

TM 712 – DEV GLUCOSE BROTH

INTENDED USE

For detection of microbial decomposition of glucose.

PRODUCT SUMMARY AND EXPLANATION

DEV Glucose Broth is used for detection of microbial decomposition of glucose. This medium is also suitable for the detection of *E.coli* for bacteriological control of drinking water.

COMPOSITION

Ingredients	Gms / Ltr
Meat peptone	10.000
Meat extract	3.000
Sodium chloride	5.000
Dextrose (Glucose)	10.000
Bromo cresol purple	0.020

PRINCIPLE

The medium consists of Meat peptone and Meat extract which provides nitrogenous nutrients to the organisms. Sodium chloride maintains the osmotic equilibrium of the medium. Bromo Cresol purple is the pH indicator which turns yellow at acidic pH. Gas formation is seen in Durham's tube.

INSTRUCTION FOR USE

- Dissolve 28.02 grams in 1000 ml purified/distilled water.
- Heat if necessary to dissolve the medium completely. Dispense in tubes containing Durham's tubes and sterilize by autoclaving at 10psi pressure (115°C) for 20 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Light yellow to light green homogeneous free flowing powder.

Appearance of prepared medium: Light purple coloured clear solution.

pH (at 25°C) : 7.4 ± 0.1

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Acid	Gas	Incubation Temperature	Incubation Period
Alcaligenes faecalis	8750	50-100	Fair-good	Negative reaction, no colour change	Negative reaction	35-37 °C	18-24 Hours











Escherichia coli	25922	50-100	Good- luxuriant	Positive reaction, yellow colour	Positive reaction	35-37 °C	18-24 Hours
Enterobacter aerogenes	13048	50-100	Good- luxuriant	Positive reaction, yellow colour	Positive reaction	35-37 °C	18-24 Hours
Klebsiella pneumoniae	13883	50-100	Good- luxuriant	Positive reaction, yellow colour	Positive reaction	35-37 °C	18-24 Hours
Salmonella Typhimurium	14028	50-100	Good- luxuriant	Positive reaction, yellow colour	Positive reaction	35-37 °C	18-24 Hours

PACKAGING:

In pack size of 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.

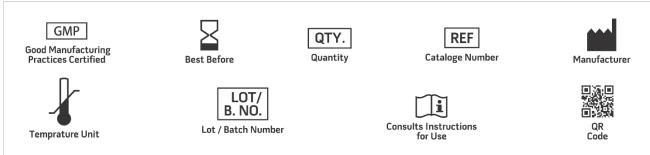
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

- 1. Baird R.B., Eaton A.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington,
- 2. Fluka Chemie AG-Laboratroy Chemical and Analytical Reagents 1999 2000/-(424).
- 3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- 4. 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.



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

Revision: 08 Nov., 2019























