# TM 2353 - SUPER BROTH

## INTENDED USE
For the mass cultivation of *Escherichia coli*.

## PRODUCT SUMMARY AND EXPLANATION
*Escherichia coli* is a bacterium that is commonly found in the gut of humans and warm-blooded animals. Most strains of *E. coli* are harmless. Some strains however, such as Enterohaemorrhagic *E. coli* (EHEC) can cause severe foodborne disease. Super Broth has a formulation slightly different from that described by Atlas and it is used for the mass cultivation of *E. coli.*

## COMPOSITION

| Ingredients | Gms / Ltr |
|---|---|
| **Casein enzymic hydrolysate** | 35.000 |
| **Yeast extract** | 20.000 |
| **Sodium chloride** | 5.000 |

## PRINCIPLE
Casein enzymic hydrolysate and yeast extract provide nitrogenous compounds, vitamin B complex and other essential growth nutrients. Sodium chloride maintains osmotic equilibrium. Super Broth is nutritionally rich hence other organisms can also grow in it easily.

## INSTRUCTION FOR USE
- Dissolve 60 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense as desired 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** : Light yellow coloured clear solution without any precipitate.
**pH (at 25°C)** : 7.0±0.2

## INTERPRETATION
Cultural characteristics observed after an incubation.

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

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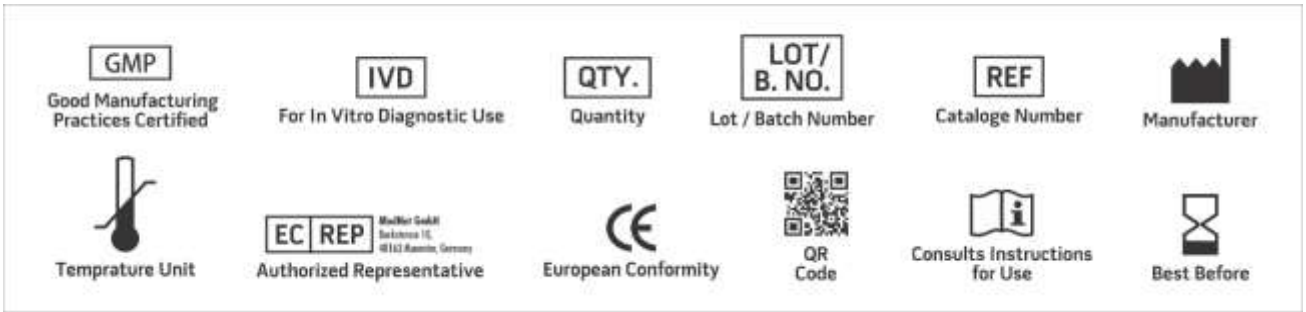
|---|---|---|---|---|---|
| *Staphylococcus aureus* | 25923 | 50-100 | Good-luxuriant | 35-37°C | 18-24 Hours |

**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. Atlas R.M., 2004, Handbook of Microbiological Media, Parks L.C. (Ed.), CRC Press, Inc.




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

***For Lab Use Only**
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