925: ALKALIPHILIC SULPHUR RESPIRING STRAINS MEDIUM

This recipe contains strain-specific modifications for *Thioalkalivibrio paradoxus* DSM 13541 *

Final pH: 10.0
Final volume: 1000 ml

Na_2CO_3	20.00	g
$NaHCO_3$	10.00	g
NaCl	5.00	g
K_2HPO_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_2O (200.0 g/l)	1.00	ml/l

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

Thiosulfate	40.00	mM
NH_4Cl	5.00	mM

* DSM 13541 = ARh1 (thiosulphate grown) Growth with thiosulfate (40 mM) and NH_4Cl (5 mM); in conical flasks 1/10 liquid/air ratio on shaker 200 rpm. Heavy sulfur formation is usual and it is necessary to continue cultivation until the sulfur has been utilized.

Trace element solution (from medium 925)

EDTA	5.00	mg
$FeSO_4$ x 7 H_2O	2.00	mg
$ZnSO_4$ x 7 H_2O	100.00	mg
$MnCl_2$ x 4 H_2O	30.00	mg
$CoCl_2$ x 6 H_2O	200.00	mg
$NiCl_2$ x 6 H_2O	20.00	mg
Na_2MoO_4 x 2 H_2O	30.00	mg
$CuCl_2$ x 2 H_2O	10.00	mg
H_3BO_3	300.00	mg
Distilled water	1000.00	ml

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