

Product Data Sheet

GLUCOSE YEAST EXTRACT AGAR Product No. GB-DCM-00242-1A

INTENDED USE

For cultivation of Lactobacilli in pharma products.

PRODUCT 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.

Product Specifications

Ingredients	Gms / Ltr		
Peptone	5.000		
Yeast extract	5.000		
Dextrose(Glucose)	2.000		
Potassium dihydrogen phosphate	2.000		
Dipotassium hydrogen phosphate	0.500		
Magnesium sulphate	0.300		
Sodium chloride	0.010		
Manganese sulphate	0.010		
Zinc sulphate	0.0016		
Copper sulphate	0.0016		
Cobalt sulphate	0.0016		
Agar	15.000		

PRINCIPLE

The medium contains variety of salts like sulphates, phosphates to support the growth of Lactobacilli. Necessary nitrogenous and carbonaceous compounds, long chain amino acids, vitamins and essential growth 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.



INSTRUCTION FOR USE

- Dissolve 28.32 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: Light yellow to beige homogeneous free flowing powder.

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

pH (at 25°C): 7.2 ± 0.2

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Lactobacillus acidophilus	4356	50-100	Good- Luxuriant	>=50%	35-37°C	24 - 48 Hours
Lactobacillus delbrueckii subsp. bulgaricus	11842	50-100	Good- Luxuriant	>=50%	35-37°C	24 - 48 Hours
Lactobacillus casei	9595	50-100	Good- Luxuriant	>=50%	35-37°C	24 - 48 Hours

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.

This product is for research use only.