

1210a. THERMOSULFURIMONAS MEDIUM

NaCl	18.00	g
MgCl ₂ x 6 H ₂ O	4.00	g
KCl	0.33	g
CaCl ₂ x 2 H ₂ O	0.33	g
(NH ₄) ₂ SO ₄	0.50	g
Trace element solution SL-10 (see medium 320)	1.00	ml
Selenite-tungstate solution (see medium 385)	1.00	ml
NaHCO ₃	2.50	g
KH ₂ PO ₄	0.33	g
Vitamin solution (see medium 141)	1.00	ml
Na-acetate	1.50	g
Na ₂ S ₂ O ₃ x 5 H ₂ O	3.50	g
Yeast extract	0.20	g
Distilled water	1000.00	ml

Dissolve ingredients except bicarbonate, hydrogenphosphate, vitamins, acetate, thiosulfate and yeast extract, then sparge medium with 80% H₂ 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. Add hydrogenphosphate, vitamins, acetate, thiosulfate and yeast extract from sterile anoxic stock solutions prepared under 100% N₂ gas and bicarbonate from a sterile anoxic stock solution prepared under 80% N₂ and 20% CO₂ 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% N₂ 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 (Na₂S₂O₅) added after autoclaving from freshly prepared anoxic stock solutions sterilized by filtration.

For [DSM 100275](#) and [DSM 102941](#) prepare medium without acetate, thiosulfate and yeast extract. Supplement medium after autoclaving with 1.00 g/l KNO₃ added from a sterile anoxic stock solution prepared under 100% N₂ gas and 5.00 g/l sulfur (powdered) sterilized separately by steaming for 3 hours on each of 3 successive days.