

#### **Technical Information**

# SCDA w/ 0.5% Polysorbate 80 & 1% Glycerol (γ - irradiated) (Triple Pack)

Product Code: PM 6319GT

Application: Recommended for cultivation of wide variety of microorganisms.

## Composition\*\* Ingredients

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

<sup>\*\*</sup>Formula adjusted, standardized to suit performance parameters

## **Principle & Interpretation**

Tryptone Soya Agar with Lecithin and Polysorbate 80 is used in RODAC (Replicate Organism Detection and Counting) plates (3) for the detection and enumeration of microorganisms present on surfaces of sanitary importances (6,8). This medium is a moduification without lecithin.

Tryptone and Soya peptone provide nitrogenous compounds and other nutrients essential for microbial replication. Polysorbate 80 (Tween 80) are neutralizers reported to inactivate residual disinfectants from where the sample is collected (1). 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 (7). 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.

<sup>#</sup> Equivalent to Pancreatic digest of casein



### 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 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 in development.
- 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 ta 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.

## Methodology

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

## **Quality Control**

#### Appearance

Sterile SCDA w/ 0.5% Polysorbate 80 & 1% Glycerol ( $\gamma$  - irradiated) (Triple pack) in 90 mm disposable plates.

#### Colour of medium

Light yellow coloured medium

#### Quantity of medium

30 ml of medium in 90 mm disposable plates.

#### рΗ

7.10-7.50

#### Dose of irradiation (Kgy)

13.00- 20.00

#### Sterility Test

Passes release criteria

#### Cultural response

Cultural characteristics was observed after an incubation for Bacterial at 30-35°C 18-24 hours and for Fungal at 30-35°C <=5days.

Organism	Inoculum (CFU)	Observed Lot value (CFU)	Recovery
Bacillus subtilis subsp.spizizenii ATCC 6633 (00003*)	50-100	35-100	>=70%
Staphylococcus aureussubsp. aureus ATCC 25923 (00034*)	50-100	35-100	>=70%
Staphylococcus aureussubsp. aureus ATCC 6538 (00032*)	50-100	35-100	>=70%
Escherichia coli ATCC25922 (00013*)	50-100	35-100	>=70%



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Escherichia coli ATCC 8739	50-100	35-100	>=70%		
(00012*)					
Escherichia coli ATCC11775	50-100	35-100	>=70%		
(00090*)					
Escherichia coli NCTC13167	50-100	35-100	>=70%		
(00179*)					
Escherichia coli NCTC	50-100	35-100	>=70%		
9002					
Pseudomonas aeruginosa	50-100	35-100	>=70%		
ATCC 27853 (00025*)					
Pseudomonas aeruginosa	50-100	35-100	>=70%		
ATCC 9027 (00026*)					
Pseudomonas aeruginosa	50-100	35-100	>=70%		
ATCC 10145 (00024*)					
Salmonella Abony NCTC	50-100	35-100	>=70%		
6017 (00029*)					
Micrococcus luteus	50-100	35-100	>=70%		
ATCC 9341					
Streptococcus pneumoniae	50-100	35-100	>=70%		
ATCC 6305					
Salmonella Typhimurium	50-100	35-100	>=70%		
ATCC 14028 (00031*)					
Enterococcus faecalis	50-100	35-100	>=70%		
ATCC 29212 (00087*)					
Candida albicans	50-100	35-100	>=70%		
ATCC10231 (00054*)					
Candida albicans	50-100	35-100	>=70%		
ATCC2091 (00055*)					
# Aspergillus brasiliensis	50-100	25-70	50-70%		
ATCC 16404 (00053*)					
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Clostridium perfringenes	50-100	35-100	>=70%		
ATCC 13124 (00007*)					

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 (4,5).

## **Further Reading**

- 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. Indian Pharmacopoeia, 2018, Govt. of India, Ministry of Health and Family Welfare, New Delhi, India.



- 4. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2<sup>nd</sup> Edition.
- 5. 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.
- 6. The United States Pharmacopoeia, 2019, The United States Pharmacopoeial Convention Inc., Rockville, MD.

#### Disclaimer:

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and developmentwork carried at **CDH** is true and accurate
- Central Drug House Pvt. Ltd. reserves the right to make changes to specifications and information related to the products at any time.
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- of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.
- Do not use the products if it fails to meet specifications for identity and performens parameters.