

## 1464: CHITINIVIBRIO MEDIUM

This recipe contains strain-specific modifications for *Chitinivibrio alkaliphilus* DSM 24538 \*

Final pH: 10.0

Final volume: 1000 ml

NaHCO <sub>3</sub>	15.00	g/l
Na <sub>2</sub> CO <sub>3</sub>	95.00	g/l
NaCl	6.00	g/l
K <sub>2</sub> HPO <sub>4</sub>	1.00	g/l
Distilled water	1000.00	ml

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

2. After autoclaving add sterile, anoxic solutions of:

Chitin (amorphous or Sigma C7170, 5% solution), adjust volume in range 1g to 10g if required	1.50	ml
MgSO <sub>4</sub>	1.00	mM
Yeast extract	20.00	mg
NH <sub>4</sub> Cl	4.00	mM
Na <sub>2</sub> S	1.00	mM
<b>Vitamine mixture (Pfennig &amp; Lippert, 1965)</b>	1.00	ml
<b>Acidic trace metals (Pfennig &amp; Lippert, 1965)</b>	1.00	ml

\* Use chitin C7170 by Sigma, others may not work as well

**Vitamine mixture (Pfennig & Lippert, 1965)** (from medium 1464)

<b>Basic solution (100 ml 0.1 N NaOH)</b>	50.00	ml
<b>Neutral solution (100 ml Aqua dem.)</b>	50.00	ml
<b>Acidic solution (HCl, pH 3; 100 ml)</b>	50.00	ml

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

**Basic solution (100 ml 0.1 N NaOH)** (from medium 1464)

Biotin	2.00	mg
PABA	5.00	mg
Nicotinic acid	5.00	mg
Pyridoxine	10.00	mg
Distilled water	100.00	ml

## 1464: CHITINIVIBRIO MEDIUM

### Neutral solution (100 ml Aqua dem.) (from medium 1464)

Folic acid	2.00	mg
Riboflavin	5.00	mg
Distilled water	100.00	ml

### Acidic trace metals (Pfennig & Lippert, 1965) (from medium 1464)

EDTA	5.00	g/l
FeSO <sub>4</sub> x 7 H <sub>2</sub> O	2.00	g/l
ZnSO <sub>4</sub> x 7 H <sub>2</sub> O	100.00	mg/l
MnCl <sub>2</sub>	30.00	mg/l
H <sub>3</sub> BO <sub>3</sub>	300.00	mg/l
CoCl <sub>2</sub> x 6 H <sub>2</sub> O	200.00	mg/l
CuCl <sub>2</sub>	10.00	mg/l
NiCl <sub>2</sub> x 2 H <sub>2</sub> O	20.00	mg/l
Na <sub>2</sub> MoO <sub>4</sub> x 2 H <sub>2</sub> O	20.00	mg/l
Distilled water	1000.00	ml

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

### Acidic solution (HCl, pH 3; 100 ml) (from medium 1464)

Thiamin	5.00	mg
Calcium pantothenate	5.00	mg
B <sub>12</sub>	0.50	mg
Distilled water	100.00	ml