

1516. THERMOFILUM MEDIUM**Mineral Salts Solution:**

KH ₂ PO ₄	0.33	g
NH ₄ Cl	0.33	g
MgCl ₂	0.33	g
CaCl ₂	0.33	g
KCl	0.33	g
Glucose	2.00	g
Yeast extract	0.10	g
Trace Element Solution (see below)	1.00	ml
Distilled water	1000.00	ml

Trace Element Solution:

(NH ₄) ₂ SO ₄ FeSO ₄ x 6 H ₂ O	784.0	mg
NiCl ₂ x 2 H ₂ O	225.0	mg
CoCl ₂ x 6 H ₂ O	38.0	mg
MnCl ₂ x 4H ₂ O	99.0	mg
ZnSO ₄ x 7 H ₂ O	144.0	mg
Na ₂ SeO ₄	95.0	mg
Na ₂ WO ₄ x 2H ₂ O	33.0	mg
Na ₂ MoO ₄ x 2 H ₂ O	24.0	mg
H ₃ BO ₃	6.0	mg
CuCl ₂ x 2 H ₂ O	2.0	mg
Distilled water	1000.0	ml

Prepare the liquid medium. Boil the medium in a water bath and cool under N₂ to room temperature. Adjust to pH 5.8-6.2. Dispense the medium into Hungate tubes or serum bottles under gassing with N₂. Sterilize by autoclaving. Before inoculation add from sterile stock solutions:

Filtrate of <i>Desulfurococcus kamchatkensis</i> (DSM18924)(see below)	10.0 ml
Vitamin Solution (see medium 141)	10.0 ml
Na ₂ SxH ₂ O	0.3 g

Filtrate:

Strain DSM 18924 was inoculated into anaerobic tube, containing 10ml of the medium mentioned above. Glucose (2g/l) and yeast extract (0,6g/l) were added as substrate. After 3 days of incubation culture was filtered through 0,22µm filter. Filtered culture broth is used for the cultivation of the strain at a concentration of 1% as a source of growth factor