

925: ALKALIPHILIC SULPHUR RESPIRING STRAINS MEDIUM

This recipe contains strain-specific modifications for *Thioalkalivibrio denitrificans* DSM 13742 *

Final pH: 10.0

Final volume: 1000 ml

Na ₂ CO ₃	20.00	g
NaHCO ₃	10.00	g
NaCl	5.00	g
K ₂ HPO ₄	1.00	g
Trace element solution	2.00	ml/l
Distilled water	1000.00	ml

1. Sterilize at 110°C 20 min in a closed vessel (i.e. a serum tube or bottle). pH after sterilization will about 10.

2. After sterilization add:

MgCl ₂ x 6 H ₂ O (200.0 g/l)	0.50	mM
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3. (a white colloid will form which will rapidly dissolve after mixing)

Sodium thiosulphate	40.00	mM
KNO ₃	5.00	mM

* *Thioalkalivibrio versutus* AL 2 = [DSM 13738](#), *Tv.nitratus* ALJ 12 = [DSM 13741](#), and *Tv.denitrificans* ALJD = [DSM 13742](#) Use 40 mM thiosulphate, 5 mM KNO₃, reduce the amount of MgCl₂ to 0.5 mM

Trace element solution (from medium 925)

EDTA	5.00	mg
FeSO ₄ x 7 H ₂ O	2.00	mg
ZnSO ₄ x 7 H ₂ O	100.00	mg
MnCl ₂ x 4 H ₂ O	30.00	mg
CoCl ₂ x 6 H ₂ O	200.00	mg
NiCl ₂ x 6 H ₂ O	20.00	mg
Na ₂ MoO ₄ x 2 H ₂ O	30.00	mg
CuCl ₂ x 2 H ₂ O	10.00	mg
H ₃ BO ₃	300.00	mg
Distilled water	1000.00	ml

Final pH should be 3, add HCl if needed. Sterilization - 120°C 20 min.