TM 1482 – AEROMONAS PSEUDO SELECTIVE AGAR

INTENDED USE

For detecting *Pseudomonas* and *Aeromonas* species in foodstuffs and waste water.

PRODUCT SUMMARY AND EXPLANATION

Aeromonas may not be truly indigenous to the marine environment, but may have a transient existence after entering salt water via rivers or sewage inputs. Foods that come in direct contact with water are likely sources of motile aeromonads, with fish and seafood products most often contaminated. Motile aeromonads can survive at low temperatures and therefore have been associated with refrigerated animal products such as chicken, dairy products, raw milk and vegetables. The predominant organism found in these foods is *Pseudomonas* species with the motile aeromonads present in lower numbers. Pseudomonas are capable of causing spoilage because they are psychrotrophic and thus multiply at refrigeration temperatures. Also they attack various substances in the food to produce compounds associated with off-flavour and off-odours. Aero Pseudo Selective Agar medium has been proposed by Kielwein for detecting Pseudomonas and Aeromonas in foodstuffs, waste water and equipments used in the food industry.

COMPOSITION

Ingredients	Gms / Ltr
Sodium glutamate	10.000
Starch, soluble	20.000
Potassium dihydrogen phosphate	2.000
Magnesium sulfate	0.500
Phenol red	0.360
Agar	12.000

PRINCIPLE

The medium contains sodium glutamate and starch as the only sources of nutrients. Organisms other than *Aeromonas* and *Pseudomonas* are unable to metabolize these nutrients sources. *Aeromonas* degrades starch, producing acid. The acid produced causes the phenol red indicator to change from red to yellow. This reaction is not exhibited by *Pseudomonas*. Added Penicillin G improves the selectivity of the medium. The medium is made more selective by the addition of antimycotic agent namely Pimaricin.

INSTRUCTION FOR USE

- Dissolve 44.86 grams in 1000 ml 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.
- Add 100,000 IU Penicillin G sodium salt, 0.01 g Pimaricin, if desired.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Light yellow to pink homogeneous free flowing powder.
Appearance of prepared medium : Red coloured, clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 7.2±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	None-poor	0-10%	-	35-37°C	18-24 Hours
Staphylococcus aureus	25923	>=10^3	Inhibited	0%	-	35-37°C	18-24 Hours
Pseudomonas aeruginosa	27853	50-100	Good-luxuriant	>=50%	Red-violet surrounded by a red violet zone	35-37°C	18-24 Hours
Pseudomonas aeruginosa	9027	50-100	Good-luxuriant	>=50%	Red-violet surrounded by a red violet zone	35-37°C	18-24 Hours
Pseudomonas aeruginosa	10145	50-100	Fair-good	20-40%	Red-violet surrounded by a red violet zone	35-37°C	18-24 Hours
Aeromonas hydrophila	7966	50-100	Good-luxuriant	>=50%	Yellow surrounded by a yellow zone	35-37°C	18-24 Hours
Aeromonas caviae	15467	50-100	Good-luxuriant	>=50%	Yellow surrounded by a yellow zone	35-37°C	18-24 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.

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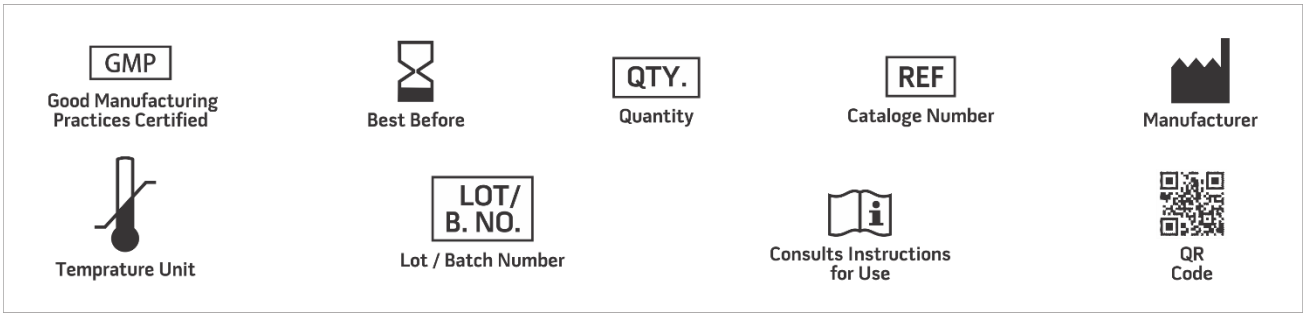

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

Revision: 08 Nov., 2019