Technical Data

SCDA Plate w/sodium pyruvate, yeast extract & LTHTh 1% glycerol (Lockable plate, γ-irradiated, Triple pack)

MP2112ALGT

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 & fatty products containing preservatives or antimicrobials.

Composition**

Ingredients	g / L
Tryptone	15.000
Soya peptone	5.000
Yeast extract	6.000
Sodium chloride	5.000
Lecithin	0.700
Polysorbate 80 (Tween 80)	5.000
Sodium pyruvate	2.000
Histidine	1.000
Sodium thiosulphate	0.050
Glycerol	10.00ml
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/ Sodium pyruvate, Yeast extract, LTHTh & 0.5% Glycerol is used for the detection and enumeration of microorganisms for products of sanitary importance, water miscible cosmetics, products containing antimicrobials or preservatives (1) Tryptone, soya peptone, yeast extract and sodium pyruvate provide nitrogenous, carbonaceous compounds, long chain amino acids, vitamins and other nutrients essential for microbial replication. Glycerol is additional source of carbon. 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

Environmental monitoring samples

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 strain of a microorganism may have unique growth requirements with respect to nutrients and physical conditions. Based on which the growth pattern of each varies on a medium and some even may display significant delay.

2. Environmental Monitoring Test : Exposure of media plates for 4 h as a settle plate or in air sampler or even under laminar air flow may lead reduction in some available moisture on the surface. This may cause development of tiny cracks in the agar or slight shrinkage. This however, does not impact the performance of the media.
3. 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.
4. It is recommended to store the plates at 24-30°C to avoid minimum condensation.

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/ Sodium Pyruvate, Yeast extract & LTHTH & 1% Glycerol in 90 mm disposable plates with smooth surface and absence of black particles/cracks/bubbles. (Lockable plate, γ-irradiated, Triple pack)

Colour

Light yellow coloured medium.

Quantity of Medium

32ml of medium in 90 mm disposable plates

pH

7.10- 7.50

Dose of irradiation (Kgy)

13.00- 20.00

Sterility Check

Passes release criteria.

Growth Promotion Test

Growth Promotion was carried out in accordance with the harmonized method of USP/EP/BP/JP, and growth was observed after an incubation at 30-35°C for <=3 days for bacteria and <=5 days for fungus. Recovery rate is considered 100% for bacteria growth on Soyabean Casein Digest 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).

Neutralization Test

Passes release criteria The smaller zone of inhibition compared to SCDA indicates neutralization of quaternary ammonium compounds.

Organism	Inoculum (CFU)	Growth	Observed Lot value (CFU)	Recovery	Incubation temperature	Incubation period
Growth promoting						
****Bacillus spizizenii* ATCC 6633 (00003*)	50 -100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Staphylococcus aureus subsp. *aureus* ATCC 25923 (00034*)	50 -100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Staphylococcus aureus subsp. *aureus* ATCC 6538 (00032*)	50 -100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Escherichia coli ATCC 25922 (00013*)	50 -100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Escherichia coli ATCC 8739 (00012*)	50 -100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Pseudomonas aeruginosa ATCC 27853 (00025*)	50 -100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
^*Pseudomonas paraeruginosa* ATCC 9027 (00026*)	50 -100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Salmonella Abony NCTC 6017	50 -100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
$ *Kokuria rhizophila* ATCC 9341	50 -100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs

Salmonella Typhimurium ATCC 14028 (00031*)	50 -100	luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Candida albicans ATCC 10231 (00054*)	50 -100	luxuriant	35 -100	>=70 %	30 -35 °C	<=5 d
Candida albicans ATCC 2091 (00055*)	50 -100	luxuriant	35 -100	>=70 %	30 -35 °C	<=5 d
#Aspergillus brasiliensis ATCC 16404 (00053*)	50 -100	luxuriant	35 -100	>=70 %	30 -35 °C	<=5 d
Candida albicans ATCC 10231 (00054*)	50 -100	luxuriant	35 -100	>=70 %	20 -25 °C	<=5 d
Candida albicans ATCC 2091 (00055*)	50 -100	luxuriant	35 -100	>=70 %	20 -25 °C	<=5 d
#Aspergillus brasiliensis ATCC 16404 (00053*)	50 -100	luxuriant	35 100	>=70 %	20 -25 °C	<=5 d
Clostridium sporogenes ATCC 19404 (00008*)	50 -100	luxuriant	35 -100	>=70 %	30 -35 °C	<=48 hours

Key : (*) Corresponding WDCM numbers , ($) Formerly known as *Micrococcus luteus,*
(**) Formerly known as *Bacillus subtilis* subsp. *spizizenii,* (#)Formerly known as *Aspergillus niger,*
(^) Formerly known as *Pseudomonas aeruginosa.*

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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