

TM 1851 - UREA BROTH BASE (CHRISTENSEN)

INTENDED USE

For the detection of urease production, particularly by members of the genus Proteus.

PRODUCT SUMMARY AND EXPLANATION

This is a liquid version of Christensen's medium introduced by Maslen in 1952. This modification allows inoculation by Pasteur pipette, and it is easier to detect contamination in a fluid rather than in a slope. Maslen also claimed that it is easier to detect positive results.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	1.000
Sodium chloride	5.000
Glucose	1.000
Disodium Phosphate	1.200
Potassium Dihydrogen Phosphate	0.800
Phenol Red	0.004

PRINCIPLE

The medium consists of peptone, glucose which provides nitrogen, carbon compounds and other essential growth nutrients. Phosphate buffers the medium. Phenol red is the indicator in the medium.

INSTRUCTION FOR USE

- Dissolve 0.9 grams in 95 ml distilled water.
- Heat with frequent agitation to completely dissolve the medium if necessary.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C then add aseptically 5ml of sterile urea solution.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Clear and yellow media.
pH (at 25°C) : 6.8±0.2

INTERPRETATION

Cultural characteristics observe after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Colour characteristics	Incubation Temperature	Incubation Period



<i>Escherichia coli</i>	25922	50-100	Good-luxuriant	Red colour	37°C	4-6 Hours
<i>Proteus mirabilis</i>	29906	50-100	Good-luxuriant	Red colour	37°C	18-24 Hours

PACKAGING:

In pack size of 100 gm and 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. Maslen L.G.C. (1952). Routine use of liquid urea medium for identifying Salmonella and Shigella organisms. J. Brit. Med. 2: 545-546..

 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**
Revision: 08 Nov., 2019