

## 1210a. THERMOSULFURIMONAS MEDIUM

NaCl	18.00	g
MgCl <sub>2</sub> x 6 H <sub>2</sub> O	4.00	g
KCl	0.33	g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O	0.33	g
(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	0.50	g
Trace element solution SL-10 (see medium 320)	1.00	ml
Selenite-tungstate solution (see medium 385)	1.00	ml
Na <sub>2</sub> CO <sub>3</sub>	1.00	g
KH <sub>2</sub> PO <sub>4</sub>	0.33	g
Vitamin solution (see medium 141)	1.00	ml
Na-acetate	1.50	g
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> x 5 H <sub>2</sub> O	3.50	g
Yeast extract	0.20	g
Distilled water	1000.00	ml

Dissolve ingredients except carbonate, hydrogenphosphate, vitamins, acetate, thiosulfate and yeast extract, then sparge medium with 80% H<sub>2</sub> and 20% CO<sub>2</sub> 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. Add hydrogenphosphate, vitamins, acetate, thiosulfate and yeast extract from sterile anoxic stock solutions prepared under 100% N<sub>2</sub> gas and carbonate from a sterile anoxic stock solution prepared under 80% N<sub>2</sub> and 20% CO<sub>2</sub> gas mixture. Stock solutions of thiosulfate and vitamins should be sterilized by filtration. The pH of the complete medium should be at 6.5 – 6.8.

For [DSM 29363](#) prepare medium without acetate, thiosulfate and yeast extract. Supplement medium after autoclaving with 2.50 g/l Fe(III)-citrate added from a sterile anoxic stock solution (10% w/v) prepared under 100% N<sub>2</sub> gas atmosphere. Adjust pH of complete medium to 6.0.

For [DSM 100025](#) supplement medium with 0.50 g/l Na-pyruvate and replace thiosulfate with 0.50 g/l sodium pyrosulfite (Na<sub>2</sub>S<sub>2</sub>O<sub>5</sub>) added after autoclaving from freshly prepared anoxic stock solutions sterilized by filtration. Adjust pH of complete medium to 6.0 – 6.5.

For [DSM 100275](#) supplement medium after autoclaving with 1.00 g/l KNO<sub>3</sub> added from a sterile anoxic stock solution prepared under 100% N<sub>2</sub> gas and 5.00 g/l sulfur (powdered) sterilized separately by steaming for 3 hours on each of 3 successive days.

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For DSM 104922 omit acetate and supplement medium after autoclaving with 1.00 g/l  $\text{KNO}_3$  added from a sterile anoxic stock solution prepared under 100%  $\text{N}_2$  gas.