

Letheen Agar

Intended Use

Letheen Agar is recommended to determine the phenol coefficient of quaternary ammonium compounds using *Escherichia coli* or *Staphylococcus aureus*.

Summary

Letheen Agar is a modification of Tryptone Glucose Extract Agar with the supplementation of lecithin and Polysorbate 80. This medium is used to neutralize the quaternary ammonium compounds in the testing of germicidal activity. The addition of lecithin and Polysorbate 80 was suggested by Weber and Black. Letheen Medium is also recommended for testing of cosmetics.

Principle

Beef extract, casein enzymic hydrolysate and dextrose supply essential nutrients and other trace elements for the microbial growth. Lecithin and polysorbate 80 enables the recovery of bacteria from solutions containing residues of disinfectant used in sanitization of utensils and equipments. Lecithin neutralizes quaternary ammonium compounds and polysorbate 80 neutralizes phenolic disinfectants, hexachlorophene and formalin. Dehydrated medium may appear moist with brown sugar appearance, which does not indicate deterioration

Formula*

| Ingredients | g/L |
|----------------------------|-----------|
| Casein Enzymic Hydrolysate | 5.0 |
| Beef Extract | 3.0 |
| Dextrose | 1.0 |
| Polysorbate 80 | 7.0 |
| Lecithin | 1.0 |
| Agar | 15.0 |
| Final pH (at 25°C) | 7.0 ± 0.2 |

*Adjusted to suit performance parameters

Storage and Stability

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of Specimen

Pharmaceutical samples

Specimen Collection and Handling

Ensure that all samples are properly labelled.

Follow appropriate techniques for handling samples as per established guidelines.

Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure.

The samples must be stored and tested within the permissible time duration.

After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions

1. Suspend 32.00 g of the powder in 1000 mL purified / distilled water.
2. Heat to boiling to dissolve the powder completely.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per the validated cycle.
4. Mix well and dispense as desired.

Quality Control

Dehydrated Appearance: Cream to yellow coloured, homogeneous free flowing powder.

Prepared Appearance: Light yellow coloured, clear to slightly opalescent gel forms in petridishes.

Cultural Response: Cultural characteristics observed after an incubation at 35°C-37°C for 24-48 hours

| Organism (ATCC) | Growth |
|--|---------------|
| <i>Escherichia coli</i> (8739) | Good |
| <i>Staphylococcus aureus</i> subsp. <i>aureus</i> (6538) | Good |

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Weber and Black, 1948, Soap Sanitary Chem., 24:134.
2. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

| Cat No. | Product description | Pack Size |
|----------------|----------------------------|------------------|
| 201120170500 | Dehydrated Culture Media | 500 g |

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.
