

206: THERMODESULFOBACTERIUM MEDIUM

Na ₂ SO ₄	3.00	g
NH ₄ Cl	1.00	g
MgCl ₂ × 6 H ₂ O	0.20	g
KH ₂ PO ₄	0.30	g
Na ₂ HPO ₄ × 12 H ₂ O	2.00	g
Trace element solution	10.00	ml
FeSO ₄ × 7 H ₂ O (0.1% w/v in 0.1 N H ₂ SO ₄)	1.50	ml
Sodium resazurin (0.1% w/v)	0.50	ml
Yeast extract	1.00	g
Na-L-lactate	4.00	g
Wolin's vitamin solution	5.00	ml
Na ₂ S × 9 H ₂ O	0.50	g
Distilled water	1000.00	ml

Dissolve ingredients (except yeast extract, lactate, vitamins and sulfide) and sparge medium for 30 - 45 min with 100% N₂ gas to make it anoxic. Distribute under same gas atmosphere in anoxic Hungate-type tubes or serum vials and autoclave. After sterilization add yeast extract, lactate, vitamins (sterilized by filtration) and sulfide from sterile anoxic stock solutions prepared under 100% N₂ gas. Before use, neutralize the sodium sulfide solution by dropwise addition of 2 N H₂SO₄ (see medium 29). Adjust pH of complete medium to 6.8 - 7.0.

Trace element solution (from medium 144)

Nitrilotriacetic acid (NTA)	12.80	g
FeCl ₂ × 4 H ₂ O	0.20	g
MnCl ₂ × 4 H ₂ O	0.10	g
CoCl ₂ × 6 H ₂ O	0.17	g
CaCl ₂ × 2 H ₂ O	0.10	g
ZnCl ₂	0.10	g
CuCl ₂	0.02	g
H ₃ BO ₃	0.01	g
Na ₂ MoO ₄ × 2 H ₂ O	0.01	g
NiCl ₂ × 6 H ₂ O	0.03	g
NaCl	1.00	g
Na ₂ SeO ₃ × 5 H ₂ O	0.03	g
Distilled water	1000.00	ml

First dissolve NTA in 200 ml of distilled water and adjust pH to 6.5 with KOH, then dissolve mineral salts. Finally adjust pH to 6.5 with KOH and make up to 1000.00 ml.

Wolin's vitamin solution (from medium 141)

Biotin	2.00	mg
Folic acid	2.00	mg
Pyridoxine hydrochloride	10.00	mg
Thiamine HCl	5.00	mg
Riboflavin	5.00	mg
Nicotinic acid	5.00	mg
Calcium D-(+)-pantothenate	5.00	mg
Vitamin B ₁₂	0.10	mg
p-Aminobenzoic acid	5.00	mg
(DL)-alpha-Lipoic acid	5.00	mg
Distilled water	1000.00	ml