

Dehydrated Culture Media Bases / Media Supplements

# **Technical Information**

# **Glucose Yeast Peptone Agar**

## Product Code: DM 1757

Application: - Glucose Yeast Peptone Agar is recommended for isolation of yeasts from soil specimens.

Composition**				
Ingredients	Gms / Litre			
Peptic digest of animal tissue	10.000			
Yeast extract	5.000			
Dextrose	20.000			
Agar	15.000			
Final pH ( at 25°C)	7.0±0.2			
**Formula adjusted, standardized to suit performance param	eters			

## **Principle & Interpretation**

Yeasts are unicellular organisms that reproduce by budding. Their phenotypic features (microscopic and morphological) usually appear similar for different genera and are not helpful in their isolation in pure culture. Glucose Yeast Peptone Agar as described by Subba Rao<sup>(1)</sup> with a slight modification in agar concentration is used for isolating yeasts from soil specimens. This is a highly nutritious medium, which may be used not only for isolating yeasts but for isolating some fastidious microorganisms also. Yeasts grow well on a minimal medium containing only dextrose and salts. The addition of protein and yeast cell extract hydrolysates allows faster growth so that during exponential or log-phase growth, doubling time of 90 minutes is observed <sup>(2)</sup>.

Peptic digest of animal tissue provides nitrogenous nutrients especially the amino acids and peptides and yeast extract supply vitamin B complex. Dextrose is the readily available source of energy and a good carbohydrate source for yeasts.

## Methodology

Suspend 50 grams of powder media in 1000 ml distilled water. Shake well & heat to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well and pour into sterile Petri plates.

# Quality Control

Physical Appearance Cream to yellow homogeneous free flowing powder

Gelling

Firm,comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Light to medium amber coloured, clear to slightly opalescent gel forms in Petri plates

**рН** 7.0<u>+</u> 0.2

pH range 6.8-7.2

#### Cultural Response/Characteristics

DM 1757 Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organism	lnoculum (CFU)	Growth	Recovery
Saccharomyces cerevisiae	50-100	luxuriant	>=70%
ATCC 9763			/ / 0/0





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## Storage and Shelf Life

Dried media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label. Prepared Media: 2-8<sup>0</sup> in sealable plastic bags for 2-5 days.

### **Further Reading**

1. Subba Rao N. S., 1977, Soil Microorganisms and Plant Growth, Oxford and IBH Publishing Co., New Delhi.

 Ausubel, Brent, Kingston, Moore, Seidman, Smith and Struhl, 1994, Current Protocols in Molecular Biology, Current Protocols, Brooklyn, N.Y.

#### Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
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