

## 925: ALKALIPHILIC SULPHUR RESPIRING STRAINS MEDIUM

This recipe contains strain-specific modifications for *Thioalkalispira microaerophila* DSM 14786 \*

Final pH: 10.0

Final volume: 1000 ml

Na <sub>2</sub> CO <sub>3</sub>	20.00	g
NaHCO <sub>3</sub>	10.00	g
NaCl	5.00	g
K <sub>2</sub> HPO <sub>4</sub>	1.00	g
<b>Trace element solution</b>	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 <sub>2</sub> x 6 H <sub>2</sub> O (200.0 g/l)	1.00	ml/l
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3. (a white colloid will form which will rapidly dissolve after mixing)

Sodium thiosulphate	30.00	mM
NH <sub>4</sub> Cl	5.00	mM

\* *Thioalkalispira microaerophila*, ALEN 1 = [DSM 14786](#). The strain is grown under nitrogen with 1% oxygen in the gas phase. The strain grows slowly with a potential lag phase of several days. Use 30 mM thiosulphate and up to a maximum of 5 mM NH<sub>4</sub>Cl

### Trace element solution (from medium 925)

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

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