

## TM 737 - GLUCOSE BROTH (W/O pH indicator)

### INTENDED USE

For study of dextrose fermentation.

### PRODUCT SUMMARY AND EXPLANATION

Waisbren, Carr and Dunnett used Glucose Broth for testing antibiotic sensitivity by the tube dilution method. This medium is also used to study glucose fermentation where pH indicator is not desired. Glucose Broth was developed to exclude the ingredients like beef extract that would contain small amount of carbohydrates. Thus the glucose fermentation studies can be performed more accurately using only pure 0.5% glucose as the source of carbohydrate.

### COMPOSITION

Ingredients	Gms / Ltr
Tryptone	10.000
Dextrose (Glucose)	5.000
Sodium chloride	5.000

### PRINCIPLE

Tryptone and glucose serve as sources of essential nutrients and energy respectively to support the growth of many fastidious organisms. The tryptone used is free of carbohydrates and glucose acts as source of energy by being the only fermentable carbohydrate. The broth gives rapid growth and hastens the early development of injured cells. Sodium chloride maintains the osmotic equilibrium.

### INSTRUCTION FOR USE

- Dissolve 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.

### QUALITY CONTROL SPECIFICATIONS

**Appearance of Powder** : Cream to yellow homogeneous free flowing powder.

**Appearance of prepared medium** : Light yellow coloured, clear solution without any precipitate.

**pH (at 25°C)** : 7.3±0.2

### INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Gas	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	25922	50-100	Luxuriant	Positive reaction	35-37°C	18-24 Hours



<i>Salmonella</i> Typhi	6539	50-100	Good-luxuriant	Negative reaction	35-37°C	18-24 Hours
<i>Shigella flexneri</i>	12022	50-100	Luxuriant	Negative reaction	35-37°C	18-24 Hours
<i>Staphylococcus aureus subsp. aureus</i>	25923	50-100	Luxuriant	Negative reaction	35-37°C	18-24 Hours
<i>Staphylococcus epidermidis</i>	12228	50-100	Luxuriant	Negative reaction	35-37°C	18-24 Hours
<i>Streptococcus pyogenes</i>	19615	50-100	Luxuriant	Negative reaction	35-37°C	18-24 Hours

**PACKAGING:**

In pack size of 100 gm and 500 gm bottles.

**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.

**REFERENCES**

1. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2<sup>nd</sup> Edition.
2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
3. Waisbren, Carr and Dunnett, 1951, Am. J. Clin. Path., 21:884.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative	 CE European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

**\*For Lab Use Only**  
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