

519. ARCHAEOGLOBUS PROFUNDUS MEDIUM

KCl	0.34	g
MgCl ₂ x 6 H ₂ O	4.00	g
MgSO ₄ x 7 H ₂ O	3.45	g
Na ₂ SO ₄	2.70	g
NH ₄ Cl	0.25	g
CaCl ₂ x 2 H ₂ O	0.14	g
K ₂ HPO ₄	0.14	g
NaCl	18.00	g
Yeast extract (OXOID)	0.50	g
Na-acetate	1.00	g
Fe(NH ₄) ₂ (SO ₄) ₂ x 7 H ₂ O solution (0.1% w/v)	2.00	ml
Trace element solution (see medium 141)	10.00	ml
Na-resazurin solution (0.1% w/v)	0.50	ml
NaHCO ₃	1.00	g
Na ₂ S x 9 H ₂ O	0.50	g
Distilled water	1000.00	ml

Dissolve ingredients except bicarbonate and sulfide, then sparge medium with 80% N₂ and 20% CO₂ gas mixture for 30 – 45 min to make it anoxic. Add bicarbonate, adjust pH to 6.5 and dispense medium under 80% N₂ and 20% CO₂ gas atmosphere into anoxic serum vials (e.g., 20 ml medium per 100 ml bottle), pressurize bottles up to 2 bar overpressure, then autoclave. Before use, release excess pressure and reduce the medium with sulfide from a sterile anoxic stock solution prepared under 100% N₂ gas. After inoculation, add 2 bar overpressure of sterile 80% H₂ and 20% CO₂ gas mixture.