

1210a. THERMOSULFURIMONAS MEDIUM

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|--|---------|----|
| 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 0.63 g/l sodium sulfite 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.