

**ACETATE AGAR****TM 1324**

for the isolation and cultivation of *Leuconostoc* and *Pediococcus* species

Composition

Ingredients	Gms/Ltr.
Peptic digest of animal tissue	5.00
Meat extract	5.00
Yeast extract	5.00
Glucose	10.00
Polysorbate 80	0.50
Sodium acetate.3H ₂ O	27.220
Agar	20.00

* Dehydrated powder, store in a dry place, in tightly-sealed containers at 24°C and protect from direct Sunlight.

Instructions for Use

Dissolve 61.90 gms in 1000 ml of distilled water. Gently heat to boiling with gentle swirling and dissolve the medium completely. Sterilize by autoclaving at 15 psi (121°C) for 15 minutes. Cool to 45 - 50°C, mix well and dispense as desired.

Appearance: Yellow coloured clear to slightly opalescent

PH (at 25°C): 5.4 ± 0.2

Principle

ACETATE AGAR is used for isolation and cultivation of *Leuconostoc* and *Pediococcus*. Acetate agar was formulated by Whittenbury and then modified by Keddie. *Leuconostoc* is a gram positive and heterofermentative bacteria that is able to produce dextran from sucrose, thereby held responsible for causing the stink when creating a sour dough starter. Some species of this microorganism are also capable of causing human infection. *Pediococcus* is a genus of gram-positive lactic acid bacteria, which are purely homofermentative. *Pediococcus* bacteria are usually considered contaminants of beer and wine, even than some strains of *Pediococcus* produce diacetyl, which gives a buttery or butterscotch aroma to some wines (such as chardo nney) and a few style of beer. *Pediococcus* species are often used in silage inoculants.

Peptic digest of animal tissue, yeast extract, meat extract provide all essential growth nutrients. Polysorbate 80 maintains the surface tension of the medium to the optimal level. Glucose is the energy source. Sodium acetate serves as a sole source of carbon.

Interpretation



PRODUCT DATA SHEET

Cultural characteristics observed after inoculating the organisms and subsequent incubation in anaerobic condition at 35 – 37°C for 5 – 7 days.

Microorganisms	ATCC	Growth
<i>Leuconostoc mesenteroides</i>	12291	Good-Luxuriant
<i>Pediococcus acidilactici</i>	33314	Good-Luxuriant
<i>Enterococcus faecalis</i>	29212	None-Poor

References

1. Vagiakou-Voudris E., Mylona-Petropoulou D., Kalogeropoulou E., Chant zis A., Chini S., Tsiodra P., Malamou-Lada E., J. Infect. Dis. 2002; 34(10):766-7.
2. Keddie R. M., 1951, Proceed. Soc. Appl. Bacteriol., 14:157.
3. Whittenbury R., 1965 b, J. Gen. Microbiol., 40:97.