

TM 2354 - SUPER BROTH NO. II

INTENDED USE

For the cultivation of recombinant strains of *Escherichia coli*.

PRODUCT SUMMARY AND EXPLANATION

The rearrangement of genetic information within and among DNA molecule encompasses a variety of processes, collectively placed under the heading of genetic recombination. Bacteria that have undergone recombination, need to be grown in an enriched medium. Super Broth No. II is a modification of Super Broth, developed by Tartoff and Hobbs.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	12.000
Yeast extract	24.000
Dipotassium phosphate	11.400

PRINCIPLE

High amount of tryptone and yeast extract, make the medium highly nutritive for the growth of recombinant strains of *E. coli*. Phosphate provide buffering to the medium.

INSTRUCTION FOR USE

- Dissolve 49.1 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense in tubes and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Amber coloured clear solution without any precipitate.
pH (at 25°C) : 7.2±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	23724	50-100	Good-luxuriant	35-37°C	18-24 Hours
<i>Escherichia coli</i>	25922	50-100	Good-luxuriant	35-37°C	18-24 Hours



<i>Staphylococcus aureus</i>	25923	50-100	Good-luxuriant	35-37°C	18-24 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.

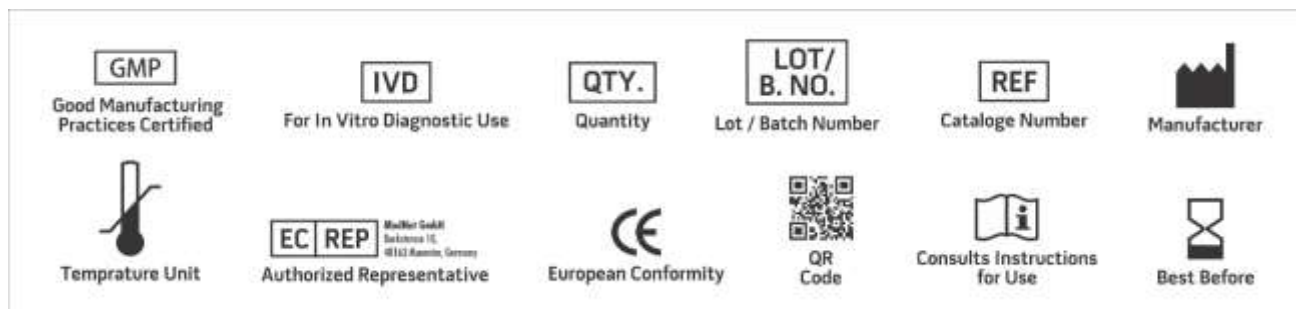
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Nelson D.L, Cox M.M, 2005 Lehninger Principles of Biochemistry, 4th edi, W.H. Freeman and Company. New York.
2. Tartoff and Hobbs. 1987. Bethesda Research Laboratories FOCUS 9:12.



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

***For Lab Use Only**
Revision: 08 Nov., 2019