



**AEROMONAS ISOLATION MEDIUM BASE**

**TM 1136**

**INTENDED USE**

For selective & differential isolation of *Aeromonas hydrophila* from clinical & environmental samples.

**COMPOSITION**

Ingredients	Gms\Ltr
Agar	12.500
Sodium thiosulphate	10.670
Peptone	5.000
Sodium chloride	5.000
Xylose	3.750
L-Lysine hydrochloride	3.500
Yeast extract	3.000
Sorbose	3.000
Bile salts	3.000
Inositol	2.500
L-Arginine hydrochloride	2.000
Lactose	1.500
Ferric ammonium citrate	0.800
Bromo thymol blue	0.040
Thymol blue	0.040

**PRODUCT SUMMARY AND EXPLANATION**

*Aeromonas* Isolation Medium is based on the formulation of Ryan. It is a modification of XLD Medium, which supports the growth of *Aeromonas*, *Plesiomonas*, *Proteus*, as well as *Enterobacteriaceae* so the medium is used as universal medium in the investigation of enteric disease. The selectivity of the medium is increased by the addition of Ampicillin (TS 099). The effectiveness of ampicillin as a selective agent for *Aeromonas* spp has been reported by several workers.

The utility of *Aeromonas* Isolation Medium and its superiority over some other formulae for detection of *Aeromonas* spp. in tap water, bottled water and foods including meat, poultry, fish and seafoods has been reported. *Aeromonas* Isolation Medium is specified by the MAFF/DHS Steering Group on the Microbiological Safety of Food for detection and enumeration of *Aeromonas hydrophila* in clinical specimens. *Aeromonas* spp. occur widely in soil and water, where they cause diseases in fish and amphibians. They also occur in untreated and chlorinated drinking water, raw



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## PRODUCT DATA SHEET

foods and raw milk. It is considered that the major cause of gastrointestinal infections by *Aeromonas* spp is from ingesting infected water.

### PRINCIPLE

Peptone special and yeast extract provide essential nitrogenous and carbonaceous compounds, long chain amino acids, vitamins and other essential growth nutrients. The salts provide the essential minerals and electrolytes and Sodium chloride maintains osmotic equilibrium. Lactose, sorbose, inositol and xylose are sources of carbon and energy whereas, Ampicillin, bile salts and sodium thioglycollate makes the medium selective. Complex sodium thiosulfate-ferric ammonium citrate produces black-centered colonies when ferric ammonium citrate precipitates (H<sub>2</sub>S production). Bromothymol blue and thymol blue act as indicators giving the characteristic colony colour.

### INSTRUCTION FOR USE

1. Dissolve 56.3gms in 1000ml distilled water.
2. Gently heat to boiling with gentle swirling and dissolve the medium is completely. DO NOT AUTOCLAVE
3. Cool to 45 - 50°C and add rehydrated contents of 1 vial of *Aeromonas* Selective Supplement (TS 099).
4. Mix well and pour into sterile Petri plates.

### QUALITY CONTROL SPECIFICATIONS

**Appearance of Powder:** Light yellow to light tan colour, homogeneous free flowing powder

**Appearance of prepared medium:** Dark green colour, clear to slightly opalescent gel

**pH (at 25°C):** 8.0 ± 0.2

### INTERPRETATION:

Cultural characteristics observed after incubation at 35-37°C for 18-24 hours.

Microorganisms	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Appearance of colony
<i>Aeromonas hydrophila</i>	7966	50-100	Luxuriant	≥ 50%	Dark green, opaque with dark centre
<i>Pseudomonas aeruginosa</i>	27853	50-100	Good-Luxuriant	≥ 50%	Blue/Grey, translucent pinpoint
<i>Escherichia coli</i>	25922	50-100	Inhibited	0%	No change
<i>Salmonella Typhi</i>	6539	50-100	Inhibited	0%	No change
<i>Shigella flexneri</i>	12022	50-100	Inhibited	0%	No change

**Manufacturer Address:** A- 902A, RIICO Industrial Area, Phase III, Bhiwadi-301019.

**Authorized Representative:** MedNet GmbH, Borkstrasse 10, 48163 Munster, Germany.

Page 2



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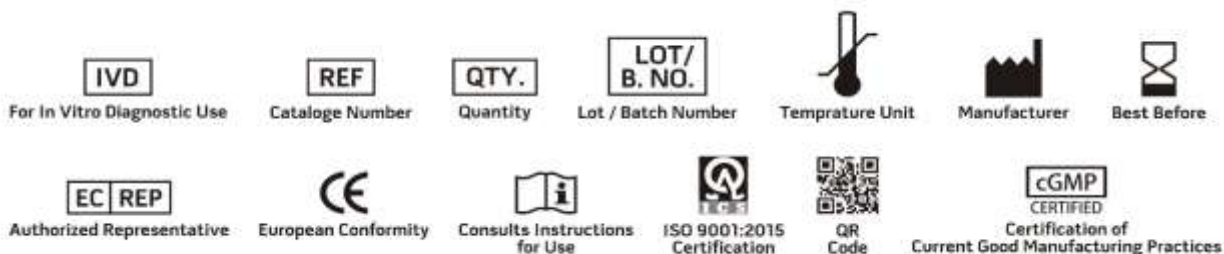
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### STORAGE & STABILITY

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°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.

### REFERENCES

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