

CM 20,017 – ACETATE AGAR

INTENDED USE

For the isolation and cultivation of Leuconostoc and Pediococcus species.

PRODUCT SUMMARY AND EXPLANATION

Leuconostoc is a genus of gram-positive bacteria, which are heterofermentative and are able to produce dextran from sucrose. These are blamed for causing the stink when creating a sour dough starter. Some species 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 although their presence

is sometimes desired in beer styles such as Lambic. Certain Pediococcus isolates produce diacetyl, which gives a buttery or butterscotch aroma to some wines (such as Chardonnay) and a few styles of beer. Pediococcus species are often used

in silage inoculants. Acetate agar was formulated by Whittenbury and then modified by Keddie.

COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	5.000
Meat extract	5.000
Yeast extract	5.000
Dextrose (Glucose)	10.000
Polysorbate 80 (Tween 80)	0.500
Sodium acetate	16.400
Agar	20.000

PRINCIPLE

Peptone, yeast extract, meat extract provides nitrogenous and carbonaceous compounds, vitamins and 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.

INSTRUCTION FOR USE

Dissolve 61.9 grams (the equivalent weight of dehydrated medium per litre) of dehydrated medium in 1000 ml purified / distilled water.

Heat to boiling to dissolve the medium completely.

Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.

Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light yellow to beige homogeneous free flowing powder.
Appearance of prepared medium pH (at 25°C)	: Yellow coloured clear to slightly opalescent gel forms in Petri plates. : 5.4±0.2

INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Enterococcus faecalis	29212	50-100	None-poor	0-10%	25-30°C	18-48 Hours
Leuconostoc mesenteroides	12291	50-100	Good-luxuriant	>=50%	25-30°C	18-48 Hours
Pediococcus acidilactici	33314	50-100	Good-luxuriant	>=50%	25-30°C	18-48 Hours

PACKAGING:

Inpacksizeof500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.









Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

Afteruse,prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. KeddieR. M., 1951, Proceed. Soc. Appl. Bacteriol., 14:157
2. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
3. 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
4. Whittenbury R., 1965 b, J. Gen. Microbiol., 40:97.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For Lab Use Only