Technical Information

Littman Oxgall MiVeg Agar Base

Product Code : VM1373

Application:- Littman Oxgall MiVeg Agar Base with added Streptomycin is recommended for selective enrichment and cultivation of fungi, especially dermatophytes.

Composition

Ingredients	Gms / Litre
MiVeg peptone	20.00
Dextrose	10.00
Synthetic detergent No. II	5.00
Crystal violet	0.01
Agar	20.00
Final pH (at 25°C)	7.0 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Littman Oxgall MiVeg Agar Base is prepared by adding vegetables peptones in place of animal based peptones thus making the medium free from BSE/TSE risks. Littman Oxgall MiVeg Agar Base is the modification of Littman Oxgall Agar Base which was formulated by Littman (1). Littman (2) compared this medium with Sabouraud Dextrose Agar using a wide variety of pathogenic and Saprophytic fungi. Isolation of fungi using this medium was three times more efficient than on Sabouraud Dextrose Agar. This medium is recommended for primary isolation of fungi and can be used for estimation of fungal flora found in faeces and sputum samples. It can also be used for the viable plate count of saprophytic fungi present in air, soil and foodstuffs. Crystal violet and Streptomycin inhibits most of the bacteria. Synthetic detergent No. II restricts spreading of fungal colonies. The neutral pH favours growth of many pathogenic fungi. MiVeg peptone supplies necessary growth nutrients while dextrose serves carbon and energy source for the growth of the microbes. For inoculation, skin or nail scraping or infected hair is directly placed on the surface of agar while sputum and faecal samples spread over the surface using sterile swab or the specimen are first enriched in broth and then cultured onto agar medium. The incubation should be done upto 8 days. Whenever *Nocardia asteroides*, *Streptomyces* or any Streptomycin sensitive microorganisms are to be cultured, use media without Streptomycin addition. For best results, isolation plates should be made with about 30 ml of medium per plate. Plates should be allowed to stand, preferably for about six hours, before using.

Methodology

Suspend 55 grams of powder media in 1000 ml distilled water. Mix thoroughly and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45°C andaseptically add sterile Streptomycin to a final concentration of 30 mcg/ml of medium.

Quality Control

Physical Appearance

Light yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.

Gelling

Firm, comparable with 2.0% Agar gel.

Colour and Clarity of prepared medium

Blue coloured slightly opalescent gel forms in petri plates.

Reaction

Reaction of 5.5% w/v aqueous solution is pH 7.0 ± 0.2 at 25°C.

pH Range

6.8-7.2

Cultural Response/Characteristics

Cultural characteristics observed after an incubation at 30°C for 48-72 hours.

Organisms (ATCC)	Plain medium	With Streptomycin
Aspergillus flavus (22547)	luxuriant	luxuriant
Microsporum audouinii (9079)	luxuriant	luxuriant
Escherichia coli (25922)	luxuriant	inhibited
Candida albicans (10231)	good to luxuriant	good to luxuriant
Saccharomyces cerevisiae (9763)	good to luxuriant	good to luxuriant
Saccharomyces uvarum (9080)	good to luxuriant	good to luxuriant
Trichophyton mentagrophytes (9533)	good	good

Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.
Prepared Media: 2-8^0 in sealable plastic bags for 2-5 day.

Further Reading

1. Littman M. L., 1947, Science, 106:109.
2. Littman 1948, AM. J. Clin. pathol. 19:409.
3. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Mainte-nance of Medical Bacteria, 3rd edition, Williams and Wilkins, Baltimore.

s

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.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing 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 in fingement of any patents.Do not use the products if it fails to meet specificatons for identity and performens parameters.