Littman Oxgall Broth Base is used for selective enrichment and cultivation of pathogenic fungi.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peptic digest of animal tissue</td>
<td>10.000</td>
</tr>
<tr>
<td>Dextrose</td>
<td>10.000</td>
</tr>
<tr>
<td>Oxgall</td>
<td>15.000</td>
</tr>
<tr>
<td>Crystal violet</td>
<td>0.010</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>7.0±0.2</td>
</tr>
</tbody>
</table>

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

**Directions**

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

**Principle And Interpretation**

Littman Oxgall Broth Base was formulated by Littman (1,2). Littman Oxgall 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 Oxgall media are also used for the enumeration of fungal populations of air, soil, foodstuffs and other materials of sanitary significance (3).

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 Oxgall Agar Base (M373) 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. The incubation should be carried out for upto 8 days. Whenever *Nocardia asteroides, Streptomyces* or any Streptomycin sensitive microorganisms are to be cultured, use the medium without Streptomycin (3).

**Quality Control**

**Appearance**

Cream to yellow homogeneous free flowing powder

**Colour and Clarity of prepared medium**

Blue coloured clear solution in tubes

**Reaction**

Reaction of 3.5% w/v aqueous solution at 25°C. pH : 7.0±0.2

**pH**

6.80-7.20

**Cultural Response**

M663: Cultural characteristics observed with added sterile Streptomycin to a final concentration of 30mcg/ml of medium, after an incubation at 25-30°C for 48-72 hours .

<table>
<thead>
<tr>
<th>Organism</th>
<th>Growth (Plain medium)</th>
<th>Growth with Streptomycin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspergillus flavus ATCC 22547</td>
<td>luxuriant</td>
<td>good-luxuriant</td>
</tr>
<tr>
<td>Candida albicans ATCC 10231</td>
<td>good - luxuriant</td>
<td>good - luxuriant</td>
</tr>
<tr>
<td>Escherichia coli ATCC 25922</td>
<td>good - luxuriantinhibited</td>
<td>good - luxuriantinhibited</td>
</tr>
</tbody>
</table>
Microsporum audouinii        luxuriant   good-luxuriant
ATCC 9079

Saccharomyces cerevisiae      good - luxuriant  good - luxuriant
ATCC 9763

Saccharomyces uvarum          good         good-luxuriant
ATCC 28098

Trichophyton mentagrophytes   good         good
ATCC 9533

Storage and Shelf Life
Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.

Reference