

**ATCC medium: 2311 *Spirochaeta americana* medium**

NH <sub>4</sub> Cl .....	1.0 g
MgCl <sub>2</sub> . 6H <sub>2</sub> O .....	0.1 g
Yeast extract.....	0.5 g
NaCl.....	30.0 g
Na <sub>2</sub> CO <sub>3</sub> .....	2.76 g
NaHCO <sub>3</sub> .....	24.0 g
KCl.....	0.2 g
K <sub>2</sub> HPO <sub>4</sub> .....	0.2 g
Glucose.....	5.0 g
Wolfe's Vitamin Solution (see below).....	2.0 ml
Modified Wolfe's Minerals (see below).....	1.0 ml
Na <sub>2</sub> S . 9H <sub>2</sub> O .....	0.4 g

Adjust the pH to 9.5.

Dispense anaerobically into tubes, approximately 10 ml/tube.

*Wolfe's Vitamin Solution:*

Available from ATCC as a sterile ready-to-use liquid (Vitamin Supplement, catalog no. MD-VS).

Biotin.....	2.0 mg
Folic acid.....	2.0 mg
Pyridoxine hydrochloride....	10.0 mg
Thiamine . HCl.....	5.0 mg
Riboflavin.....	5.0 mg
Nicotinic acid.....	5.0 mg
Calcium D-(+)-pantothenate...	5.0 mg
Vitamin B12.....	0.1 mg
p-Aminobenzoic acid.....	5.0 mg
Thioctic acid.....	5.0 mg
Distilled water.....	1.0 L

*Modified Wolfe's Minerals:*

Na <sub>2</sub> SeO <sub>3</sub> .....	10.0 mg
NiCl <sub>2</sub> . 6H <sub>2</sub> O .....	10.0 mg
Na <sub>2</sub> WO <sub>4</sub> . 2H <sub>2</sub> O.....	10.0 mg
Wolfe's Mineral Solution (see below).....	1.0 L

*Wolfe's Mineral Solution:*

Available from ATCC as a sterile ready-to-use liquid (Trace Mineral Supplement, catalog no. MD-TMS.)

Nitrilotriacetic acid.....	1.5 g
MgSO <sub>4</sub> . 7H <sub>2</sub> O .....	3.0 g
MnSO <sub>4</sub> . H <sub>2</sub> O .....	0.5 g
NaCl.....	1.0 g
FeSO <sub>4</sub> . 7H <sub>2</sub> O .....	0.1 g
CoCl <sub>2</sub> . 6H <sub>2</sub> O .....	0.1 g
CaCl <sub>2</sub> .....	0.1 g
ZnSO <sub>4</sub> . 7H <sub>2</sub> O .....	0.1 g
CuSO <sub>4</sub> . 5H <sub>2</sub> O .....	0.01 g
AlK(SO <sub>4</sub> ) <sub>2</sub> . 12H <sub>2</sub> O.....	0.01 g
H <sub>3</sub> BO <sub>3</sub> .....	0.01 g
Na <sub>2</sub> MoO <sub>4</sub> . 2H <sub>2</sub> O.....	0.01 g
Distilled water.....	1.0 L

Add nitrilotriacetic acid to approximately 500 ml of water and adjust to pH 6.5 with KOH to dissolve the compound. Bring volume to 1.0 L with remaining water and add remaining compounds one at a time.