

905. METHANOCALCULUS HALOTOLERANS MEDIUM

NH ₄ Cl	1.00	g
K ₂ HPO ₄	0.30	g
KH ₂ PO ₄	0.30	g
KCl	0.17	g
NaCl	50.00	g
Na-acetate	0.50	g
Yeast extract (OXOID)	0.50	g
Trypticase (BD BBL)	0.50	g
Trace element solution (see medium 141)	10.00	ml
Na-resazurin solution (0.1% w/v)	0.50	ml
NaHCO ₃	2.00	g
L-Cysteine-HCl x H ₂ O	0.50	g
CaCl ₂ x 2 H ₂ O	0.60	g
MgCl ₂ x 6 H ₂ O	3.20	g
Na ₂ S x 9 H ₂ O	0.30	g
Distilled water	1000.00	ml

Dissolve ingredients (except bicarbonate, cysteine, calcium chloride, magnesium chloride and sulfide), then sparge medium with 80% N₂ and 20% CO₂ gas mixture for 30 – 45 min to make it anoxic. Add and dissolve solid bicarbonate and cysteine, then adjust pH to 7.5 with 10 N KOH. Dispense medium under 80% N₂ and 20% CO₂ gas atmosphere into anoxic Hungate-type tubes or serum vials (to 30% of volume) and autoclave. Add calcium chloride, magnesium chloride and sulfide from sterile anoxic stock solutions prepared under 100% N₂ gas. The pH of the complete medium should be between 7.2 and 7.6. After inoculation pressurize vessels with sterile 80% H₂ and 20% CO₂ gas mixture to 1 bar overpressure.