1516. THERMOFILUM MEDIUM

**Mineral Salts Solution:**
- KH2PO4: 0.33 g
- NH4Cl: 0.33 g
- MgCl2: 0.33 g
- CaCl2: 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:**
- (NH4)2SO4FeSO4 x 6 H2O: 784.0 mg
- NiCl2 x 2 H2O: 225.0 mg
- CoCl2 x 6 H2O: 38.0 mg
- MnCl2 x 4H2O: 99.0 mg
- ZnSO4 x 7 H2O: 144.0 mg
- Na2SeO4: 95.0 mg
- Na2WO4 x 2H2O: 33.0 mg
- Na2MoO4 x 2 H2O: 24.0 mg
- H3BO3: 6.0 mg
- CuCl2 x 2 H2O: 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 Desulfurococcus kamchatkensis (DSM18924)(see below): 10.0 ml
- Vitamin Solution (see medium 141): 10.0 ml
- Na2SxH2O: 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 0,22nm filter. Filtered culture broth is used for the cultivation of the strain at a concentration of 1% as a source of growth factor.