

1229: THIOHALOSPIRA ALKALIPHILA MEDIUM

This recipe contains strain-specific modifications for *Thiohalospira alkaliphila* DSM 17116 *

Final pH: 8.0 - 8.5

Final volume: 1000 ml

NaCl	120.00	g
K ₂ HPO ₄	2.00	g
(NH ₄) ₂ SO ₄	0.50	g
Distilled water	1000.00	ml

1. Flush the gas phase with nitrogen and add 5% oxygen. Sterilize at 120°C 20 min in a closed vessel (i.e. a serum tube or bottle) with a liquid to air ratio of about 1:10.

2. After sterilization add from sterile stock solutions:

Trace element solution	1.00	ml
MgCl ₂ x 6 H ₂ O (200.0 g/l)	2.00	ml

3. (a white colloid will form which will rapidly dissolve after mixing)

Sodium thiosulfate pentahydrate (4 M - 992 g/l)	5.00	ml
Vitamin B ₁₂ (filter sterilized 100mg/l)	1.00	ml
NaHCO ₃ (84.0 g/l)	100.00	ml

4. Final pH is 8.0 - 8.5.

5. Incubate statically until growth occurs, then shake at 100 rpm.

* Microaerophilic with 5% oxygen

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.