

**DEXTROSE AGAR****TM 334**

For cultivating of a wide variety of microorganisms with or without blood

Composition

Ingredients	Gms/Ltr.
Agar	15.00
Dextrose	10.00
Tryptose	10.00
Sodium chloride	5.00
Beef extract	3.00

* Dehydrated powder, hygroscopic in nature, store, in a dry place in tightly- sealed containers below 25°C and protect from direct Sunlight.

Instructions for use

Dissolve 43gms in 1000ml distilled water. Gently heat to boiling with gentle swirling and dissolve the medium is completely. Sterilize by autoclaving at 15psi (121°C) for 15 minutes. Cool to 50-60°C and dispense as desired. If desired, sterile defibrinated sheep blood may be supplemented to sterile Dextrose Agar media to a final concentration of 5% (v/v), for enrichment and growth of fastidious organisms.

Appearance: Light amber colour, very slightly opalescent gel. After addition of sterile defibrinated sheep blood, cherry red colour, opaque gel.

pH (at 25°C): 7.3 ± 0.2

Principle

DEXTROSE AGAR is used for cultivating of a wide variety of microorganisms with or without blood. The medium consists of tryptose and beef extract, as the sources for nitrogen and vitamins required for organism growth. High concentration of Dextrose is added as an energy source for early and luxuriant growth of organisms. Such a high dextrose concentration interferes with the haemolytic reaction, hence, this medium is not recommended for study of haemolytic pattern. Sodium chloride maintains the osmotic balance. Agar acts as a solidifying agent.

Interpretation

Cultural characteristics observed after inoculating (10^3 CFU/ml), on incubation at 35°C for 18 - 48 hours.

Microorganisms	ATCC	Inoculum (CFU/ml)	Growth w/o blood	Growth w/ blood
<i>Escherichia coli</i>	25922	10^3	Good	Luxuriant
<i>Staphylococcus aureus</i>	25923	10^3	Good	Luxuriant
<i>Streptococcus pneumoniae</i>	6305	10^3	Good	Luxuriant
<i>Streptococcus pyogenes</i>	19615	10^3	Fair	Luxuriant
<i>Neisseria meningitidis</i>	13090	10^3	Poor	Luxuriant



PRODUCT DATA SHEET

References

1. Norton, J. 1931. J. Lab. Clin. Med. **17**:585.
2. MacFaddin, J.F. 1985. Media for isolation-cultivation-identification-maintenance of medical bacteria, Vol. 1. Williams & Wilkins, Baltimore, MD.
3. Downes, F.P. and Ito, K. (Eds). 2001. Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, DC.