

771. SULFUROSPIRILLUM BARNESII MEDIUM

K ₂ HPO ₄	225.00 mg
KH ₂ PO ₄	225.00 mg
NaCl	460.00 mg
(NH ₄) ₂ SO ₄	225.00 mg
MgSO ₄ x 7 H ₂ O	117.00 mg
Yeast extract	1.00 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	4.20 g
Na-DL-lactate	2.25 g
NaNO ₃	1.70 g
Vitamin solution (see medium 141)	10.00 ml
L-Cysteine-HCl x H ₂ O	0.10 g
Na ₂ S x 9 H ₂ O	0.10 g
Distilled water	1000.00 ml

Dissolve ingredients except bicarbonate, lactate, nitrate, vitamins, cysteine and sulfide. Sparge medium with 80% N₂ and 20% CO₂ gas mixture for 30 – 45 min to make it anoxic, then dispense under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Add lactate, nitrate, vitamins, cysteine and sulfide from sterile anoxic stock solutions prepared under 100% N₂ gas and bicarbonate from a sterile anoxic stock solution prepared under 80% N₂ and 20% CO₂ gas atmosphere. Vitamins should be sterilized by filtration. The pH of the complete medium should be 7.2 - 7.4.