

## 1441. ALKALIPHILES PIRELLULA MEDIUM (M1)

### Solution 1:

CaCO <sub>3</sub>	5.00	g
Na <sub>2</sub> HPO <sub>4</sub> x H <sub>2</sub> O	0.10	g
MgSO <sub>4</sub> x 7H <sub>2</sub> O	0.50	g
Hutner's basal salts (see below) – (medium 590)	20.00	ml
Gellan gum Gelrite	9.00	g
Distilled water	940.00	ml

Adjust pH to 9.0, autoclave at 121°C for 20 min.

### Solution 2:

N-acetylglucosamine	2.0	g
Vitamin solution No.6 (see below) - (see medium 621)	10.0	ml
Distilled water	40.0	ml

Adjust pH to 9.0, filter-sterilize, and add to **solution 1**.

### *Vitamin solution:*

Vitamin B <sub>12</sub>	0.2	mg
Biotin	4.0	mg
Thiamine-HCl x 2 H <sub>2</sub> O	10.0	mg
Ca-pantothenate	10.0	mg
Folic acid	4.0	mg
Riboflavin	10.0	mg
Nicotinamide	10.0	mg
p-Aminobenzoic acid	10.0	mg
Pyridoxine hydrochloride	20.0	mg
Distilled water	1000.0	ml

Filter-sterilized.

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**Hutner's salts:**

Nitrilotriacetic acid (NTA)	10.000 g
MgSO <sub>4</sub> x 7 H <sub>2</sub> O	29.700 g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O	3.335 g
(NH <sub>4</sub> ) <sub>6</sub> MoO <sub>7</sub> O <sub>24</sub> x 4 H <sub>2</sub> O	9.250 mg
FeSO <sub>4</sub> x 7 H <sub>2</sub> O	99.000 mg
"Metals 44" (see below)	50.000 ml
Distilled water	950.000 ml

Dissolve the nitrilotriacetic acid, adjust the pH to 7.0 with KOH (about 7.3 g). Dissolve other salts separately, combine and adjust the pH to 6.8 with NaOH or H<sub>2</sub>SO<sub>4</sub>.

**"Metals 44":**

Na-EDTA	250.000 mg
ZnSO <sub>4</sub> x 7 H <sub>2</sub> O	1095.000 mg
FeSO <sub>4</sub> x 7 H <sub>2</sub> O	500.000 mg
MnSO <sub>4</sub> x H <sub>2</sub> O	154.000 mg
CuSO <sub>4</sub> x 5 H <sub>2</sub> O	39.200 mg
Co(NO <sub>3</sub> ) <sub>2</sub> x 6 H <sub>2</sub> O	24.800 mg
Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub> x 10 H <sub>2</sub> O	17.700 mg
Distilled water	1000.000 ml

Dissolve the EDTA and add a few drops of concentrated H<sub>2</sub>SO<sub>4</sub> to retard precipitation of the heavy metal ions.