876. DESULFOTHERMUS NAPHTHAE MEDIUM

Na$_2$SO$_4$ 4.00 g
KH$_2$PO$_4$ 0.20 g
NH$_4$Cl 0.25 g
NaCl 20.00 g
MgCl$_2$ x 6 H$_2$O 9.80 g
KCl 0.50 g
CaCl$_2$ x 2 H$_2$O 0.10 g
Trace element solution SL-10 (see medium 320) 1.00 ml
Selenite-tungstate solution (see medium 385) 2.00 ml
Na-resazurin solution (0.1% w/v) 0.50 ml
Na$_2$CO$_3$ 1.00 g
Na-caproate 0.50 g
Na-butyrate 0.30 g
Vitamins solution (see medium 141) 9.00 ml
Vitamins solution (see medium 503) 1.00 ml
Na$_2$S x 9 H$_2$O 0.40 g
Distilled water 1000.00 ml

Dissolve all ingredients except carbonate, caproate, butyrate, vitamins and sulfide, then sparge medium with 80% N$_2$ and 20% CO$_2$ gas mixture for 30 – 45 min to make it anoxic. Dispense medium under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Add caproate, butyrate, vitamins and sulfide from sterile anoxic stock solutions prepared under 100% N$_2$ gas and carbonate from a sterile anoxic stock solution prepared under 80% N$_2$ and 20% CO$_2$ gas atmosphere. Vitamins should be sterilized by filtration. Adjust pH of complete medium to 6.7 - 6.9, if necessary. Note: Growth can be stimulated by supplementing the medium with 1% (v/v) of fatty acid mixture (see medium 119).