

### 316: MOORELLA THERMOACETICA (TYE-CO) MEDIUM

NH <sub>4</sub> Cl	1.00	g
KH <sub>2</sub> PO <sub>4</sub>	0.30	g
Na <sub>2</sub> HPO <sub>4</sub> x 12 H <sub>2</sub> O	2.80	g
MgCl <sub>2</sub> x 6 H <sub>2</sub> O	0.20	g
Trypticase peptone (BD BBL)	10.00	g
Yeast extract (OXOID)	3.00	g
<b>Modified Wolin's mineral solution</b>	10.00	ml
<b>Wolin's vitamin solution</b>	5.00	ml
FeSO <sub>4</sub> x 7 H <sub>2</sub> O (0.1% w/v in 0.1 N H <sub>2</sub> SO <sub>4</sub> )	1.00	ml
Sodium resazurin (0.1% w/v)	0.50	ml
Na <sub>2</sub> S x 9 H <sub>2</sub> O	0.60	g
Distilled water	1000.00	ml

Dissolve ingredients (except sulfide), adjust pH to 7.0, bring medium to the boil, then cool to room temperature under 100% carbon monoxide gas. Dispense under same gas atmosphere into anoxic Hungate-type tubes or serum vials to 30% of their volume and autoclave. After sterilization add sulfide from a sterile anoxic stock solution prepared under 100% N<sub>2</sub> gas.

#### Modified Wolin's mineral solution (from medium 141)

Nitrilotriacetic acid	1.50	g
MgSO <sub>4</sub> x 7 H <sub>2</sub> O	3.00	g
MnSO <sub>4</sub> x H <sub>2</sub> O	0.50	g
NaCl	1.00	g
FeSO <sub>4</sub> x 7 H <sub>2</sub> O	0.10	g
CoSO <sub>4</sub> x 7 H <sub>2</sub> O	0.18	g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O	0.10	g
ZnSO <sub>4</sub> x 7 H <sub>2</sub> O	0.18	g
CuSO <sub>4</sub> x 5 H <sub>2</sub> O	0.01	g
AlK(SO <sub>4</sub> ) <sub>2</sub> x 12 H <sub>2</sub> O	0.02	g
H <sub>3</sub> BO <sub>3</sub>	0.01	g
Na <sub>2</sub> MoO <sub>4</sub> x 2 H <sub>2</sub> O	0.01	g
NiCl <sub>2</sub> x 6 H <sub>2</sub> O	0.03	g
Na <sub>2</sub> SeO <sub>3</sub> x 5 H <sub>2</sub> O	0.30	mg
Na <sub>2</sub> WO <sub>4</sub> x 2 H <sub>2</sub> O	0.40	mg
Distilled water	1000.00	ml

First dissolve nitrilotriacetic acid and adjust pH to 6.5 with KOH, then add minerals. Adjust final to pH 7.0 with KOH.

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### **Wolin's vitamin solution** (from medium 141)

Biotin	2.00	mg
Folic acid	2.00	mg
Pyridoxine hydrochloride	10.00	mg
Thiamine HCl	5.00	mg
Riboflavin	5.00	mg
Nicotinic acid	5.00	mg
Calcium D-(+)-pantothenate	5.00	mg
Vitamin B <sub>12</sub>	0.10	mg
p-Aminobenzoic acid	5.00	mg
(DL)-alpha-Lipoic acid	5.00	mg
Distilled water	1000.00	ml