

# TM 1767 – ANTIBIOTIC ASSAY MEDIUM J (as per IP)

#### **INTENDED USE**

For cultivation of various microorganisms and for sterility testing in pharmaceutical procedures.

## PRODUCT SUMMARY AND EXPLANATION

Grove and Randall have elucidated the antibiotic assays and medias in their comprehensive treatise on antibiotic assays. Antibiotic assay Medium No. 36 is recommended for preparation of inoculum of *Mycobacterium smegmatis* for the assay of Bleomycin. This medium is also used for the cultivation of a wide variety of microorganisms and sterility testing of pharmaceutical preparations. This medium is formulated in accordance with Indian Pharmacopoeia.

## **COMPOSITION**

Ingredients	Gms / Ltr		
Tryptone	15.000		
Soya peptone	5.000		
Sodium chloride	5.000		
Agar	15.000		

## **PRINCIPLE**

The combination of Tryptone and soya peptone makes this medium nutritious by providing amino acids and long chain peptides for the growth of microorganisms. Sodium chloride maintains the osmotic balance of the medium.

## **INSTRUCTION FOR USE**

- Dissolve 40 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. Mix well and pour into sterile Petri plates.

## **QUALITY CONTROL SPECIFICATIONS**

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

Appearance of prepared medium : Light yellow coloured clear to slightly opalescent gel forms in Petri plates.

pH (at 25°C) : 7.3±0.1

# **INTERPRETATION**

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Mycobacterium smegmatis	607	50-100	Luxuriant	>=70%	36 -37.5°C	18-48 Hours

### **PACKAGING:**

In pack size of 100 gm and 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**

- 1. Grove and Randall, 1955, Assay Methods of Antibiotics, Medical Encyclopedia, Inc. New York
- 2. Indian Pharmacopoeia 2010, Ministry of Health and Family welfare, Government of India, New Delhi.
- 3. Wright and Welch, 1959-60, Antibiotics Ann., 61.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. \*For Lab Use Only Revision: 08 Nov., 2019







