

**Product :
GLUTAMATE STARCH PSEUDOMONAS
AGAR (GSPA)**
Also known as

GSP Agar

Specification

 Semiselective and differential solid medium for the isolation of *Pseudomonas-Aeromonas* from very contaminated samples.

Formula * in g/L

Sodium L(+)-Glutamate.....	10.00
Soluble starch.....	20.00
Monopotassium phosphate.....	2.00
Magnesium sulfate.....	0.50
Phenol red.....	0.36
Agar.....	15.00

Final pH 7,2 ±0,2 at 25 °C

* Adjusted and /or supplemented as required to meet performance criteria

Directions

Suspend 47.86 g of powder in 1 L of distilled water and bring to the boil. Dispense in flasks and sterilize by autoclaving at 121°C for 15 minutes. Cool to 45-50°C and add 100.000 I.U. of sodium G penicillin and 0,01g of pimaricine per litre. Pour into sterile plates.

Technique

 Antibiotics are added to this medium after sterilization and cooling to 45-50°C, in such a way that final concentrations in the medium are 100.000 IU/ L of penicillin G and 0.01 g/L of piramicine (it may be replaced by amphotericin or nystatin). After solidification in plates, medium may be used by surface inoculation or by leaving for the membrane filters. *Aeromonas* colonies turn to yellow, and *Pseudomonas* ones do not. The incubation is performed at room temperature (25- 30°C) for 3 days. Sometimes, enterobacteria may also grow but very slowly with pinpoint colonies.

Quality control
Incubation temperature: 28 ±2 °C

Incubation time: 48-72 h

Inoculum: Practical range 100 ± 20 CFU. Min. 50 CFU (Productivity) / 10⁴-10⁶ CFU (Selectivity) according to ISO 11133:2014/Amd 1:2018. MF methods.

Microorganism
Growth
Remarks

<i>Aeromonas hydrophila</i> ATCC® 7966	Productivity > 0.50	Starch hydr. (+). Yellow medium.
<i>Pseudomonas aeruginosa</i> ATCC® 27853	Productivity > 0.50	Starch hydr. (-). Red-violet medium.
<i>Pseudomonas aeruginosa</i> ATCC® 9027	Productivity > 0.50	Starch hydr. (-). Red-violet medium.
<i>Escherichia coli</i> ATCC® 25922	Partial inhibition	-
<i>Staphylococcus aureus</i> ATCC® 25923	Inhibited	-

References

- CORRY, J.E.L., G.D.W. CURTIS & R.M. BAIRD (2012) Handbook of Culture Media for Food and Water Microbiology. 3rd Edition. Royal Society of Chemistry. Cambridge. UK
- PERALES, I. (2012) Culture media for the isolation of *Aeromonas* ssp and *Plesiomonas shigelloides* in Handbook of culture media for food and water microbiology, Chap. 20, 3rd edition by Corry, Curtis & Baird. RSC Publishing Co.
- STANIER, R., N. PALLERONI, M. DOUDOROFF. (1966) The aerobic pseudomonads: A taxonomic study. J. Gen. Microbiol. 42:159-271
- KIELWEIN, G. (1971) Die Isolierung und Differenzierung von Pseudomonaden aus Lebensmitteln. Arch G. Lebensmittelhyg. 22:29-37.
- KORTH, H. (1963) Ein Nährboden zur Züchtung von Pseudomonaden. Zbl.Bact.Parasit. Hyg. Abt. 190:225

Storage

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+4 °C to 30 °C).