

1583. MEDIUM FOR AMMONIA OXIDIZING BACTERIA (STRAINS FROM SOIL)

Solution A:

NH ₄ Cl	535	mg
KH ₂ PO ₄	54	mg
KCl	74	mg
MgSO ₄ x 7 H ₂ O	49	mg
CaCl ₂ x 2 H ₂ O	147	mg
NaCl	584	mg
Trace element solution	1	ml
Cresol red solution	2	ml
Distilled water	ad 1000	ml

Autoclave, subsequently adjust pH of the medium to about 7.8 by addition of sterile 10% NaHCO₃ (medium is turning from yellow to pink).

Important: During growth, add NaHCO₃ to readjust pH as soon as pH indicator changes to yellow. For stock cultures, 5 g l⁻¹ CaCO₃ (will stay as a precipitate) or 4.8 g l⁻¹ HEPES may be added to keep pH neutral for a longer time.

Aeration must be adjusted according to the density and activity of the culture. At low cell concentrations (which is the case most of the time) cells are sensitive to strong aeration (don't shake the cultures).

Trace element solution

Distilled water	975	ml
HCl, 1M	25	ml
MnSO ₄ x 4 H ₂ O	45	mg
H ₃ BO ₃	49	mg
ZnSO ₄ x 7 H ₂ O	43	mg
(NH ₄) ₆ Mo ₇ O ₂₄ x 4 H ₂ O	37	mg
FeSO ₄ x 7 H ₂ O	973	mg
CuSO ₄ x 5 H ₂ O	25	mg

Cresol red solution

Cresol red	50	mg
Distilled water	100	ml