.00- 25.00

Sterility Check: Passes release criteria.

Expected 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 is considered 100% for bacteria growth on soya Agar and fungus growth on Sabouraud Dextrose Agar.

Sr. No.	Organisms	Results to be achieved CFU)					
		Inoculum (CFU)	Growth	Observed Lot value (CFU)	Recovery	Incubation Tempera-ture	Incubation Period
1.	*Candida albicans ATCC 10231*	50 - 100	luxuriant	35 -100	>=70 %	20 -25 °C	<=5 d
2.	*Aspergillus brasiliensis ATCC 16404*	50 - 100	good-luxuriant	35 -100	>=70 %	20 -25 °C	<=5 d
3.	*Aspergillus brasiliensis ATCC 16404*	50 - 100	luxuriant	25 -70	50-70%	30 -35 °C	<=5 d
4.	*Salmonella Abony NCTC 6017*	50 - 100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
5.	*Bacillus subtilis ATCC 6633*	50 - 100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
6.	*Escherichia coli ATCC 8739*	50 - 100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
7.	*Pseudomonas aeruginosa ATCC 9027*	50 - 100	good-luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
8.	*Staphylococcus aureus ATCC 6538*	50 - 100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
9.	*Candida albicans ATCC 10231*	50 - 100	good-luxuriant	35 -100	50-70%	30 -35 °C	<=5 d
10.	*Streptococcus pneumoniae ATCC 6305*	50 - 100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
11.	*Salmonella Typhimurium ATCC 14028*	50 - 100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
12.	*Pseudomonas aeruginosa ATCC 27853*	50 - 100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
13.	*Micrococcus luteus ATCC 9341*	50 - 100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
14.	*Staphylococcus aureus ATCC 25923*	50 - 100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
15.	*Escherichia coli ATCC 25922*	50 - 100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
16.	*Escherichia coli NCTC 9002*	50 - 100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
17.	*Candida albicans ATCC 2091*	50 - 100	luxuriant	35 -100	>=70 %	20 -25 °C	<=5 d

18.	*Candida albicans ATCC 10231*	50 - 100	luxuriant	35 -100	>=70 %	20 -25 °C	<=5 d

The organisms listed are the minimum that should be used for quality control testing.

Test Procedure

1. 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.[11] After counting the colonies, carry out biochemical testing for identification.
2. Refer appropriate references for standard test procedures.

Results

Refer appropriate references and procedures for interpretation of results.

Storage

On receipt, store plates at 15-25°C.

Expiration

Refer to the expiration date stamped on the pack. Prepared plates stored in their original sleeve wrapping at 15-25°C until just prior to use may be inoculated up to the expiration date and incubated for recommended incubation times.

Product Disposal

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

Limitations of the Procedure

1. Some diagnostic tests may be performed with the primary plate. However, a pure culture is recommended for the majority of biochemical tests and other identification procedures.
2. Consult appropriate references for further information.

Packing Information

It is triple layered packing containing 10 No. of plates. The primary packaging bag contains 5 plates packing with two nos. of a silica gel desiccant bag and it is packed by using five layered plastic bag.

Then these two 5 plates stacks it is packed into second plastic bag which is labeled and then 10plates into tertiary packing (Plastic bag).

Cartons are used for packaging the bagged stacks. The sealing seams of the bags are heat-sealed. The bags allow easy opening without the use of sharp objects such as scissors or knives. Bags can be peeled open at the ends of the stacks by tearing apart both plastic films of the bag. Apply aseptic techniques. Once the outer bag is opened, appropriate measures should be used to maintain the sterility of the inner bags and the contents.

Packaging

Product Name : Tryptone Soya Agar Plate w/ Lecithin & Polysorbate 80

Product Code : EP004IT

Available Pack sizes : γ -irradiated, Triple Pack (Pack of 10 plates)

References

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7. Hickey, Beckelheimer and Parrow. 1993. In Marshall (ed.), Standard methods for the examination of dairy products, 16th ed. American Public Health Association, Washington, D.C.
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9. Brummer, 1976, Appl. Environ. Microbiol., 32:80.
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11. Murray PR, Baron, Pfaller, and Yolken (Eds.), 2003, In Manual of Clinical Microbiology, 8th ed., ASM, Washington, D.C.

Further Information

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