311c. SPOROMUSA ACIDOVORANS MEDIUM

NH_4Cl	0.50	g
$MgSO_4$ x 7 H_2O	0.50	g
$CaCl_2$ x 2 H_2O	0.25	g
NaCl	2.25	g
$FeSO_4$ x 7 H_2O solution (0.1% w/v in 0.1 N H_2SO_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_2HPO_4	0.35	g
KH_2PO_4	0.23	g
$NaHCO_3$	4.00	g
D-Fructose	5.00	g
Vitamin solution (see medium 141)	10.00	ml
L-Cysteine-HCl x H_2O	0.30	g
Na_2S x 9 H_2O	0.30	g
Distilled water	1000.00	ml

Dissolve ingredients (except phosphates, bicarbonate, fructose, vitamins, cysteine and sulfide) and sparge medium with 80% N_2 and 20% CO_2 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% N_2 gas and bicarbonate from a sterile anoxic stock solution prepared under 80% N_2 and 20% CO_2 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) Na_2CO_3.

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.