CM 20177 – ASPARAGINE BROTH

INTENDED USE

For identification and enumeration of Pseudomonas aeruginosa.

PRODUCT SUMMARY AND EXPLANATION

Histoplasmacapsulatum, a dimorphic fungus causes histoplasmosis, a systemic fungal disease. H. capsulatum is an obligate intracellular organism residing in macrophages of the reticuloendothelial system. Of current concern is the increased incidence of histoplasmosis in patients with AIDS. Coccidiodes immitis, the causative agent of coccidioidomycosis (Valley fever) is endemic in hot regions with dry climate and alkaline soil. Patients with AIDS are at a risk of developing coccidioidomycosis.

Asparagine Broth is a chemically defined medium used for the preparation of Coccidioidin and Histoplasmin antigens. Histoplasma capsulatum or Coccidioides immitis are cultured in this medium for 1-3 months at 37°C till the static phase

is obtained. At this stage, cells are autolyzed and a mixture of antigen haptens is prepared. Cell free filtrate from this medium is sterilized by filtration and used as the antigen. Preparation, standardization and administration of histoplasmin and the interpretation of delayed cutaneous hypersensitivity tests are identical to those for Coccidioidin.

COMPOSITION

Ingredients	Gms / Ltr
L-Asparagine	7.000
Ammonium chloride	7.000
Dipotassium phosphate	1.310
Sodium citrate	0.900
Magnesium sulphate	1.500
Ferric citrate	0.300
Dextrose	10.000

PRINCIPLE

Theaminoacid asparagine, favours the synthesis of antigens from Histoplasma and Coccidiodes. Salts included in the medium buffer the medium well. Dextrose and slightly acidic pH of the medium helps for the luxuriant growth of the fungi.

INSTRUCTION FOR USE

Dissolve 28.01 grams in 1000 ml distilled water containing 25 ml glycerol.
Mix thoroughly and then dispense in a wide bottom flask, to give a depth of 1 to 1.5 inches.
Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Off-white to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Yellow coloured clear solution with brownish precipitate.
pH (at 25°C)	: 6.8±0.2

INTERPRETATION

Culturalcharacteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Coccidiodes immitis	-	50-100	Luxuriant	35-37°C	1 week
Histoplasma capsulatum	10230	50-100	Luxuriant	35-37°C	1 week

PACKAGING:

Inpacksizeof100 gm and 500 gm bottles.

STORAGE

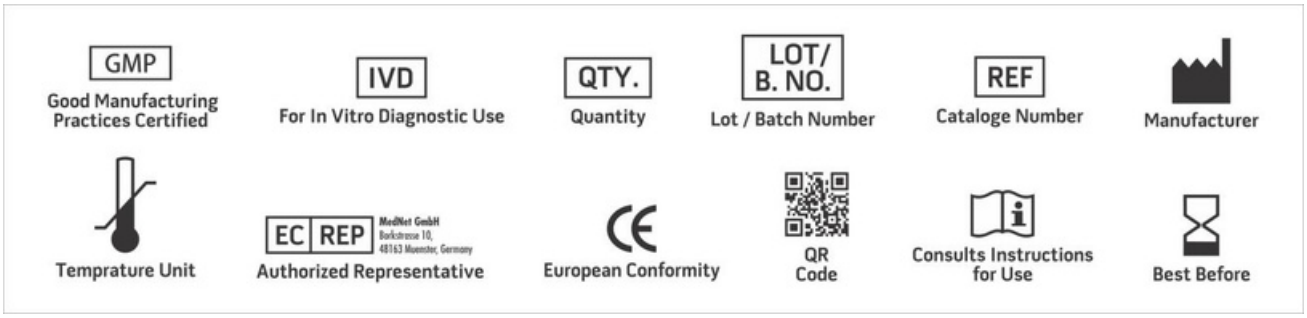
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided 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. Jone P. G., Cohen R. L., Bates D. H., et al., 1983, Six Transm. Dis, 10: 202-204.
2. Smith C. E., Pappagianis D., Levine H. B., and Saito M., 1961, Bact. Rev., 25:310.
3. Emmons C. W., Olson B. J., and Eldridge W. W., 1945, Pub. Hlth. Rept., 60:1383.
4. Emmons W. W., Binford C. H., Utz J. P., and Kwon-Chung K. J., (Eds.),1977, Medical Mycology, 3rd Ed., Lea and Febiger, Philadelphia.



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

*For LabUse Only