

# TM 525 – LITTMAN OXGALL BROTH BASE

#### **INTENDED USE**

For selective enrichment and cultivation of pathogenic fungi.

#### PRODUCT SUMMARY AND EXPLANATION

Littman Oxgall Broth Base was formulated by Littman. Littman Bile Broth Base is used for selective enrichment of pathogenic skin fungi (dermatophytes) and saprophytic fungi from various clinical specimens. It provides effective enrichment even when the test samples are heavily contaminated with bacterial flora. Littman Bile media are also used for the enumeration of fungal populations of air, soil, foodstuffs and other materials of sanitary significance.

#### **COMPOSITION**

Ingredients	Gms / Ltr	
Peptone	10.000	
Dextrose (Glucose)	10.000	
Oxgall	15.000	
Crystal violet	0.010	

## **PRINCIPLE**

This medium consists of Peptone which provides essential nutrients for the growth of microorganisms. Dextrose is fermentable energy source. Crystal violet and Streptomycin has inhibitory effect on most of the bacteria. Oxgall restricts spreading of fungal colonies. The neutral pH favours the growth of many pathogenic fungi.

For inoculation, skin or nail scraping or infected hair is directly placed on the surface of Littman Bile Agar Base while sputum, faeces etc. are spread over the surface with sterile swab or the specimen are first enriched in broth and then cultured on agar medium. Whenever Nocardia asteroides, Streptomyces or any Streptomycin sensitive microorganisms are to be cultured, use the medium without Streptomycin.

#### **INSTRUCTION FOR USE**

- Dissolve 35.01 grams in 1000 ml purified/distilled water.
- Heat, if necessary, to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C and aseptically add sterile Streptomycin to a final concentration of 30 mcg/ml of medium.
- Mix well and dispense into sterile tubes or flasks as desired.

### **QUALITY CONTROL SPECIFICATIONS**

Appearance of Powder : Cream to yellow homogeneous free flowing powder.

**Appearance of prepared medium**: Blue coloured clear solution in tubes.

: 7.0 ± 0.2 pH (at 25°C)

### INTERPRETATION

Cultural characteristics observed with added sterile Streptomycin to a final concentration of 30mcg/ml of medium after incubation.













Microorganism	ATCC	Inoculum (CFU/ml)	Growth (Plain medium)	Growth w/ streptomycin	Incubation Temperature	Incubation Period
Aspergillus flavus	22547	10-100	Luxuriant	Good- luxuriant	25-30°C	48-72 Hours
Candida albicans	10231	10-100	Good- luxuriant	Good- luxuriant	25-30°C	48-72 Hours
Escherichia coli	25922	50-100	Good- luxuriant	Inhibited	25-30°C	48-72 Hours
Microsporum audouinii	9079	10-100	Luxuriant	Good- luxuriant	25-30°C	48-72 Hours
Saccharomyces cerevisiae	9763	10-100	Good- luxuriant	Good- luxuriant	25-30°C	48-72 Hours
Saccharomyces uvarum	28098	10-100	Good- luxuriant	Good- luxuriant	25-30°C	48-72 Hours
Trichophyton mentagrophytes	9533	10-100	Good	Good	25-30°C	48-72 Hours

### **PACKAGING:**

In pack size of 500 gm bottles.

### **STORAGE**

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

## **DISPOSAL**

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

# **REFERENCES**

- ${\bf 1.}\ Is enberg,\ H.D.\ Clinical\ Microbiology\ Procedures\ Handbook\ 2nd\ Edition.$
- 2. 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.
- 3. Littman M. L., 1947, Science, 106:109.
- 4. Littman M. L., 1948, Am. J. Clin. pathol., 18:409.
- 5. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol.1, Williams and Wilkins, Baltimore.







































**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. \*For Lab Use Only

Revision: 08 Nov., 2019







