

**142. THIOMICROSPIRA PELOPHILA MEDIUM**

NaCl	25.00	g
(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	1.00	g
MgSO <sub>4</sub> x 7 H <sub>2</sub> O	1.50	g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O	0.42	g
Trace element solution (see medium 69)	0.20	ml
Bromothymol blue solution (0.1% w/v)	4.00	ml
K <sub>2</sub> HPO <sub>4</sub>	0.50	g
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> x 5 H <sub>2</sub> 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. K<sub>2</sub>HPO<sub>4</sub> and Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> 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) Na<sub>2</sub>CO<sub>3</sub> solution. Alternatively, "aged sea water" may be used (see medium 246), supplemented by the indicated amounts of (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>, bromothymol blue, K<sub>2</sub>HPO<sub>4</sub>, sodium thiosulfate and vitamins.

*Note: Growth of most Thiomicrospira strains is more reliable if the medium is prepared under a 80% N<sub>2</sub> and 20% CO<sub>2</sub> 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 NaHCO<sub>3</sub> (10% 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 100274](#) adjust pH of complete medium to 6.0 – 6.5.