

**ATCC medium: 2139 *Chrysiogenes arsenatis* medium**

Trace Element Solution (see below).....0.1 ml  
Distilled water.....110.0 ml

Boil to remove oxygen. Autoclave at 121C for 15 minutes. Cool under N<sub>2</sub>.  
Aseptically and anaerobically add:

Solution 1 (see below).....1.0 ml  
Solution 2 (see below).....1.0 ml  
5% NaHCO<sub>3</sub> Solution (see below) .....1.0 ml  
1 M Sodium Acetate Solution (see below).....0.5 ml  
1 M Sodium Arsenate Solution (see below).....0.5 ml

Dispense under N<sub>2</sub> into Hungate tubes.

*Trace Element Solution:*

EDTA . 2H<sub>2</sub>O .....5.2 g  
FeCl<sub>2</sub> . 4H<sub>2</sub>O .....1.5 g  
ZnCl<sub>2</sub> .....70.0 mg  
MnCl<sub>2</sub> . 4H<sub>2</sub>O .....100.0 mg  
H<sub>3</sub>BO<sub>3</sub> .....62.0 mg  
CoCl<sub>2</sub> . 6H<sub>2</sub>O .....180.0 mg  
CuCl<sub>2</sub> . 2H<sub>2</sub>O .....17.0 mg  
NiCl<sub>2</sub> . 2H<sub>2</sub>O .....24.0 mg  
Na<sub>2</sub>MoO<sub>4</sub> . 2H<sub>2</sub>O.....36.0 mg  
Distilled water.....1.0 L

*Solution 1:*

NaCl.....12.0 g  
KCl.....3.0 g  
NH<sub>4</sub>Cl .....1.5 g  
KH<sub>2</sub>PO<sub>4</sub> .....2.0 g  
Na<sub>2</sub>SO<sub>4</sub> .....0.3 g  
Distilled water.....110.0 ml

Adjust pH to 7.0. Boil for four minutes to remove oxygen. Autoclave at  
121C for 15 minutes. Keep sealed from air.

*Solution 2:*

MgCl<sub>2</sub> . 6H<sub>2</sub>O .....4.0 g  
CaCl<sub>2</sub> . 2H<sub>2</sub>O .....1.5 g  
Distilled water.....110.0 ml

Boil for 4 minutes to remove oxygen. Autoclave at 121C for 15 minutes.  
Keep sealed from air.

*5% NaHCO<sub>3</sub> Solution:*

NaHCO<sub>3</sub> .....5.0 g  
Distilled water.....110.0 ml

Boil water to remove oxygen. Add sodium bicarbonate. Filter-sterilize.

*1 M Sodium Acetate Solution:*

Sodium acetate.....8.2 g  
Distilled water.....110.0 ml

Adjust pH to 7.0. Boil for four minutes to remove oxygen. Autoclave at 121C for 15 minutes. Keep sealed from air.

*1 M Sodium Arsenate Solution:*

Sodium arsenate . 7H<sub>2</sub>O .....31.2 g  
Distilled water.....110.0 ml

Adjust pH to 7.0. Boil for four minutes to remove oxygen. Autoclave at 121C for 15 minutes. Keep sealed from air.