

541. SULFUROSPIRILLUM MEDIUM**Solution A:**

KH ₂ PO ₄	1.36	g
MgSO ₄ x 7 H ₂ O	0.37	g
CaCl ₂ x 2 H ₂ O	0.10	g
NH ₄ Cl	0.27	g
Distilled water	900.00	ml

Solution B:

Na ₂ CO ₃	1.50	g
Distilled water	30.00	ml

Solution C:

Trace element solution SL-10 (see medium 320)	2.00	ml
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Solution D:

Na ₂ -fumarate	4.00	g
Distilled water	20.00	ml

Solution E:

L-Cysteine-HCl x H ₂ O	0.07	g
Distilled water	2.00	ml

Sparge *solution A* with 80% N₂ and 20% CO₂ gas mixture for 30 – 45 min to make it anoxic, distribute 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. *Solutions C* and *E* are autoclaved under 100% N₂ gas atmosphere. *Solution D* should be prepared under 100% N₂ gas and sterilized by filtration. To complete the medium appropriate amounts of *solutions B* to *E* are added to the sterile *solution A* in the sequence as indicated. Adjust pH of complete medium to 7.2, if necessary

For [DSM 18149](#) supplement medium after autoclaving with 10.00 ml/l of an anoxic vitamin solution (see medium 141) sterilized by filtration. Prior to inoculation reduce the complete medium with 10 - 20 mg/l sodium dithionite (added from a 5% w/v stock solution freshly prepared under 100% N₂ gas and filter-sterilized) instead of using cysteine.

For [DSM 22742](#) supplement medium with vitamins (see medium 141) and 0.50 g/l Na-thiosulfate added after autoclaving from anoxic stock solutions sterilized by filtration.