Microorganisms



1845: Nitrososphaera gargensis medium

Final pH: 8.5

Final volume: 1000 ml

Basal salt stock solution (20x)	50.00	ml
Trace element solution (Nitrososphaera)	1.00	ml
FeNaEDTA solution (7.5 mM)	1.00	ml
Selenite-tungstate solution	1.00	ml
NH ₄ Cl (1 M)	0.50	ml

- 1. Add 50 mL of 20x Basal salt stock solution and 4 g $CaCO_3$ to 950 mL sterile double distilled water and mix all just before use.
- 2. Autoclave at 121 °C for 20 min.
- 3. Cool down to room temperature.
- 4. Add aseptic per liter of 1x basalt salt solution: 1 mL FeNaEDTA (7.5 mM), 1 mL trace elements solution, 1 mL Selenite-tungstate solution, 0.5 mL NH_4Cl solution.
- 5. Adjust pH to 8.5 with NaOH.

Basal salt stock solution (20x)

KH ₂ PO ₄	1.00	g
KCI	1.50	g
$Mg(SO_4) \times 7 H_2O$	7.00	g
NaCl	11.68	g

- 1. Prepare with double distilled water.
- 2. Autoclave at 121 °C for 20 min.
- 3. Cool down to room temperature.
- 4. Store in the dark at 4 °C.

Trace element solution (Nitrososphaera) (from medium 1630c)

HCI (12.5M)	8.00	mL
H ₃ BO ₃	30.00	mg
$MnCl_2 \times 4 H_2O$	100.00	mg
CoCl ₂ x 6 H ₂ O	190.00	mg
NiCl ₂ x 6 H ₂ O	24.00	mg
CuCl ₂ x 2 H ₂ O	2.00	mg
$ZnSO_4 \times 7 H_2O$	144.00	mg
$Na_2MoO_4 \times 2 H_2O$	36.00	mg

Microorganisms

1845: Nitrososphaera gargensis medium



Double distilled water 1000.00 ml

This solution contains no iron! Sterilise by autoclaving or filtration (0.2 μ m) and store in the dark at 4 °C.

FeNaEDTA solution (7.5 mM) (from medium 1630c)

FeNa-EDTA	2753.00	mg
Double distilled water	1000.00	ml

Sterilise by filtration (0.2 μm) and store in the dark at 4 °C.

Selenite-tungstate solution (from medium 385)

NaOH	0.50	g
$Na_2SeO_3 \times 5 H_2O$	3.00	mg
$Na_2WO_4 \times 2 H_2O$	4.00	mg
Distilled water	1000.00	ml

NH₄Cl (1 M) (from medium 1630c)

NH ₄ Cl	2.67	g
Double distilled water	50.00	ml

- 1. Dissolve 2.67 g ammonium chloride in 50 mL Double distilled water.
- 2. Filtrate (0.2 μm).