

Product Data Sheet

LEPTOSPIRA MEDIUM BASE

Product No. GB-DCM-00330-1A

INTENDED USE

For cultivation and maintenance of Leptospira species.

PRODUCT SUMMARY

Leptospirosis is an acute febrile disease caused by members of the genus Leptospira. Direct culture of blood is the most reliable way to detect Leptospira during the first week of illness. After the first week of illness and for several months thereafter, leptospirens may be isolated by direct culture of undiluted urine specimens. By autopsy, leptospirens may be isolated from kidney and liver tissues as well as from blood and urine. The Leptospira Medium Base was originally formulated by Ellinghausen and McCullough and modified by Johnson and Harris. Leptospira Medium Base is enriched by the addition of Leptospira Enrichment.

Product Specifications

Ingredients	Gms / Ltr
Disodium hydrogen phosphate	1.000
Potassium dihydrogen phosphate	0.300
Sodium chloride	1.000
Ammonium chloride	0.250
Thiamine	0.005

INSTRUCTION FOR USE

- Dissolve 2.56 grams in 900 ml purified / distilled water.
- Swirl 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 100 ml (equivalent to 5 vials) of sterile Leptospira Enrichment.
- Mix well and dispense aseptically in sterile tubes or bottles as desired.

PRINCIPLE

This medium provides long chain fatty acids as the carbon, energy source and vitamin for the growth of *Leptospira*. The salts supply essential nutrients for the growth of the organisms. Phosphates form buffering system while sodium chloride maintains osmotic equilibrium and also provides essential ions. *Leptospira* metabolizes the fatty acids by beta-oxidation and the metabolic end products formed are acetate and carbon dioxide.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder White to yellow homogeneous free flowing powder.

Appearance of prepared : Basal medium : Colourless clear solution; After addition of TS 078 :

Light yellow coloured clear solution in tubes.

pH (at 25°C) : 7.5± 0.2

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Leptospira interrogans sero. canicola</i>	23470	50-100	Good-Luxuriant	35-37°C	28-48 Hours
<i>Leptospira kirschneri</i>	23604	50-100	Good-Luxuriant	35-37°C	28-48 Hours

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.

This product is for research use only.