## **PRODUCT DATA SHEET**



# TM 1945 – ACID BROTH

### **INTENDED USE**

For cultivation of acid tolerant microorganisms from canned food.

## PRODUCT SUMMARY AND EXPLANATION

Acid Broth is a very good medium for the recovery of minimal contamination of canned acid food and is formulated as per APHA for the selective cultivation of acid tolerant microorganisms from canned foods. Bacteria such as *Bacillus coagulans, Lactobacillus, Leuconostoc* and yeasts etc. are capable of causing spoilage in acid product concentrates such as fruit pastes, tomato paste. Some *Pediococci* and *Streptococci*, which are aciduric and responsible for canned food spoilage, can also be cultivated in the Acid Broth.

# COMPOSITION

Ingredients	Gms / Ltr	
Invert sugar	10.000	
Peptone	10.000	
Yeast extract	7.500	

#### PRINCIPLE

Acid Broth contains an invert sugar, which is a mixture of 50% glucose and 50% fructose obtained by the hydrolysis of sucrose. It is included in the medium to prevent loss of water from the medium and also because the acid tolerant bacteria utilize it. Peptone and yeast extract provide the nitrogenous nutrients including amino acids to the microorganisms.

## **INSTRUCTION FOR USE**

- Dissolve 27.5 grams in 1000 ml purified / distilled water.
- Heat if necessary to dissolve the medium completely. Distribute into tubes or flasks.
- Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

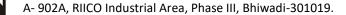
#### QUALITY CONTROL SPECIFICATIONS

Appearance of dehydrated medium	:	Light yellow to beige homogeneous free flowing powder
Appearance of prepared medium	:	Light amber coloured clear solution, without any precipitate.
pH (at 25°C)	:	4.0±0.2

# INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism ATCC (CFU/ml) Growth Temperature Incubation Period
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Bacillus coagulans	8038	50-100	Good-luxuriant	30°C	5 days
Lactobacillus acidophilus	4356	50-100	Good-luxuriant	30°C	5 days
Leuconostoc mesenteroides	12291	50-100	Good-luxuriant	30°C	5 days

## PACKAGING:

In pack size of 500 gm bottle.

## STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 10-25°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

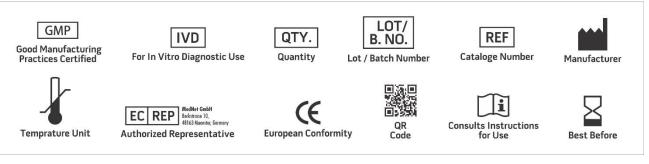
After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

## REFERENCES

1. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition

2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

3. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. \*For Lab Use Only Revision: 28 Sep, 2022