

795. STETTERIA MEDIUM

Synthetic seawater (2 x conc.) (see below)	500.00	ml
NaHCO ₃	0.16	g
KH ₂ PO ₄	0.50	g
Trace element solution (see medium 141)	15.00	ml
NiCl ₂ x 6 H ₂ O solution (0.1% w/v)	3.00	ml
Peptone (BD Bacto)	2.00	g
Yeast extract (OXOID)	1.00	g
Na-resazurin solution (0.1% w/v)	0.50	ml
Sulfur, powdered	10.00	g
Na ₂ S x 9 H ₂ O	0.50	g
Distilled water	500.00	ml

Dissolve ingredients except sulfur and sulfide, then sparge medium with 80% N₂ and 20% CO₂ gas mixture for 30 - 45 min to make it anoxic. Dispense medium under same gas atmosphere into serum vials (e.g., 20 ml medium per 100 ml bottle) that contain already the appropriate amount of sulfur. After closing pressurize bottles to 2 bar overpressure using 80% H₂ and 20% CO₂ gas mixture, then heat at 100°C for 1.5 hours on each of 3 successive days. Before use add sulfide from a sterile anoxic stock solution prepared under 100% N₂ gas atmosphere. Adjust pH of complete medium to 6.0, if necessary. Incubate without shaking.

Synthetic seawater (2 x conc.):

NaCl	55.40	g
SrCl ₂ x 6 H ₂ O	0.03	g
MgSO ₄ x 7 H ₂ O	14.00	g
KI	0.10	mg
MgCl ₂ x 6 H ₂ O	11.00	g
Na ₃ -citrate	20.00	mg
KCl	1.30	g
CaCl ₂ x 2 H ₂ O	1.50	g
NaBr	0.20	g
H ₃ BO ₃	0.06	g
Distilled water	1000.00	ml

For [DSM 25542](#) and [DSM 25543](#) use medium without adding 80% H₂ and 20% CO₂ gas mixture before sterilization and adjust pH of complete medium to 6.8.