

TM 2355 - SYNCASE BROTH

INTENDED USE

For the detection of coliforms in food samples.

PRODUCT SUMMARY AND EXPLANATION

Examination of water, foods, ingredients and raw materials, for the presence of marker groups such as coliforms is one of the most common tests in a microbiological laboratory, partly because of the relative ease and speed with which these tests can be accomplished. It is a valuable bacterial indicator for determining the extent of faecal contamination of recreational surface waters or drinking water. Syncase Broth is used for the detection of coliform organisms from food samples as per APHA.

COMPOSITION

Ingredients	Gms / Ltr		
Casein acid hydrolysate	20.000		
Dipotassium phosphate	8.710		
Yeast extract	6.000		
Sodium chloride	2.500		

PRINCIPLE

Casein acid hydrolysate and yeast extract in the medium supply the necessary nitrogenous nutrients for the growth of coliforms. Dipotassium phosphate serves as buffering agent to maintain pH, whereas sodium chloride maintains osmotic equilibrium.

INSTRUCTION FOR USE

- Dissolve 37.21 grams in 1000 ml distilled water.
- Heat, if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and dispense as desired.

Note: The medium may form slight precipitate upon standing.

QUALITY CONTROL SPECIFICATIONS

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

Appearance of prepared medium: Light yellow coloured clear solution in tubes.

pH (at 25°C) : 8.5±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Citrobacter freundii	8090	50-100	Luxuriant	35-37°C	18-24 Hours









Enterobacter aerogenes	13048	50-100	Luxuriant	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Luxuriant	35-37°C	18-24 Hours

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.

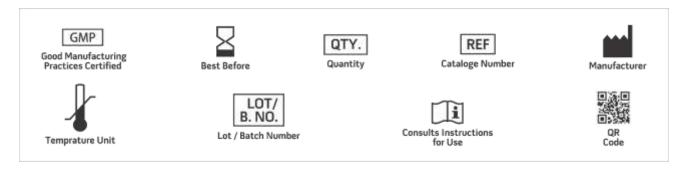
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

- 1. Corry J. E. L., Curtis G. D. W., and Baird R. M., Culture Media for Food Microbiology, Vol. 34, Progress in Industrial Microbiology, 1995, Elsevier, Amsterdam
- 2. Vanderzant C. and Splittstoesser D. F., (Eds.), 1992, Compendium of Methods for the Microbiological Examination of Foods, 3rd Ed., APHA, Washington, D.C



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

*For Lab Use Only

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