



# YEP Agar, Modified

**M1823** 

## **Intended Use:**

Recommended the cultivation and isolation of *Agrobacterium* species and other soil microorganisms. It can also be used for clinical samples.

### **Composition\*\***

Ingredients	Gms / Litre
Peptone	10.000
Yeast extract	10.000
Sodium chloride	5.000
Agar	15.000
Final pH ( at 25°C)	7.0±0.2

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

## **Directions**

Suspend 40 grams in 1000 ml purified / distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour in sterile Petri plate.

## **Principle And Interpretation**

YEP Agar, Modified is based on the original formula of YEP Agar formulated by Windle Taylor (1) for the plate count of microorganisms in water.

Yeast extract and peptone provide nitrogenous and carbonaceous compounds, long chain amino acids, vitamin B complex and other growth nutrients. Separate counts are made of the organisms forming visible colonies after 24 hours at 35-37°C and the organisms forming colonies after 3 days at 20-22°C (2). Select the plates containing 30 - 300 colonies.

## Type of specimen

Soil samples, Clinical samples - urine

## **Specimen Collection and Handling:**

For soil samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards (3).

For clinical samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards. (4,5). After use, contaminated materials must be sterilized by autoclaving before discarding.

#### Warning and Precautions :

InVitro Diagnostic use. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

### **Limitations :**

1. This medium is general purpose medium and may not support the growth of fastidious organisms.

2. Further biochemical and serological tests must be carried out for complete identification.

### **Performance and Evaluation**

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

## **Quality Control**

AppearanceCream to yellow homogeneous free flowing powderGellingFirm, comparable with 1.5% Agar gel.Colour and Clarity of prepared mediumLight amber coloured slight opalescent gel forms in Petri plates.

#### Reaction

Reaction of 2.7% w/v aqueous solution at 25°C. pH : 7.0±0.2

pН

6.80-7.20

#### **Cultural Response**

Cultural characteristics observed after an incubation at 25-30°C for upto 5 days.

Organism	Growth
Rhizobium leguminosarum	luxuriant
ATCC 10004	
Rhizobium meliloti ATCC	luxuriant
9930	
Agrobacterium tumefaciens	luxuriant
ATCC 33970	

#### **Storage and Shelf Life**

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°C. Use before expiry date on

the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

#### Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (4,5).

## Reference

- 1. Taylor W. E., 1958, The Examination of Waters and Water Supplies, 7th ed., Churchill Ltd, London, pg. 394, 778.
- 2. Dept. of Health and Social Security, 1982, report No.71 : HMSO, London, 54.
- 3. Subba Rao N. S., 1977, Soil Microorganisms and Plant Growth, Oxford and IBH Publishing Co., New Delhi.
- 4. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- 5. 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.

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IVD	In vitro diagnostic medical device
(€	CE Marking
-30°C	Storage temperature
	Do not use if package is damaged
	HiMedia Laboratories Pvt. Limited, Plot No.C-40, Road No.21Y, MIDC, Wagle Industrial Area, Thane (W) -400604, MS, India
EC REP	CE Partner 4U ,Esdoornlaan 13, 3951 DB Maarn The Netherlands, <u>www.cepartner</u> 4u.eu

#### Disclaimer :

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