

**541: SULFUROSPIRILLUM MEDIUM**

<b>Solution A</b>	952.00	ml
<b>Solution B</b>	30.00	ml
<b>Solution C</b>	20.00	ml
<b>Solution D</b>	2.00	ml

Sparge solution A with 80% N<sub>2</sub> and 20% CO<sub>2</sub> 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% N<sub>2</sub> and 20% CO<sub>2</sub> gas atmosphere. Solution C should be prepared under 100% N<sub>2</sub> gas and sterilized by filtration. Solution D is autoclaved under 100% N<sub>2</sub> gas atmosphere. To complete the medium appropriate amounts of solutions B to D 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 1.00 ml/l Wolin's vitamin solution 10x (see medium 120) 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% N<sub>2</sub> gas and filter-sterilized) instead of using cysteine.

For DSM 22742: Supplement medium with 1.00 ml/l Wolin's vitamin solution 10x (see medium 120) and 0.50 g/l Na-thiosulfate added after autoclaving from anoxic stock solutions sterilized by filtration.

**Solution A**

KH <sub>2</sub> PO <sub>4</sub>	1.36	g
MgSO <sub>4</sub> x 7 H <sub>2</sub> O	0.37	g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O	0.10	g
NH <sub>4</sub> Cl	0.27	g
<b>Trace element solution SL-10</b>	2.00	ml
Distilled water	950.00	ml

**Solution B**

Na <sub>2</sub> CO <sub>3</sub>	1.50	g
Distilled water	30.00	ml

**Solution C**

Na <sub>2</sub> -fumarate	4.00	g
Distilled water	20.00	ml

**Solution D**

L-Cysteine HCl x H <sub>2</sub> O	0.07	g
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## 541: SULFUROSPIRILLUM MEDIUM

Distilled water	2.00	ml
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### Trace element solution SL-10 (from medium 320)

HCl (25%)	10.00	ml
FeCl <sub>2</sub> x 4 H <sub>2</sub> O	1.50	g
ZnCl <sub>2</sub>	70.00	mg
MnCl <sub>2</sub> x 4 H <sub>2</sub> O	100.00	mg
H <sub>3</sub> BO <sub>3</sub>	6.00	mg
CoCl <sub>2</sub> x 6 H <sub>2</sub> O	190.00	mg
CuCl <sub>2</sub> x 2 H <sub>2</sub> O	2.00	mg
NiCl <sub>2</sub> x 6 H <sub>2</sub> O	24.00	mg
Na <sub>2</sub> MoO <sub>4</sub> x 2 H <sub>2</sub> O	36.00	mg
Distilled water	990.00	ml

First dissolve FeCl<sub>2</sub> in the HCl, then dilute in water, add and dissolve the other salts. Finally make up to 1000.00 ml.