

Glucose Broth (Dextrose Broth)

A liquid medium designed for the isolation, cultivation, and enumeration of various microorganisms

REF: BS.1/NZ01.100.0100	100 Gram	REF: BS.1/NZ01.250.0250	250 Gram
REF: BS.1/NZ01.500.0500	500 Gram		

PRINCIPLE AND INTERPERTATION :

This version of Glucose broth is prepared without meat extract, making dextrose the sole carbohydrate in the medium. It serves as a liquid culture medium that promotes faster growth, as most microorganisms utilize glucose as their energy source. However, this medium is not buffered, which can lead to strong acidification during fermentation and potentially affect its performance. Although, it is still frequently used in blood cultures, it has largely been replaced by other media with better buffering capacity. Due to the relatively high glucose content, it is advisable to use freshly prepared medium with a short sterilization time to avoid the formation of toxic furfurals. On the other hand, its simple formulation makes it ideal for testing gas production from glucose when using Durham tubes, as it does not contain any indicators that could interfere with the results.

MEDIA COMPOSITION

Item	Formula per liter of medium
Tryptone (from Casein)	10.00 gm
Dextrose	5.00 gm
Sodium chloride	5.00 gm

Final pH 7.2 ± 0.2

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

PRECAUTIONS AND WARNINGS

Media to be handled by entitled and professionally educated person. Do not ingest or inhale.

Good Laboratories practices using appropriate precautions should be followed in:

- Wearing personnel protective equipment (overall, gloves, glasses,).
- Do not pipette by mouth.
- In case of contact with eyes or skin; rinse immediately with plenty of soap and water. In case of severe injuries; seek medical advice immediately.
- Respect country requirement for waste disposal.

S56: dispose of this material and its container at hazardous or special waste collection point.

S57: use appropriate container to avoid environmental contamination.

S61: avoid release in environment.

For further information, refer to the Glucose Broth material safety data sheet.

STORAGE AND STABILITY

BioScien Glucose Broth Store between 10-30°C in a tightly closed container and the prepared medium at 15-25°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.

PREPARATION

Suspend 20 grams in 1000 ml purified / distilled water. Heat if necessary to dissolve the medium completely. Dispense in tubes containing inverted Durhams tubes. Sterilize by autoclaving at 118°C for 15 minutes. Cool to 45-50°C.

Deterioration

The color of **BioScien** Glucose Broth color Cream to yellow homogeneous free flowing powder. prepared medium Light yellow coloured, clear solution without any precipitate.

EQUIPMENT REQUIRED NOT PROVIDED

- Sterile petri dishes
- Incubator
- Autoclave

PERFORMANCE CHARACTERISTICS

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

Organisms (ATCC)	Growth
Escherichia coli ATCC 25922	luxuriant
Salmonella Typhi ATCC 6539	luxuriant
Shigella flexneri ATCC 12022	luxuriant
Staphylococcus epidermidis ATCC 12228	luxuriant
Staphylococcus aureus ATCC 25923	luxuriant
Streptococcus pyogenes ATCC 19615	luxuriant

QUALITY CONTROL

To ensure adequate quality control, it is recommended that positive and negative control included in each run. If control still out of range please contact **BioScien** technical support.

REFERENCE

1. APHA, Recommended Methods for the Microbiological Examination of Food, APHA Inc, New York, 1958
2. F P Downes, K Ito, Compendium of Methods for the Microbiological Examination of Food 4th ed, APHA, Washington, 2001
3. J D MacFaddin, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, William & Wilkins Co, Baltimore, 1985

SYMBOLS IN PRODUCT LABELLING		
	For in-vitro diagnostic use	 Number of <n> test in the pack
	Batch Code/Lot number	 Caution
	Catalogue Number	 Do not use if package is damaged
	Temperature Limitation	 Consult Instruction for use
	Expiration Date	
	Manufactured by	