TM 760 – LEGIONELLA ENRICHMENT BROTH BASE

INTENDED USE
For enrichment of *Legionella* species.

PRODUCT SUMMARY AND EXPLANATION
Legionella is a gram-negative bacterium and is the causative agent of Legionnaires disease. Natural sources of *Legionella* are fresh water ponds and creeks. Transmission to humans takes place via inhalation of aerosols from cooling towers, hot water systems or fountains containing the bacteria. Legionella Enrichment Broth is recommended for enrichment of *Legionella*.

COMPOSITION

Ingredients	Gms / Ltr
Yeast extract	5.000
Proteose peptone	15.000
Liver extract	2.500
Sodium chloride	5.000

PRINCIPLE
This medium consists of Yeast extract, iverL extract and proteose peptone which provide necessary nitrogenous nutrients for better recovery of *Legionella*. Sodium chloride helps to maintain osmotic balance. L-Cysteine hydrochloride and ferric pyrophosphate satisfy the specific nutritional requirements. Adding 50 ml of sterile defibrinated horse blood can further enrich this medium.

INSTRUCTION FOR USE
- Dissolve 13.75 grams in 500 ml purified / distilled water.
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C and aseptically add rehydrated contents of 1 vial of Legionella Growth Supplement.
- Mix well and dispense into sterile tubes or flasks as desired.

QUALITY CONTROL SPECIFICATIONS
Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Yellow coloured clear to slightly opalescent solution in tubes.
pH (at 25°C) : 6.9 ± 0.2

INTERPRETATION
Cultural characteristics observed with added Legionella Growth Supplement after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Legionella dumoffii	33343	50-100	Good-luxuriant	35-37°C	48-72 Hours

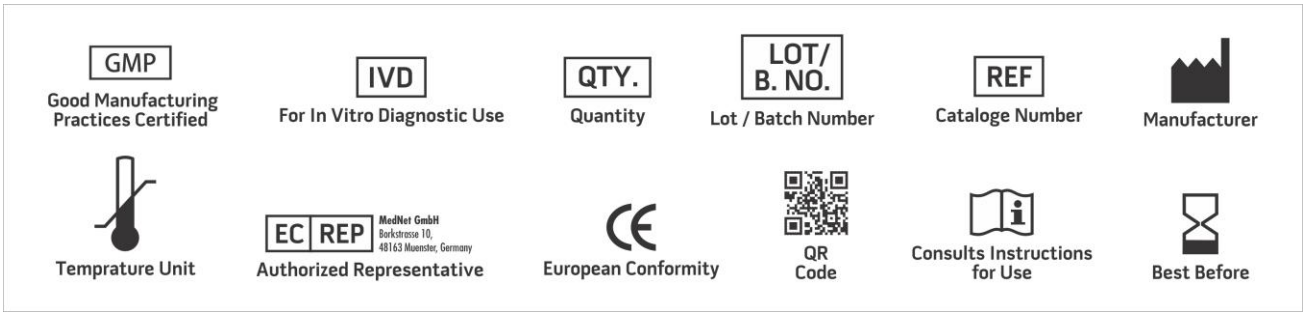
Legionella pneumophila	33153	50-100	Good-luxuriant	35-37°C	48-72 Hours

PACKAGING:
In pack size of 100 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, D.C.
2. Collee J. G., Duguid J. P., Fraser A. G., Marmion B. P., (Eds.), Mackie and McCartney, Practical Medical Microbiology, 1989, 13th Edition, Churchill Livingstone.
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