

## TM 1137 – AEROMONAS STARCH DNA AGAR BASE

### INTENDED USE

For selective isolation and enumeration of *Aeromonas* species from food and clinical samples.

### PRODUCT SUMMARY AND EXPLANATION

*Aeromonas* species occur widely in soil and water where these species cause disease in fish and amphibians. Also found in untreated and chlorinated drinking water, raw food and raw milk. It is observed that the major cause of gastrointestinal infections by *Aeromonas* species is because of ingesting infected water. It was noted that the recoveries of the *Aeromonas* species was very low from fresh foods of animal origin when cultivated on clinical media and difficulties were encountered in distinguishing the *A. hydrophila* group from the background microflora. Polumbo et al had formulated Starch Ampicillin Agar with starch hydrolysis as the differential trait and ampicillin to suppress the background microflora. *Aeromonas* Starch DNA Agar Base allows additional selective isolation of *Aeromonas* based on DNA hydrolysis.

### COMPOSITION

Ingredients	Gms / Ltr
Peptone	15.000
Soya peptone	5.000
Sodium chloride	5.000
Corn starch	10.000
Deoxyribonucleic acid (DNA)	2.000
Agar	15.000

### PRINCIPLE

Peptone and Soya Peptone provide essential nitrogen and carbon source, long chain amino acid, vitamins and other essential nutrients. Sodium chloride maintains osmotic equilibrium.

### INSTRUCTION FOR USE

- Dissolve 52.0 grams in 1000 ml purified / distilled water.
- Heat to boiling 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 Ampicillin Supplement.
- Mix well and pour into sterile Petri plates.

### QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light yellow coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 7.5±0.2

### INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Aeromonas hydrophila</i>	7966	50-100	Luxuriant	$\geq 70\%$	35-37°C	24 Hours
<i>Escherichia coli</i>	25922	$\geq 10^3$	Inhibited	0%	35-37°C	24 Hours
<i>Staphylococcus aureus</i> <i>subsp.aureus</i>	25923	$\geq 10^3$	Inhibited	0%	35-37°C	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. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
2. Buchanan R. L. and Palumb S. A., 1985, J. Food Safety, 7:15.
3. Burke V. et al 1984, Appl. Environ. Microbiol., 48:361.
4. Downes F. P. and Ito K., (Ed.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., American Public Health Association, Washington, D.C.
5. Eddy B.P., 1962, For the studie on *Aeromonas*. I. Additional strains and supplementary biochemical tests. J. Appl. Bacteriol. 25:137.
6. George W. L., 1987, Clin. Microbiol., Newsletter 9, 121.
7. Greenberg A. E., Clesceri L. S. and Eaton A. D., (Eds.), 2005, Standard Methods for the Examination of Water and Wastewater, 21st ed., APHA, Washington, D.C.
8. Holmberg S. D., et al, 1986, Ann. Intern. Med., 105:683.
9. Polumbo, S.A., Maxino, F., Williams, A.C., Buchanam, R.L. and Thayer, D.W. 1985, Starch Ampicillin Agar for Quantitative Detection of *Aeromonas hydrophila*, Appl. Environ. Microbiol, 50:1027.

 Good Manufacturing Practices Certified	 For In Vitro Diagnostic Use	 Quantity	 Lot / Batch Number	 Catalogue Number	 Manufacturer
 Temperature Unit	 Authorized Representative <small>MedNet GmbH Birkstrasse 10, 48163 Münster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

**\*For Lab Use Only**  
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