

ATCC medium: 2050 *Thauera aromatica* medium

10X BT Salts Solution (see below).....100.0 ml
KNO₃2.0 g
PS-1 Solution (see below).....5.0 ml
VS-Salts Solution (see below).....5.0 ml
Sodium Pyruvate Solution (see below)....50.0 ml
Distilled water.....840.0 ml

Autoclave BT Salts and potassium nitrate in 840 ml distilled water at 121C for 15 minutes. Cool to room temperature and aseptically add PS-1, VS-Salts, and sodium pyruvate solutions.

For solid medium, autoclave BT Salts and potassium nitrate in 400 ml water and cool to 50C. Add 20 g Agar, Noble (BD 214230) to 440 ml water and autoclave at 121C; cool to 50C. Aseptically mix the two solutions, then add PS-1, VS-Salts, and sodium pyruvate solutions. Mix well and dispense aseptically.

10X BT Salts Solution:

Na₂HPO₄20.03 g
KH₂PO₄7.5 g
NH₄Cl1.5 g
Distilled water.....500.0 ml

Store at room temperature.

PS-1 Solution:

MgSO₄ . 7H₂O20.0 g
Distilled water.....1.0 L

Aliquot into small volumes and autoclave at 121C for 15 minutes.

VS-Salts Solution:

EDTA (acid).....50.0 g
ZNSO₄ . 7H₂O22.0 g
CaCl₂5.54, g
MnCl₂ . 4H₂O5.06 g
FeSO₄ . 7H₂O4.99 g
(NH₄)₆Mo₇O₂₄ . 4H₂O.....1.10 g
CuSO₄ . 5H₂O1.57 g
CoCl₂ . 6H₂O1.61 g
Distilled water.....1.0 L

Add each component in the order listed, adjusting the pH to 6.0 each time, using 10% KOH (approximately 150 ml per 500 ml of solution). Prepare to a final volume of 1.0 L, dispense in smaller volumes, and sterilize. Add nitrate for growth under denitrification conditions.

Sodium Pyruvate Solution:

Sodium pyruvate.....2.0 g
Distilled water.....50.0 ml

Filter-sterilize.