CM 20566 – DEXTROSE PEPTONE BROTH

INTENDED USE

For routine sterility testing and for cultivation of fastidious organisms.

PRODUCT SUMMARY AND EXPLANATION

DextrosePeptoneBrothisformulatedas per the procedures described by Williams for the cultivation of microorganismsthat are fastidious, or present in small numbers and also for the enumeration of thermophilic bacteria responsible forflat-sour spoilage of canned foods. This medium is recommended by AOAC for the routine cultivation purpose. Dextrose is the readily available energy source for most of the organisms. Dextrose Peptone Broth can also be used for routinesterility testing. Supplementation of the medium with blood provides additional nutrients.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	20.000
Dextrose (Glucose)	10.000
Sodium chloride	5.000

PRINCIPLE

Themediumconsists of Peptone supplies amino acids, peptides etc. for the growth of the organisms. Dextrose is the readily available energy source for the most of the organisms. Sodium chloride maintains he osmotic balance of the medium.

INSTRUCTION FOR USE

Dissolve 35 grams in 1000 ml purified/distilled water.
Heat if necessary to dissolve the medium completely.
Sterilize by autoclaving at 15psi pressure (121°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 to amber coloured, clear to slightly opalescent solution in tubes.
pH (at 25°C) : 7.2 ± 0.2

INTERPRETATION

Culturalcharacteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Luxuriant	35-37 °C	18-48 Hours

Pseudomonas aeruginosa	27853	50-100	Luxuriant	35-37 °C	18-48 Hours
Streptococcus pyogenes	19615	50-100	Luxuriant	35-37 °C	18-48 Hours
Staphylococcus aureus subsp. aureus	25923	50-100	Luxuriant	35-37 °C	18-48 Hours

PACKAGING:

Inpacksizeof500 gm bottles.

STORAGE

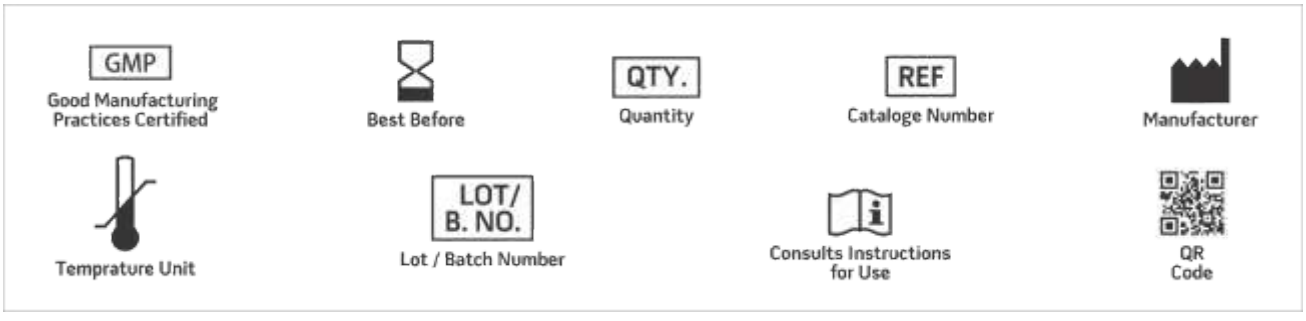
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided 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

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

REFERENCES

1. Association of Official, Analytical, Chemists, 1978, Bacteriological Analytical Manual, 5th Ed, AOAC, Washington, D.C.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. 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.
4. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
5. Williams O.B., 1936, Food Res., 1(3):217.



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

*For LabUse Only