

1055. DESULFOHALOBIUM UTAHENSE MEDIUM

NaCl	100.0	g
MgSO ₄ x 7 H ₂ O	10.0	g
KCl	6.0	g
CaCl ₂ x 2 H ₂ O	0.4	g
NH ₄ Cl	1.0	g
KH ₂ PO ₄	0.1	g
Yeast extract	0.5	g
Trace element solution SL-10 (see medium 320)	1.0	ml
Selenite-tungstate solution (see medium 385)	1.0	ml
Na-resazurin solution (0.1% w/v)	0.5	ml
NaHCO ₃	4.0	g
Vitamin solution (see medium 141)	10.0	ml
Na-L-lactate	2.5	g
Na ₂ S x 9 H ₂ O	0.3	g
Distilled water	1000.0	ml

Dissolve ingredients (except bicarbonate, vitamins, lactate and sulfide) and sparge medium with 80% N₂ and 20% CO₂ 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 vitamins (sterilized by filtration), lactate and sulfide from sterile anoxic stock solutions prepared under 100% N₂ gas and bicarbonate from a sterile anoxic stock solution prepared under 80% N₂ and 20% CO₂ gas mixture. Adjust pH of the complete medium to 7.0 - 7.2, if necessary.

For [DSM 17721](#) replace Na-L-lactate with 1.5 g/l Na-propionate. After inoculation, add sterile **H₂ gas** to an overpressure of 0.5 bar. Addition of 10 - 20 mg sodium dithionite per liter (e.g. from 5% (w/v) solution, freshly prepared under N₂ and filter-sterilized) can be used to completely reduce the medium and may stimulate growth at the beginning.

For [DSM 18834](#) replace Na-L-lactate with 1.0 g/l Na₂-DL-malate.

For [DSM 24312](#) omit Na-L-lactate and add 3.4 g/l Na-formate, 0.16 g/l Na-acetate and 5.0 g/l Na₂S₂O₃ from sterile anoxic stock solutions prepared under 100% N₂ gas.