

1011d. GALENEA MJ MEDIUM (CO₂)

NaCl	30.00	g
K ₂ HPO ₄	0.14	g
CaCl ₂ x 2 H ₂ O	0.14	g
MgSO ₄ x 7 H ₂ O	3.40	g
MgCl ₂ x 6 H ₂ O	4.18	g
KCl	0.33	g
NH ₄ Cl	0.25	g
Fe(NH ₄) ₂ (SO ₄) ₂ x 6 H ₂ O	0.01	g
Trace element solution (see medium 141)	10.00	ml
Na ₂ CO ₃	2.50	g
Na ₂ S ₂ O ₃ x 5 H ₂ O	1.50	g
Vitamin solution (see medium 141)	10.00	ml
Distilled water	1000.00	ml

Dissolve ingredients (except carbonate, thiosulfate and vitamins), then sparge medium with 100% CO₂ gas for 30 – 45 min to make it anoxic. Dispense medium under same gas atmosphere into anoxic Hungate-type tubes or serum vials up to a volume of 20% and autoclave. Add carbonate, thiosulfate and vitamins to the autoclaved medium from sterile anoxic stock solutions. Solutions of vitamins and thiosulfate are sterilized by filtration and stored under 100% N₂ gas, whereas the stock solution of carbonate is prepared under 80% N₂ and 20% CO₂ gas mixture and autoclaved. Adjust pH of the complete medium to 6.7. After inoculation pressurize vessels to 0.5 bar overpressure with sterile 100% CO₂ gas and add sterile air in an amount that is equivalent to a volume of 20% of the headspace.