

1101a: DESULFONATRONUM ZHILINAE MEDIUM

NaCl	25.00	g
K ₂ HPO ₄	0.50	g
Yeast extract	0.20	g
Na ₂ SO ₄	3.00	g
NaHCO ₃	1.85	g
Na ₂ CO ₃	1.20	g
MgCl ₂ x 6 H ₂ O	0.10	g
Trace elements solution (Pfennig & Lippert, 1966)	1.00	ml
Selenite-tungstate solution	1.00	ml
Na-L-lactate	2.20	g
Seven vitamins solution	1.00	ml
Na ₂ S x 9 H ₂ O	0.50	g
Distilled water	1000.00	ml

Dissolve ingredients except carbonates, magnesium chloride, trace elements, lactate, vitamins and sulfide, then sparge medium with 100% N₂ gas for 30 - 45 min to make it anoxic. Then add and dissolve carbonates, adjust pH to 9.0, dispense under 100% N₂ gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. After sterilization add magnesium chloride, trace elements, lactate, vitamins and sulfide from sterile anoxic stock solution prepared under 100% N₂ gas. The vitamin solution should be sterilized by filtration. Adjust pH of complete medium to 9.0 - 9.5, if necessary.

Trace elements solution (Pfennig & Lippert, 1966) (from medium 1369)

EDTA	5.00	g
FeSO ₄ x 7 H ₂ O	2.20	g
ZnSO ₄ x 7 H ₂ O	0.10	g
MnCl ₂ x 4 H ₂ O	0.03	g
H ₃ BO ₃	0.03	g
CoCl ₂ x 6 H ₂ O	0.20	g
CuCl ₂ x 2 H ₂ O	0.03	g
NiCl ₂ x 6 H ₂ O	0.03	g
Na ₂ MoO ₄ x 2 H ₂ O	0.03	g
Distilled water	1000.00	ml

pH 3.0-4.0

Selenite-tungstate solution (from medium 385)

NaOH	0.50	g
Na ₂ SeO ₃ x 5 H ₂ O	3.00	mg
Na ₂ WO ₄ x 2 H ₂ O	4.00	mg

Distilled water	1000.00	ml
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Seven vitamins solution (from medium 503)

Vitamin B ₁₂	100.00	mg
p-Aminobenzoic acid	80.00	mg
D-(+)-biotin	20.00	mg
Nicotinic acid	200.00	mg
Calcium pantothenate	100.00	mg
Pyridoxine hydrochloride	300.00	mg
Thiamine-HCl x 2 H ₂ O	200.00	mg
Distilled water	1000.00	ml