

1062. DESULFITOBACTERIUM (PCE II) MEDIUM

KH ₂ PO ₄	0.20	g
NH ₄ Cl	0.25	g
NaCl	1.00	g
MgCl ₂ x 6 H ₂ O	0.40	g
KCl	0.50	g
CaCl ₂ x 2 H ₂ O	0.15	g
Trace element solution (see medium 141)	10.00	ml
Na-resazurin solution (0.1% w/v)	0.50	ml
NaHCO ₃	3.00	g
FeSO ₄ x 7 H ₂ O	22.00	mg
Vitamin solution (see medium 503)	1.00	ml
Yeast extract	2.00	g
Na-pyruvate	4.50	g
Na ₂ -fumarate	6.50	g
Distilled water	1000.00	ml

Dissolve ingredients (except bicarbonate, ferrous iron sulfate, vitamins and organic substrates), then sparge medium with 80% N₂ and 20% CO₂ gas mixture for 30 – 45 min to make it anoxic. Dispense medium under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Add ferrous iron sulfate (dissolved in 0.1 N H₂SO₄), vitamins, pyruvate, fumarate and yeast extract 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. Stock solutions of ferrous iron sulfate, vitamins, pyruvate and fumarate should be sterilized by filtration. Adjust pH of the complete medium to 7.5, if necessary.

Note: Addition of 10 - 20 mg sodium dithionite per litre (e.g. from 5% (w/v) solution, freshly prepared under N₂ and filter-sterilized) may stimulate growth at the beginning.