



Ready Prepared Media

Technical Information

Soyabean Casein Digest Agar Plate w/ 1%Glycerol, 0.5% Polysorbate 80, 0.07% Soya lecithin & 5IU/plateB-lactamase mixture.

Product Code: PM 6280GT

Application: For cultivation of wide variety of aerobes and fungi and for inactivation of Penicillinc, cephalosporis of first ,second, third and fourth generation and penems.

Composition**

| Ingredients | Gms / Litre |
|------------------------------|-------------|
| Tryptone | 15.000 |
| Soya peptone | 5.000 |
| Sodium chloride | 5.000 |
| Lecithin | 0.700 |
| Polysorbate 80 (Tween 80) | 5.000 |
| Agar | 15.000 |
| Glycerol | 10.000 |
| Beta-lactamase mixture/Plate | 5.000 |

**Formula adjusted, standardized to suit performance parameters

Principle & Interpretation

Soyabean Casein Digest Agar with Glycerol, polysorbate 80, Soya lecithin and beta-lactamase is used in plates (1) for the detection and enumeration of microorganisms present on surfaces of sanitary importances (2, 3) and also in environmental monitoring of clean room for facilities where production of Penicillins is carried out.

Casein enzymic hydrolysate and papaic digest of soyabean meal 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 (4). Lecithin neutralizes quaternary ammonium compounds and polysorbate 80 neutralizes phenolic disinfectants, hexachlorophene, formalin and with lecithin ethanol (5).Beta-lactamase mixture added in the medium will inactivate the beta-lactam antibiotics thus enabling the growth of resistant strains present in the environment of clean rooms where production of antibiotics is carried out.

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.



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Warning and Precautions

In Vitro diagnostic use only ,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.

Methodology

Either streak, inoculate or surface spread the test inoculum (50-100 CFU) aseptically on the plate. Alternatively this medium can also be used for environmental monitoring of clean rooms in production areas of Pharmaceutical industries where production of antibiotics like Penicillins is carried out.

Quality Control

Appearance

Sterile Soyabean Casein Digest Agar Plate w/1% Glycerol, 0.5% Polysorbate 80, 0.07% Soya Lecithin & Beta-Lactamase mixture (5 IU/Plate) in 90mm disposable plates and absence of black particles/cracks/bubbles. (gamma-irradiated) (Triple pack).

Colour

Light yellow coloured medium.

Quantity of Medium

30ml of medium in 90mm disposable plates.

Reaction

7.10- 7.50

Dose of Irradiation (Kgy)

13.00- 20.00

Sterility Check

Passes release criteria

Cultural Response

Growth Promotion Test of as such plates was carried out and growth was observed after incubation at 30-35°C for < =3 days for bacterial cultures and at 20-25°C for ≤ 5 days for fungal cultures. Simultaneously growth promotion test was carried out on plates which were seeded with 1mcg/ml of respective antibiotics.

| Organism | Inoculum (CFU) | Growth | Lot value (CFU) | Recovery | Incubation Temperature | Incubation Period |
|--|----------------|-----------|-----------------|----------|------------------------|-------------------|
| Escherichia coli ATCC 25922 w/o antibiotic | 50-100 | Luxuriant | 35-100 | >=70% | 30-35°C | 18-24hrs |



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| | | | | | | |
|------------------------------|--------|----------------|--------|--------|---------|----------|
| w/ Cephalothin | 50-100 | Luxuriant | 35-100 | >=70% | 30-35°C | 18-24hrs |
| w/ Cefamandole | 50-100 | Luxuriant | 35-100 | >=70% | 30-35°C | 18-24hrs |
| w/ Cefotaxime | 50-100 | Luxuriant | 35-100 | >=70% | 30-35°C | 18-24hrs |
| w/ Ceftazidime | 50-100 | Luxuriant | 35-100 | >=70% | 30-35°C | 18-24hrs |
| w/ Cefepime | 50-100 | Luxuriant | 35-100 | >=70% | 30-35°C | 18-24hrs |
| w/ Imipenem | 50-100 | Luxuriant | 35-100 | >=70% | 30-35°C | 18-24hrs |
| w/ Meropenem | 50-100 | Luxuriant | 35-100 | >=70% | 30-35°C | 18-24hrs |
| Staphylococcus aureus | | | | | | |
| ATCC 25923 | | | | | | |
| w/ Penicillin | 50-100 | Luxuriant | 35-100 | >=70% | 30-35°C | 18-24hrs |
| Growth promoting | | | | | | |
| Candida albicans | 50-100 | Luxuriant | 35-100 | >=70% | 30-35°C | <=5d |
| ATCC10231 | | | | | | |
| Candida albicans | 50-100 | Luxuriant | 35-100 | >=70% | 30-35°C | <=5d |
| ATCC2091 | | | | | | |
| Aspergillus brasiliensis | 50-100 | good-Luxuriant | 25-70 | 50-70% | 30-35°C | <=5d |
| ATCC 16404 | | | | | | |
| Aspergillus brasiliensis | 50-100 | Luxuriant | 35-100 | >=70% | 20-25°C | <=5d |
| ATCC 16404 | | | | | | |

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 (6,7).

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 development work 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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