

MD-2507: Thermotoga Medium

Starch, soluble, 5.0 g
KH₂PO₄, 0.5 g
Trace element solution* (*see below*), 15.0 ml
NiCl₂·6H₂O, 2.0 mg
NaCl, 20.0 g
Artificial sea water (*see below*), 250.0 ml
Distilled water, 750.0 ml
Yeast extract (BD 212750), 0.5 g
Resazurin, 1.0 mg
Na₂S·9H₂O, 0.5 g
Adjust pH to 6.5. Gas atmosphere: 100% nitrogen. Autoclave at 121°C.

Artificial sea water:

NaCl, 27.7 g
MgSO₄·7H₂O, 7.0 g
MgCl₂·6H₂O, 5.5 g
KCl, 0.65 g
NaBr, 0.1 g
H₃BO₃, 30.0 mg
SrCl₂·6H₂O, 15.0 mg
Citric acid, 10.0 mg
KI, 0.05 mg
CaCl₂·2H₂O, 2.25 g
Distilled water, 1.0 L

* Trace Mineral Solution:

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

EDTA, 0.5 g
MgSO₄·7H₂O, 3.0 g
MnSO₄·H₂O, 0.5 g
NaCl, 1.0 g
FeSO₄·7H₂O, 0.1 g
CoCl₂·6H₂O, 0.1 g

CaCl₂, 0.1 g
ZnSO₄·7H₂O, 0.1 g
CuSO₄·5H₂O, 0.01 g
AlK(SO₄)₂·12H₂O, 0.01 g

H₃BO₃, 0.01 g
Na₂MoO₄·2H₂O, 0.01 g
Na₂SeO₃ (anhydrous), 0.001 g
Na₂WO₄·2H₂O, 0.010 g
NiCl₂·6H₂O, 0.020 g
Distilled water, 1.0 L

Add EDTA to approximately 500 ml of water and adjust to pH 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.