

1465. CHITINISPIRILLUM MEDIUM

Mineral Base:

NaHCO ₃	8.0	g
Na ₂ CO ₃	22.0	g
NaCl	6.0	g
K ₂ HPO ₄	1.0	g

Adjust pH to 10.0 with NaOH or HCl. Make anoxic under nitrogen stream and autoclave at 121°C.

After autoclaving add sterile, anoxic solutions of:

Chitin (amorphous)	1 – 2g/l	(from 5% solution)
MgSO ₄	1 mM	(final concentration)
Yeast extract	20	mg/l
NH ₄ Cl	4 mM	(final concentration)
Na ₂ S	1 mM	(final concentration)
Acidic trace metals (Pfennig & Lippert, 1965)	1	ml/l
Vitamine mixture (Pfennig & Lippert, 1965)	1	ml/l

Acidic trace metals (Pfennig & Lippert, 1965)

1. EDTA	5000 mg/l
2. FeSO ₄ x 7H ₂ O	2000 mg/l
3. ZnSO ₄ x 7H ₂ O	100 mg/l
4. MnCl ₂	30 mg/l
5. H ₃ BO ₃	300 mg/l
6. CoCl ₂ x 6H ₂ O	200 mg/l
7. CuCl ₂	10 mg/l
8. NiCl ₂ x 2H ₂ O	20 mg/l
9. Na ₂ MoO ₄ x 2H ₂ O or NH ₄ MoO ₄	20 mg/l

adjust pH to 3-4 with HCl; autoclave in closed bottles, 120°C, 20 min.

Vitamine mixture (Pfennig & Lippert, 1965)

1: acidic solution (HCl, pH 3; 100 ml)

Thiamin	5 mg
Ca pantotenat	5 mg
B12	0.5 mg

2: basic solution (100 ml 0.1 N NaOH)

Biotin	2 mg
PABA	5 mg
Nicotinic acid	5 mg
Pyridoxine	10 mg

3: Neutral solution (100 ml Aqua dem.)

Folic acid	2 mg
Riboflavin	5 mg

Sterilize by filtration and keep at 4°C. Before addition to the medium mix 1:1:1 (vol:vol:vol).