Microorganisms



185. THERMOPROTEUS MEDIUM

(NH4)2SO4	0.264	g
FeSO ₄ x 7 H ₂ O	0.556	g
MgSO ₄ x 7 H ₂ O	0.492	g
$CaSO_4 \times 2 H_2O$	0.344	g
KH ₂ PO ₄	0.014	g
Resazurin	1.000	mg
Trace elements solution (see below)	1.000	ml
Yeast extract	0.200	g
Soluble starch	5.000	g
Sulfur, powdered	10.000	g
$Na_2S \times 9 H_2O$	0.500	g
Distilled water	1000.000	ml

Trace elements solution:

NaF	840.0	mg
MnCl ₂ x 4 H ₂ O	180.0	mg
$Na_2B_4O_7 \times 10 H_2O$	450.0	mg
ZnSO ₄ x 7 H ₂ O	22.0	mg
CuCl ₂ x 2 H ₂ O	5.0	mg
$Na_2MoO_4 \times 2 H_2O$	3.0	mg
CoSO ₄ x 7 H ₂ O	1.0	mg
Distilled water	1000.0	ml

Prepare medium (without starch, sodium sulfide, sulfur) anaerobically under N_2 gas atmosphere. Adjust pH to 5.5 with H_2SO_4 before sterilization. Distribute the medium into tubes containing the appropriate amount of sulfur powder. Sterilize medium by heating for 3 h at 90 - 100°C on three subsequent days. Before use, add to the medium starch and sodium sulfide.

Medium pH is 5.5.