m-AEROMONAS SELECTIVE AGAR BASE (HAVELAAR)
AEROMONAS SELECTIVE SUPPLEMENT

Base medium and selective supplement for the isolation of *Aeromonas*

Aeromonas Selective Agar (Havelaar): *A.hydrophila*

TYPICAL FORMULAS

Aeromonas Selective Agar Base (Havelaar) (g/l)

Tryptose	5.00
Yeast Extract	2.00
Dextrin	11.40
Sodium Chloride	3.00
Potassium Chloride	2.00
Magnesium Sulphate	0.10
Ferric Chloride	0.06
Sodium Desoxycholate	0.10
Bromothymol Blue	0.08
Agar	13.00

Aeromonas Selective Supplement (vial contents for 500 ml of medium)

Ampicillin	5 mg

DIRECTIONS

Suspend 18.35 g of m-Aeromonas Selective Agar Base (Havelaar) in 500 ml of cold distilled water. Heat to boiling with frequent agitation and sterilise by autoclaving at 121°C for 15 minutes. Cool to approximately 50°C and, under aseptic conditions, add the contents of one vial of Aeromonas Selective Supplement-Ampicillin (cat. N° 4240012) reconstituted with 5ml of sterile distilled water. Mix well and distribute into sterile 55mm dishes.
Final pH: 8.0 ± 0.2

Description

The significance of *Aeromonas* species as human pathogens is getting increasing attention (Holmberg and Farmer); many investigators have reported that the aquatic environment can be considered the biggest source of infection, Buchanan and Palumbo implicated *Aermonas* as potential food-poisoning agent.
m-Aeromonas Selective Agar Base supplemented with ampicillin, corresponds to the medium described by Havelaar, During and Versteegh. It is recommended by United States Environmental Protection Agency (USEPA), Method 1605, for the detection of *Aeromonas* in finished water by membrane filtration. The use of ampicillin suppresses adequately the background flora without having

any decrease in the *Aeromonas* recovery. Strains sensitive to 10 mg/l of ampicillin appear to occur at a frequency of 1% or less (Havelaar et al.).

Technique
Appropriate volumes or decimal dilutions of the samples are filtered using membrane filters 0.45µm pore size, and the filters are transferred onto the plates.
After 24 hours of incubation at 30°C in aerobic conditions, *Aeromonas* colonies show a visible yellow colour (dextrin fermentation). The detection of dextrin fermentation is considered by Havelaar to be highly specific and until now no dextrin negative *Aeromonas* strains have been found.
Confirm the presumptive detection with standard biochemical tests: oxidase and trehalose fermentation. If a colony is oxidase and trehalose positive, report as a confirmed *Aeromonas*.

User quality assurance (30°C-24 H)
Productivity control
A.hydrophila ATCC 7965: good growth
Selectivity control
E.coli ATCC 25922: inhibited

Storage
Dehydrated media: 10-30°C
Selective supplement: 2-8°C
User prepared plates: up to 7 days at 2-8°C

References
• Buchanan, R.L., Palumbo, S.A. (1985) J. Food Saf. **7**, 15-29
• Havelaar, A.H., During, M., Versteegh, J.F.M. (1987) J. App. Bact. **62**, 279-287
• Havelaar, A.H., Vonk, M (1988) Letters App. Bact. **7**, 169-171
• Holmberg, S.C., Farmer, J.J. (1984) Rev. Inf. Dis. **6**, 633-639
• Palumbo, S.A. et al. (1985) App. Environ. Microbiol. **50**, 1027- 1030
• United States Environmental Protection Agency (USEPA), Method 1605: *Aeromonas* in Finished Water by Membrane Filtration. September 2000- Draft

Packaging

4010192	**m-Aeromonas Selective Agar Base (Havelaar),**	**500 g (13.6 l)**
4240012	**Aeromonas Selective Supplement (Ampicillin), medium**	**10 vials, each for 500 ml of**