

# **Technical Data**

# Antibiotic Assay Medium No. 8 (Base Agar w/low pH)

**M041** 

Antibiotic Assay Medium No. 8 is used in the microbiological assay of Oxytetracycline, Tetracycline and Vancomycin..

# Composition\*\*

Ingredients	Gms / Litre
Peptic digest of animal tissue (Peptone)	6.000
Yeast extract	3.000
Beef extract	1.500
Agar	15.000
Final pH (at 25°C)	5.9±0.2

<sup>\*\*</sup>Formula adjusted, standardized to suit performance parameters

#### **Directions**

Suspend 25.5 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.

Advice: Recommended for the microbiological assay of Oxytetracycline, Tetracycline and Vancomycin .

# **Principle And Interpretation**

Antibiotic Assay Media are used in the performance of antibiotic assays. Grove and Randall have elucidated those antibiotic assays and media in their comprehensive treatise on antibiotic assays (1). Schmidt and Moyer have reported the use of antibiotic assay medium for the liquid formulation used in the performance of antibiotic assay (2). These media are prepared according to the specifications detailed in the USP(3) and FDA (4).

Beef extract, yeast extract and peptic digest of animal tissue serves as a source of nutrients and growth factors.

### **Quality Control**

### **Appearance**

Cream to yellow homogeneous free flowing powder

#### Gelling

Firm, comparable with 1.5% Agar gel

# Colour and Clarity of prepared medium

Light amber coloured opalescent gel forms in Petri plates

#### Reaction

Reaction of 2.55% w/v aqueous solution at 25°C. pH: 5.9±0.2

#### рН

5.70-6.10

# **Cultural Response**

M041: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Antibiotics assayed
Bacillus subtilis ATCC 6633	3 50-100	luxuriant	>=70%	Mitomycin, Vancomycin
Bacillus cereus var mycoide ATCC 11778	s 50-100	luxuriant	>=70%	Oxytetracycline, Tetracycline

# **Storage and Shelf Life**

Store below 30°C in tightly closed container and use freshly prepared medium . Use before expiry date on label.

# Reference

1. Grove and Randall, 1955, Assay Methods of Antibiotics Medical Encyclopedia, Inc. New York.

HiMedia Laboratories Technical Data

- 2. Schmidt and Moyer, 1944, J. Bact., 47:199.
- 3. United States Pharmacopoeia 2009, US Pharmacopoeial Convention, Inc., Rockville, MD.
- 4. Tests and Methods of Assay of Antibiotics and Antibiotic containing Drugs, FDA, CFR, 1983 Title 21, Part 436, Subpart

D, Washington, D.C.: U.S. Government Printing Office, paragraphs 436, 100-436, 106, p. 242-259, (April 1).

Revision: 2 / 2015

#### Disclaimer:

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia<sup>™</sup> publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia<sup>™</sup> Laboratories 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 or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.