337. SYNTROPHOCOCCUS SUCROMUTANS MEDIUM

Solution A:
Mineral solution (see medium 335) 50.00 ml
Trace element solution (see medium 320) 1.00 ml
Rumen fluid, clarified (see medium 1310) 300.00 ml
Trypticase peptone (BD BBL) or
Casitone peptone (BD Bacto) 5.00 g
Na-formate 0.60 g
Na-resazurin solution (0.1% w/v) 0.50 ml
Distilled water 560.00 ml

Solution B:
NaHCO₃ 2.50 g
Distilled water 50.00 ml

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

Solution D:
Lactose 5.00 g
Distilled water 25.00 ml

Solution E:
L-Cysteine-HCl x H₂O 0.24 g
Distilled water 10.00 ml

Solution F:
Na₂S x 9 H₂O 78.00 mg
Distilled water 1.00 ml

Sparge solution A with 80% N₂ and 20% CO₂ gas mixture for 30 - 45 min to make it anoxic. Adjust pH to 6.4 and dispense 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 atmosphere and sterilized by filtration. Solutions D, E and F are autoclaved separately under 100% N₂ gas. To complete the medium add appropriate amounts of solutions B - F to the sterile solution A in the sequence as indicated. Adjust pH of the complete medium to 6.4 - 6.8, if necessary.

Note: Rumen fluid may be replaced by supplementing the medium with 200 μg/ml of crude egg yolk phosphatidylcholine (SIGMA, type IX-E).