OXFORD LAB FINE CHEM LLP
ISO 9001-2008 Certified Company

Regd Office: Unit no 12, 1st Floor,
Neminath Industrial Estate No.6,
Navghar, Vasai (East), Palghar - 410210.
Maharashtra, INDIA.

Tel: +91 250 2390032 / 2390989 / 2390990
Email: sales@oxfordlabchem.com /
info@oxfordlabchem.com
Web: www.oxfordlabchem.com

Oxford
Range of
Laboratory Chemicals

TECHNICAL DATA SHEET

Tryptone Yeast Extract Agar w/BCP

Principle

Tryptone Yeast Extract Agar with BCP is formulated as per ISO specifications (ISO 7402: 1993) and is recommended for the isolation and enumeration of *Enterobacteriaceae*. Casein enzymic hydrolysate and yeast extract provide nitrogenous compounds, vitamin B complex and other growth nutrients. Dextrose is the fermentable carbohydrate and bromocresol purple acts as the pH indicator, with colour change from purple to yellow in acidic conditions. Sodium chloride maintains osmotic equilibrium. Enumeration of *Enterobacteriaceae* can be carried out by either the MPN Technique or colony count technique.

MPN Technique: Inoculate 10 ml of the test sample or 10 ml of the initial suspension into 3 tubes of double strength EE Broth (M287I) and 1 ml of sample into three tubes of single strength tubes of EE Broth (M287I). Inoculate another three single strength tubes of EE Broth (M287I) with 1 ml of the first decimal dilution (10-1) of the test sample. Incubate these nine tubes at 35-37°C for 24 hours. Streak a loopful from each tube onto VRBGA w/o Lactose (M581). Incubate plates at 35-37°C for 24 hours. On incubation, presumptive typical red to pink colonies or colourless, mucoid colonies are confirmed biochemically.

Colony count technique: Transfer 1 ml of the test sample in two sterile Petri plates. To another two sterile Petri dishes, transfer 1 ml of the first decimal dilution. Repeat the procedure for further dilutions. Into each Petri dish, aseptically add 15 ml of sterile, cooled VRBGA w/o Lactose (M581). Mix and cool. After complete solidification, add a covering layer of 10 ml to 15 ml of sterile VRBGA w/o Lactose (M581), cooled to 45-50°C. Allow to solidify and incubate at 35-37°C for 24 hours. Select presumptive colonies, as described in MPN Technique and confirm biochemically.Biochemical testing is done by inoculation in Tryptone Yeast Extract Agar w/ BCP to check fermentation reactions.

Use: For isolation and enumeration of Enterobacteriaceae and Bacillus cereus.

OXFORD LAB FINE CHEM LLP

ISO 9001-2008 Certified Company

Regd Office: Unit no 12, 1st Floor,
Neminath Industrial Estate No.6,
Navghar, Vasai (East), Palghar - 410210.
Maharashtra, INDIA.

Tel: +91 250 2390032 / 2390989 / 2390990
Email: sales@oxfordlabchem.com /
info@oxfordlabchem.com
Web: www.oxfordlabchem.com

Oxford
Range of
Laboratory Chemicals

Contents*

Casein enzymic hydrolysate	**10.000**
Yeast extract	**1.500**
Dextrose	**10.000**
Sodium chloride	**5.000**
Bromocresol purple	**0.015**
Agar	**15.000**
Final pH (at 25°C)	**7.0±0.2**

*** Formula adjusted for optimum performance and parameters**

Directions: Suspend 41.52 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Dispense in tubes and cool the tubed medium in a slanting position.

Precautions to be taken

These microbial media are intended for the in-vitro use only. All the handling, experiments, storage, and discarding should be performed with the help of skilled and knowledgeable technicians and as per the established guidelines. The material should be disposed only after proper sterilization by autoclaving. Please go through the MSDS of the media to avoid any accidents or in emergency.

Performance and Evaluation

The expected performance of the medium is liable to use as per the direction on the label when stored at optimum conditions and within expiry date.

OXFORD LAB FINE CHEM LLP
ISO 9001-2008 Certified Company

Regd Office: Unit no 12, 1st Floor,
Neminath Industrial Estate No.6,
Navghar, Vasai (East), Palghar - 410210.
Maharashtra, INDIA.

Tel: +91 250 2390032 / 2390989 / 2390990
Email: sales@oxfordlabchem.com /
info@oxfordlabchem.com
Web: www.oxfordlabchem.com

Oxford
Range of
Laboratory Chemicals

Quality Control

Appearance	**Cream to pale green homogeneous free flowing powder**
Reaction of 4.15% solution	**7.0±0.2 at 25˚C**
pH	**6.80-7.20**
Gelling	**Firm comparable with 1.5% agar gel**
Color and clarity of ready medium	**Purple coloured clear to slightly opalescent gel forms in tubes as slants.**
Growth Promotion properties	**Best at ≤ 100 CFU at 25-30°C for 1-7 days**
Indicative properties	**Optimum at ≤ 100 CFU at 25-30°Cfor 1-7 days**
Negative control	**Performed using sterile distilled water**

Different Microbial Response: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organism	ATCC	Inoculum (CFU)	Growth	Colour of Medium
Escherichia coli	8739	50-100	Luxuriant	Yellow
Escherichia coli	25922	50-100	Luxuriant	Yellow
Klebsiella aerogenes	13048	50-100	Luxuriant	Yellow
Salmonella typhimurium	14028	50-100	Luxuriant	Yellow
Salmonella enteritidis	13076	50-100	Luxuriant	Yellow

Storage and Shelf Life: The product is highly hygroscopic; keep the container tightly closed at all times and store it properly as per the conditions mentioned on the label. The declared expiry is valid only when stored as per the conditions mentioned on the label.
Note: Sterilize media immediately after reconstitution.

Disposal: To avoid the contamination or propagation of any hazardous microbes the used, unusable or modified preparation of this product must be disposed after autoclaving after completion of task.

Regd Office: Unit no 12, 1st Floor,
Neminath Industrial Estate No.6,
Navghar, Vasai (East), Palghar - 410210.
Maharashtra, INDIA.

Tel: +91 250 2390032 / 2390989 / 2390990
Email: sales@oxfordlabchem.com /
info@oxfordlabchem.com
Web: www.oxfordlabchem.com

Reference

1. **Corry J. E. L., Curtis G. D. W., and Baird R. M., Culture Media for Food Microbiology. Vol. 34, Progress in IndustrialMicrobiology, 1995, Elsevier, Amsterdam**
2. **International Organization for Standardization, (ISO), 1993, Draft ISO/DIS, 7402.**

Disclaimer:

****

The information contained herein in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

Oxford Lab Fine Chem LLP makes no representations or warranties, either express or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Oxford Lab Fine Chem LLP will not be responsible for damages resulting from use of or reliance upon this information.