

## Technical Information

### Super Broth No. II

#### Product Code: DM 2689

**Application:** - Super Broth No. II is recommended for the cultivation of recombinant strains of *Escherichia coli*.

#### Composition\*\*

Ingredients	Gms / Litre
Tryptone	12.000
Yeast extract	24.000
Dipotassium phosphate	11.400
Monopotassium phosphate	1.700
Final pH ( at 25°C)	7.2±0.2

\*\*Formula adjusted, standardized to suit performance parameters

#### Principle & Interpretation

Super Broth No. II is a modification of Super Broth, developed by Tart off and Hobbs (2). The rearrangement of genetic information within and among DNA molecule encompasses a variety of processes, collectively placed under the heading of genetic recombination (1). Bacteria that have undergone recombination, need to be grown in an enriched medium.

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.

#### Methodology

Suspend 49.1 grams of dehydrated powder media in 1000 ml distilled water containing 5 ml glycerol. Mix thoroughly & Heat if necessary to dissolve the medium completely. Dispense in tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 mins.

#### Quality Control

##### Appearance

Cream to yellow coloured homogeneous free flowing powder.

##### Colour and Clarity

Amber coloured clear solution without any precipitate.

##### Reaction

Reaction of 4.9% w/v aqueous solution at 25°C. pH : 7.2±0.2

##### pH Range

7.00-7.40

##### Cultural Response

DM 2689: Cultural characteristics observed after an incubation at 35-37°C for 18- 24 hours.

Organism	Inoculum (CFU)	Growth
<i>Escherichia coli</i> ATCC 25922	50-100	good-luxuriant
<i>Escherichia coli</i> ATCC 23724	50-100	good-luxuriant



Dehydrated Culture Media  
Bases / Media Supplements

*Staphylococcus aureus* ATCC 25923      50-100      good-luxuriant

## Storage and Shelf Life

**Dried Media:** Store below 30°C in tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label.

**Prepared Media:** 2-8° in sealable plastic bags for 2-5 days.

## Further Reading

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.

## Disclaimer :

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