

142. THIOMICROSPIRA PELOPHILA MEDIUM

NaCl	25.00	g
(NH ₄) ₂ SO ₄	1.00	g
MgSO ₄ x 7 H ₂ O	1.50	g
CaCl ₂ x 2 H ₂ O	0.42	g
Trace element solution (see medium 69)	0.20	ml
Bromothymol blue solution (0.1% w/v)	4.00	ml
K ₂ HPO ₄	0.50	g
Na ₂ S ₂ O ₃ x 5 H ₂ O	5.00	g
Seven vitamins solution (see medium 503)	1.00	ml
Distilled water	1000.00	ml

Dissolve ingredients (except hydrogenphosphate, thiosulfate and vitamins), adjust pH to 7.2 and autoclave. K₂HPO₄ and Na₂S₂O₃ are autoclaved separately each in 10% of the final volume. Filter sterilize the vitamins solution. Adjust pH of the complete medium to 7.2 with sterile 0.4% (w/v) Na₂CO₃ solution. Alternatively, "aged sea water" may be used (see medium 246), supplemented by the indicated amounts of (NH₄)₂SO₄, bromothymol blue, K₂HPO₄, sodium thiosulfate and vitamins.

Note: Growth of most Thiomicrospira strains is more reliable if the medium is prepared under a 80% N₂ and 20% CO₂ gas atmosphere to make it anoxic and then filled under air atmosphere into Hungate-type tubes (5 ml per vial). The pH is adjusted with a sterile stock solution of Na₂CO₃ (5% w/v) after autoclaving.

For [DSM 12346](#), [DSM 12350](#), [DSM 12351](#), [DSM 12352](#), [DSM 12353](#), and [DSM 12354](#) omit vitamins and adjust pH of complete medium to 7.3 – 7.6.

For [DSM 25194](#) and [DSM 25197](#) omit vitamins and adjust pH of complete medium to 8.0.

For [DSM 100274](#) adjust pH of complete medium to 6.0 – 6.5.