

## CM 20991 – LITTMAN OXGALL AGAR BASE

### INTENDED USE

For primary isolation of pathogenic fungi.

### PRODUCT SUMMARY AND EXPLANATION

Littman Oxgall Agar Base was formulated by Littman. Littman Oxgall Agar is used for the primary isolation of pathogenic selective isolation of pathogenic skin fungi (dermatophytes) and saprophytic fungi from various clinical specimens. It provides effective isolation even when the test samples are heavily contaminated with bacterial flora. Littman Bile Agar Base 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     |
| Agar               | 20.000    |

### 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 agar 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.

### INSTRUCTION FOR USE

Dissolve 55.01 grams in 1000 ml purified/distilled water.

Heat to boiling, 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 µg/ml of medium.

Mix well and pour into sterile Petri plates.

### QUALITY CONTROL SPECIFICATIONS

|                               |                                                                                     |
|-------------------------------|-------------------------------------------------------------------------------------|
| Appearance of Powder          | : Light yellow to light brown may have green tinge homogeneous free flowing powder. |
| Appearance of prepared medium | : Blue coloured clear to slightly opalescent gel forms in Petri plates.             |
| pH (at 25°C)                  | : 7.0 ± 0.2                                                                         |

### INTERPRETATION

Cultural characteristics observed after incubation.



| Microorganism               | ATCC  | Inoculum (CFU/ml) | Growth (Plain medium) | Recovery (Plain medium) | Growth w/ streptomycin | Recovery w/ Streptomycin | Incubation Temperature | Incubation Period |
|-----------------------------|-------|-------------------|-----------------------|-------------------------|------------------------|--------------------------|------------------------|-------------------|
| Aspergillus flavus          | 22547 | 10-100            | Luxuriant             | >=70%                   | Good-luxuriant         | >=50%                    | 25-30°C                | 48-72 Hours       |
| Candida albicans            | 10231 | 10-100            | Good-luxuriant        | >=50%                   | Good-luxuriant         | >=50%                    | 25-30°C                | 48-72 Hours       |
| Escherichia coli            | 25922 | 50-100            | Luxuriant             | >=70%                   | Inhibited              | 0%                       | 25-30°C                | 48-72 Hours       |
| Microsporum audouinii       | 9079  | 10-100            | Luxuriant             | >=70%                   | Good-luxuriant         | >=50%                    | 25-30°C                | 48-72 Hours       |
| Saccharomyces cerevisiae    | 9763  | 10-100            | Good-luxuriant        | >=50%                   | Good-luxuriant         | >=50%                    | 25-30°C                | 48-72 Hours       |
| Saccharomyces uvarum        | 28098 | 10-100            | Good-luxuriant        | >=50%                   | Good-luxuriant         | >=50%                    | 25-30°C                | 48-72 Hours       |
| Trichophyton mentagrophytes | 9533  | 10-100            | Moderate-good         | 20-40%                  | Moderate-good          | 20-40%                   | 25-30°C                | 48-72 Hours       |
| Trichophyton rubrum         | 28188 | 10-100            | Good                  | 40-50%                  | Good                   | 40-50%                   | 25-30°C                | 48-72 Hours       |

#### PACKAGING:

Inpacksizeof500 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.

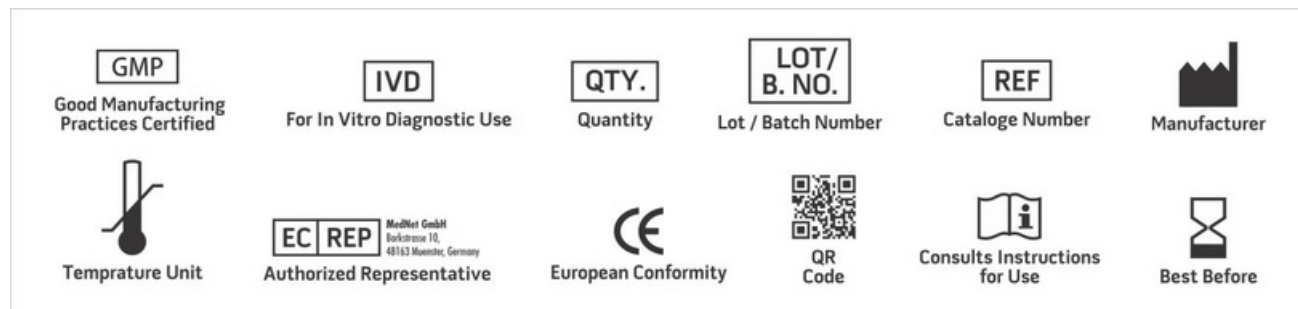
#### DISPOSAL

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

#### REFERENCES



1. Isenberg, 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 LabUse Only

