

ATCC medium: 2228 *Thiomicrospira pelophila* medium

NaCl.....25.0 g
(NH₄)₂SO₄.....1.0 g
MgSO₄ . 7H₂O1.50 g
CaCl₂ . 2H₂O0.42 g
Wolfe's Mineral Solution (see below).....1.0 ml
Bromothymol blue.....4.0 mg
K₂HPO₄*0.50 g
Na₂S₂O₃ . 5H₂O*5.0 g
Vitamin B₁₂15.0 mcg
Distilled water.....1.0 L

*Autoclave the K₂HPO₄ and Na₂S₂O₃ separately, each in 10% of the final volume. Filter-sterilize the vitamin B₁₂. Adjust the completed medium to pH 7.2 with sterile 0.4% (w/v) Na₂CO₃ solution. Alternatively, use "aged sea water" (see medium 246), supplemented by the indicated amounts of (NH₄)₂SO₄, bromothymol blue, K₂HPO₄, sodium thiosulfate, and vitamin B₁₂.

Wolfe's Mineral Solution:

Available from ATCC as a sterile ready-to-use liquid (Trace Mineral Supplement, catalog no. MD-TMS.)

Nitrilotriacetic acid.....1.5 g
MgSO₄ . 7H₂O3.0 g
MnSO₄ . H₂O0.5 g
NaCl.....1.0 g
FeSO₄ . 7H₂O0.1 g
CoCl₂ . 6H₂O0.1 g
CaCl₂.....0.1 g
ZnSO₄ . 7H₂O0.1 g
CuSO₄ . 5H₂O0.01 g
AlK(SO₄)₂ . 12H₂O.....0.01 g
H₃BO₃0.01 g
Na₂MoO₄ . 2H₂O.....0.01 g
Distilled water.....1.0 L

Add nitrilotriacetic acid to approximately 500 ml of water and adjust pH to 6.5 with KOH to dissolve the compound. Bring volume to 1.0 L with remaining water and add remaining compounds one at a time.