



Ready Prepared Media

## Technical Information

### Soyabean Casein Digest Agar Plate w/1% Glycerol and 4% Polysorbate 80 (gamma-irradiated) (Triple Pack)

**Product Code: PM 6317GT**

**Application:** Recommended for determining efficiency of sanitization of containers, equipment, surfaces, water miscible cosmetics etc.

### Composition\*\*

Ingredients	Gms / Litre
Tryptone #	15.000
Soya peptone	5.000
Sodium chloride	5.000
Agar	15.000
Glycerol	10.000 ml
Polysorbate 80	40.000 ml
Final pH ( at 25°C)	7.3±0.2

\*\*Formula adjusted, standardized to suit performance parameters

# Equivalent to Pancreatic digest of casein

### Principle & Interpretation

Soyabean Casein Digest Agar is a widely used medium, which supports the growth of wide variety of organisms even that of fastidious ones such as *Neisseria*, *Listeria* and *Brucella* etc. It is used for sterility testing in pharmaceuticals.

Tryptone and Soya peptone provide nitrogenous compounds and other nutrients essential for microbial replication. Polysorbate 80 (Tween 80) is a neutralizer reported to inactivate residual disinfectants from where the sample is collected (1). It neutralizes phenolic disinfectants, hexachlorophene, formalin (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 (5). 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.



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## 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 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 Soyabean Casein Digest Agar Plate w/ 1% Glycerol & 4% Polysorbate 80 (γ-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.

### pH

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
<i>Bacillus subtilis subsp.spizizenii</i> ATCC 6633 (00003*)	50-100	35-100	>=70%
<i>Staphylococcus aureussubsp. aureus</i> ATCC 25923 (00034*)	50-100	35-100	>=70%
<i>Staphylococcus aureussubsp. aureus</i> ATCC 6538 (00032*)	50-100	35-100	>=70%
<i>Escherichia coli</i> ATCC25922 (00013*)	50-100	35-100	>=70%
<i>Escherichia coli</i> ATCC 8739 (00012*)	50-100	35-100	>=70%
<i>Escherichia coli</i> ATCC11775 (00090*)	50-100	35-100	>=70%
<i>Escherichia coli</i> NCTC13167 (00179*)	50-100	35-100	>=70%
<i>Escherichia coli</i> NCTC 9002	50-100	35-100	>=70%



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

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).

## Further Reading

1. Brummer, 1976, Appl. Environ. Microbiol., 32:80.
2. Favero (Chairman), 1967, Biological Contamination Control Committee, a state of the art report., Am. Assoc. for contamination control.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2<sup>nd</sup> 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. Murray PR, Baron, Pfaller, and Tenover (Eds.), 2003, In Manual of Clinical Microbiology, 8th ed., ASM, Washington, D.C.



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## 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
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