

Main sol. 795a

Synthetic seawater (2 x conc.)	500.00	ml
NH ₄ Cl	1.25	g
KH ₂ PO ₄	0.50	g
NiCl ₂ x 6 H ₂ O (0.1% w/v)	3.00	ml
Modified Wolin's mineral solution	10.00	ml
Na-formate	0.20	g
Tryptone (BD Bacto)	1.00	g
Yeast extract (OXOID)	1.00	g
Sodium resazurin (0.1% w/v)	0.50	ml
NaHCO ₃	2.00	g
Wolin's vitamin solution (10x)	1.00	ml
Sulfur, powdered	10.00	g
Na ₂ S x 9 H ₂ O	0.50	g
Distilled water	500.00	ml

1. Dissolve ingredients (except bicarbonate, vitamins, sulfur, and sulfide), then sparge medium with 80% H₂ and 20% CO₂ gas mixture for 30 - 45 min to make it anoxic and adjust pH to 5.5 with H₂SO₄. Dispense under the same gas atmosphere in suitable culture vessels (e.g. 20 ml of the medium in 100 ml serum bottles) and autoclave. Steam sulfur for 3 hours on each of 3 successive days (see medium 35). Aseptically mix the sterilized sulfur with the sterile medium while retaining anoxic conditions. Add vitamins from an anoxic stock solution prepared under 100% N₂ gas atmosphere and sterilized by filtration and bicarbonate from a sterile anoxic stock solution prepared under 80% N₂ and 20% CO₂ gas mixture. Prior to inoculation add sulfide from a sterile anoxic stock solution prepared under 100% N₂ gas atmosphere. Check pH and adjust to 5.5, if necessary.
2. After inoculation pressurize vials to 1 bar overpressure with sterile 80% H₂ and 20% CO₂ gas mixture.