

# TM 1911 – ACETOBACTER BROTH (GLUCOSE)

#### **INTENDED USE**

For glucose positive Acetobacter species.

# PRODUCT SUMMARY AND EXPLANATION

Acetobacter species are aerobic, gram negative organisms. Acetic acid bacteria are found in fruits with high carbohydrate concentration, which is selective for yeasts that produce ethanol. This ethanol forms the substrate for acetic acid bacteria and may oxidize ethanol to acetic acid. Various synthetic and maintenance media for Acetobacter cultures have been cited. A typical maintenance medium is Acetobacter Broth. Acetobacter Broth is formulated as per Manual of Microbiological Methods and used for the maintenance of Acetobacter species utilizing glucose.

# **COMPOSITION**

Ingredients	Gms / Ltr
Yeast extract	10.000
Calcium carbonate	10.000
Glucose	3.000

# **PRINCIPLE**

Yeast extract in the medium provides nitrogen, vitamins and minerals necessary to support bacterial growth. Glucose acts as energy source. Calcium carbonate acts as a buffer.

# **INSTRUCTION FOR USE**

- Dissolve 23.0 grams in 1000 ml distilled water.
- Heat if necessary and dispense in test tubes, taking care to distribute calcium carbonate evenly.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

Note: Due to presence of Calcium carbonate, the prepared medium forms opalescent solution with white precipitate.

# **QUALITY CONTROL SPECIFICATIONS**

**Appearance of Powder** : Cream to yellow homogeneous free flowing powder.

Appearance of prepared medium : Light amber coloured, clear to slightly opalescent solution with heavy white

precipitate forms in tubes.

pH (at 25°C) : 7.4±0.2

# **INTERPRETATION**

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Acetobacter acetii	15973	50-100	Luxuriant	35-37°C	24-48 Hours









Acetobacter liquifaciens	14835	50-100	Luxuriant	35-37°C	24-48 Hours
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### **PACKAGING:**

In pack size of 500 gm bottles.

# **STORAGE**

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°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.

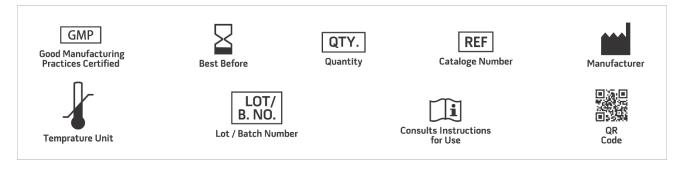
**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### **DISPOSAL**

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

### **REFERENCES**

- 1. Vanderzant C., Splittstoesser D. F., (Eds.), 1992, Compendium of Methods for the Microbiological Examination of Foods, 3rd Ed., APHA, Washington,
- D. C.
- 2. Asai, 1968, Univ. of Tokyo Press, Tokyo, Japan and Univ. Park Press, Baltimore, MD.
- 3. Manual of Microbiological Methods, 1957, Society of American Bacteriologists, McGraw-Hill Book Company, New York.
- 4. Catalogue of Bacteria and Bacteriophages, 1992, 18th Ed., American Type Culture Collection, Rockville, MD.



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

\*For Lab Use Only

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