

829b. THERMODESULFOBACTERIUM HYDROGENIPHILUM MEDIUM

Sea Salts (SIGMA)	30.00	g
NH ₄ Cl	1.00	g
KH ₂ PO ₄	0.35	g
MES [2-(N-morpholino) ethane sulfonic acid]	1.95	g
Trace element solution SL-10 (see medium 320)	1.00	ml
Selenite-tungstate solution (see medium 385)	1.00	ml
Na-resazurin solution (0.1% w/v)	0.50	ml
NaHCO ₃	1.50	g
Yeast extract	0.50	g
Vitamin solution (see medium 503)	1.00	ml
Growth-stimulating factors (see medium 829)	1.00	ml
Na-dithionite (Na ₂ S ₂ O ₄)	20.00	mg
Distilled water	1000.00	ml

Dissolve ingredients (except bicarbonate, yeast extract, vitamins, growth-stimulating factors and dithionite), boil medium for 1 min, then cool to room temperature under 80% H₂ and 20% CO₂ gas atmosphere. Adjust pH to 6.0 and dispense under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Add yeast extract, vitamins, growth-stimulating factors and dithionite from sterile anoxic stock solutions prepared under 100% N₂ gas atmosphere and bicarbonate from a sterile anoxic stock solution prepared under 80% N₂ and 20% CO₂ gas mixture. Vitamins and dithionite are sterilized by filtration. Adjust pH of the complete medium to 6.5, if necessary. After inoculation use 2 bar overpressure of sterile 80% H₂ and 20% CO₂ gas mixture.