

Glucose Yeast Extract Agar

Intended Use

Glucose Yeast Extract Agar is used for enumeration of *Lactobacilli* in pharmaceutical preparations.

Summary

Glucose Yeast Extract Agar is prepared according to the formula described by Evans and Niven and Rogosa *et al.*, and is used for enumeration and cultivation of *Lactobacilli* in pharmaceutical preparations.

Principle

The medium contains a variety of salts like sulphates, phosphates to support the growth of *Lactobacilli*. Necessary nitrogenous nutrients for *Lactobacilli* are provided by peptone and yeast extract. Glucose is the source of fermentable carbohydrate. The metallic salts are sources of ions essential for the replication of lactic acid bacteria.

Formula*

Ingredients	g/L
Yeast Extract	5.0
Peptone	5.0
Glucose	2.0
Dipotassium Phosphate	0.5
Monopotassium Phosphate	0.5
Magnesium Sulphate	0.3
Manganese Sulphate	0.01
Sodium Chloride	0.01
Cobalt Sulphate	0.0016
Copper Sulphate	0.0016
Zinc Sulphate	0.0016
Agar	15.0
Final pH (at 25°C)	6.8 ± 0.2

*Adjusted to suit performance parameters

Storage and Stability

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of Specimen

Pharmaceutical sample

Specimen Collection and Handling

Ensure that all samples are properly labelled.

Follow appropriate techniques for handling samples as per established guidelines.

Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure.

The samples must be stored and tested within the permissible time duration.

After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions

1. Suspend 28.32 g of the powder in 1000 mL purified / distilled water.
2. Mix thoroughly.
3. Boil with frequent agitation to dissolve the powder completely.
4. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control

Dehydrated appearance: Beige coloured, homogenous, free flowing powder.

Prepared Appearance: Yellow coloured, slightly opalescent gel forms in petridishes.

Cultural response: Cultural characteristics observed after an incubation of 24-48 hours at 30°C-35°C.

Organism (ATCC)

Lactobacillus rhamnosus (9595)

Lactobacillus leichmanni (7830)

Growth

Good

Good

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Evans and Niven, 1951, J. Bacteriol., 62:599.
2. Rogosa M., Mitchell J. A. and Wiseman R. F., 1951, J. Bacteriol., 62 :132.
3. Seppo Salminen, Atte von Wright and Arthur Ouweh and, Lactic Acid Bacteria., Microbiological and Functional Aspects, 3rd Ed., Marcel and Dekker. NY. Basel.
4. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201070090100	Dehydrated Culture Media	100 g
201070090500	Dehydrated Culture Media	500 g

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.
