

407. SYNTROPHOMONAS SD2 MEDIUM

Solution A:

Mineral solution (see medium 212)	50.00	ml
Trace element solution SL-10 (see medium 320)	1.00	ml
Rumen fluid, clarified (see medium 1310)	50.00	ml
Trypticase peptone (BD BBL)	1.00	g
Na ₂ SO ₄	2.80	g
Na-resazurin solution (0.1% w/v)	0.50	ml
Distilled water	790.00	ml

Solution B:

NaHCO ₃	3.50	g
Distilled water	70.00	ml

Solution C:

Vitamin solution (see medium 503)	1.00	ml
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Solution D:

Na-stearate	0.61	g
Distilled water	20.00	ml

Dissolve stearate by heating in water bath.

Solution E:

L-Cysteine-HCl x H ₂ O	0.30	g
Distilled water	10.00	ml

Solution F:

Na ₂ S x 9 H ₂ O	0.30	g
Distilled water	10.00	ml

Add and dissolve ingredients of *solution A*, adjust pH to 7.2, then sparge medium with 80% N₂ and 20% CO₂ gas mixture for 30 – 45 min to make it anoxic. Distribute medium under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. *Solution B* is autoclaved separately under 80% N₂ and 20% CO₂ gas atmosphere. *Solution C* is prepared under 100% N₂ gas and sterilized by filtration. *Solutions D, E* and *F* are autoclaved under 100% N₂ gas. To complete the medium, appropriate amounts of *solutions B to F* are added to the sterile *solution A*. Adjust pH of complete medium to 7.2, if necessary.

Note: Use 25 - 50% inoculum. Growth can be followed by the clearing of stearate. Maintain cultures at 25°C.