## **Microorganisms**



## 815a: DESULFOCELLA HALOPHILA MEDIUM

Na <sub>2</sub> SO <sub>4</sub>	3.00	g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O	6.00	g
NaCl	40.00	g
KCI	2.00	g
NH <sub>4</sub> Cl	0.30	g
KH <sub>2</sub> PO <sub>4</sub>	0.20	g
$MgCl_2 \times 6 H_2O$	8.00	g
SrCl2 x 6 H <sub>2</sub> O	0.10	g
Trace element solution SL-11	1.00	ml
MOPS	3.00	g
Yeast extract	1.00	g
Sodium resazurin (0.1% w/v)	0.50	ml
Na-pyruvate	2.50	g
Na <sub>2</sub> CO <sub>3</sub>	0.50	g
$Na_2S \times 9 H_2O$	0.10	g
Distilled water	1000.00	ml

- 1. Dissolve ingredients except pyruvate, bicarbonate and sulfide, adjust pH to 6.0 with NaOH and sparge medium for 30 45 min with  $100\%~N_2$  gas to make it anoxic. Dispense medium under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Before use add pyruvate (sterilized by filtration) and sulfide from sterile anoxic stock solutions prepared under  $100\%~N_2$  gas and carbonate from a sterile anoxic stock solution prepared under  $80\%~N_2$  and  $20\%~CO_2$  gas atmosphere. Final medium pH should be 7.2.
- 2. Note: Prior to inoculation 10-20 mg/l sodium dithionite (added from a 5% w/v solution freshly prepared under  $N_2$  and filter-sterilized) can be added to the medium to stimulate growth at the beginning.

## Trace element solution SL-11 (from medium 722)

$Na_2$ -EDTA x 2 $H_2O$	5.20	g
FeCl <sub>2</sub> x 4 H <sub>2</sub> O	1.50	g
ZnCl <sub>2</sub>	70.00	mg
MnCl <sub>2</sub> x 4 H <sub>2</sub> O	100.00	mg
H <sub>3</sub> BO <sub>3</sub>	6.00	mg
CoCl <sub>2</sub> x 6 H <sub>2</sub> O	190.00	mg
CuCl <sub>2</sub> x 2 H <sub>2</sub> O	2.00	mg
NiCl <sub>2</sub> x 6 H <sub>2</sub> O	24.00	mg
$Na_2MoO_4 \times 2 H_2O$	36.00	mg
Distilled water	1000.00	ml

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Dissolve EDTA in 800 ml distilled water, adjust pH to 7 using 2 N NaOH and add ferrous chloride. After ferrous chloride has dissolved add other compounds. Finally adjust pH to 6.0 and bring volume to 1000 ml.