

311c. SPOROMUSA ACIDOVORANS MEDIUM

NH ₄ Cl	0.50	g
MgSO ₄ x 7 H ₂ O	0.50	g
CaCl ₂ x 2 H ₂ O	0.25	g
NaCl	2.25	g
FeSO ₄ x 7 H ₂ O solution (0.1% w/v in 0.1 N H ₂ SO ₄)	2.00	ml
Trace element solution SL-10 (see medium 320)	1.00	ml
Selenite-tungstate solution (see medium 385)	1.00	ml
Yeast extract	2.00	g
Casitone	2.00	g
Na-resazurin solution (0.1% w/v)	0.50	ml
K ₂ HPO ₄	0.35	g
KH ₂ PO ₄	0.23	g
Na ₂ CO ₃	1.00	g
D-Fructose	5.00	g
Vitamin solution (see medium 141)	10.00	ml
L-Cysteine-HCl x H ₂ O	0.30	g
Na ₂ S x 9 H ₂ O	0.30	g
Distilled water	1000.00	ml

Dissolve ingredients (except phosphates, carbonate, fructose, vitamins, cysteine and sulfide) and 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. After autoclaving add phosphates, fructose, vitamins, cysteine and sulfide to the medium from sterile anoxic stock solutions prepared under 100% N₂ gas and carbonate from a sterile anoxic stock solution prepared under 80% N₂ and 20% CO₂ gas mixture. Stock solutions of fructose and vitamins should be sterilized by filtration. Adjust pH of complete medium to pH 6.5 – 7.0, if necessary.

For [DSM 4440](#) replace fructose with 1.35 g/l betaine as substrate; cysteine and sulfide must be replaced by 0.15 g/l DL-dithiothreitol (DTT) added from an anoxic stock solution sterilized by filtration.

For [DSM 6539](#), [DSM 6540](#) and [DSM 17108](#) replace fructose with 2.00 g/l D-glucose added to the autoclaved medium from a filter-sterilized anoxic stock solution. Cysteine and sulfide must be replaced by 0.15 g/l DL-dithiothreitol (DTT) added from an anoxic stock solution sterilized by filtration.

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For [DSM 14980](#) replace fructose with 8.00 g/l D-glucose and 2.00 g/l Na-pyruvate as substrates added to the autoclaved medium from filter-sterilized anoxic stock solutions.

For [DSM 16652](#) replace fructose with 1.11 g/l N-acetyl-D-glucosamine as substrate added to the autoclaved medium from a filter-sterilized anoxic stock solution.

For [DSM 17189](#) and [DSM 17285](#) replace fructose with 3.60 g/l D-mannitol as substrate added to the autoclaved medium from a filter-sterilized anoxic stock solution. Cysteine and sulfide must be replaced by 0.30 g/l DL-dithiothreitol (DTT) added from an anoxic stock solution sterilized by filtration.

For [DSM 26537](#) replace fructose with 5.00 g/l D-glucose as substrate added to the autoclaved medium from a filter-sterilized anoxic stock solution. Adjust pH of completed medium to 7.8 using a sterile anoxic stock solution of 5% (w/v) Na₂CO₃.

For [DSM 26827](#) replace fructose with 2.50 g/l Na-(DL)-lactate added to the autoclaved medium from a separately sterilized anoxic stock solution. Cysteine and sulfide must be replaced by 0.15 g/l DL-dithiothreitol (DTT) added from an anoxic stock solution sterilized by filtration.