# TMHV 102 - SOYBEAN CASEIN DIGEST MEDIUM (TRYPTONE SOYA BROTH) (CASO BROTH) (as per USP/EP/BP/JP/IP) (VEG.)

## INTENDED USE

For cultivation of wide variety of microorganisms recommended for sterility testing of molds and lower bacteria.

## PRODUCT SUMMARY AND EXPLANATION

Cetrimide Agar was described by King et al. This media formulation is in accordance with the harmonized method of USP/EP/BP/JP/IP. It is used as a selective medium for the isolation of *Pseudomonas aeruginosa* from pharmaceutical products. This medium is also recommended for microbial limit testing of non- sterile products. Lowburry first reported the use of cetrimide as an agent for selective isolation of *Pseudomonas* spp. This medium is also used for determining the ability of an organism to produce fluorescein and pyocyanin.

## COMPOSITION

| Ingredients | Gms / Ltr |
|---|---|
| **Veg. hydrolysate** | 17.000 |
| **Sodium chloride** | 5.000 |
| **Soya Peptone** | 3.000 |
| **Dipotassium hydrogen phosphate** | 2.500 |
| **Glucose** | 2.500 |

## PRINCIPLE

Veg. hydrolysate and soya peptone makes this medium nutritious by providing amino acids and long chain peptides for the growth of microorganisms. Dipotassium hydrogen phosphate serves as the buffer in the medium. Sodium chloride maintains the osmotic balance. Glucose is the fermentable source of carbon.

## INSTRUCTION FOR USE

- Dissolve 30.00 grams in 1000 ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely.
- Dispense in tubes or flasks as desired.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Cool to room temperature before use.

## QUALITY CONTROL SPECIFICATIONS

**Appearance of Dehydrated powder** : Cream to yellow colour, homogeneous free flowing powder
**Appearance of Prepared medium** : Light yellow colour, clear solution
**pH (at 25°C)** : 7.3±0.2

## INTERPRETATION

Cultural characteristics observed after incubation.

| Microorganism | ATCC | Inoculum (CFU/ml) | Growth | Incubation Temperature | Incubation Period |
|---|---|---|---|---|---|
| **Growth promotions** | | | | | |
| *Staphylococcus aureus* | 6538 | 50-100 | Luxuriant | 30-35°C | 18-24 Hours |

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|---|---|---|---|---|---|
| *Staphylococcus aureus* | 25923 | 50-100 | Luxuriant | 30-35°C | 18-24 Hours |
| *Escherichia coli* | 8739 | 50-100 | Luxuriant | 30-35°C | 18-24 Hours |
| *Escherichia coli* | 25922 | 50-100 | Luxuriant | 30-35°C | 18-24 Hours |
| *Pseudomonas aeruginosa* | 9027 | 50-100 | Luxuriant | 30-35°C | 18-24 Hours |
| *Pseudomonas aeruginosa* | 27853 | 50-100 | Luxuriant | 30-35°C | 18-24 Hours |
| *Bacillus subtilis* | 6633 | 50-100 | Luxuriant | 30-35°C | 18-24 Hours |
| *Salmonella typhimurium* | 14028 | 50-100 | Luxuriant | 30-35°C | 18-24 Hours |
| *Streptococcus pneumoniae* | 6305 | 50-100 | Luxuriant | 30-35°C | 18-24 Hours |
| *Micrococcus luteus* | 9341 | 50-100 | Luxuriant | 30-35°C | 18-24 Hours |
| *Candida albicans* | 10231 | 50-100 | Luxuriant | 30-35°C | <=5 Days |
| *Candida albicans* | 2091 | 50-100 | Luxuriant | 30-35°C | <=5 Days |
| #Aspergillus brasiliensis | 16404 | 10-100 | Luxuriant | 30-35°C | <=5 Days |
| **Sterility Testing (Growth promotion+ Validation** | | | | | |
| *Staphylococcus aureus* | 6538 | 50-100 | Luxuriant | 20-25°C | <=3 Days |
| *Staphylococcus aureus* | 25923 | 50-100 | Luxuriant | 20-25°C | <=3 Days |
| *Escherichia coli* | 8739 | 50-100 | Luxuriant | 20-25°C | <=3 Days |
| *Escherichia coli* | 25922 | 50-100 | Luxuriant | 20-25°C | <=3 Days |
| *Pseudomonas aeruginosa* | 9027 | 50-100 | Luxuriant | 20-25°C | <=3 Days |
| *Pseudomonas aeruginosa* | 27853 | 50-100 | Luxuriant | 20-25°C | <=3 Days |
| *Bacillus subtilis* | 6633 | 50-100 | Luxuriant | 20-25°C | <=3 Days |
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| *#Aspergillus brasiliensis* | 16404 | 10-100 | Luxuriant | 20-25°C | <=5 Days |

#Formerly known as *Aspergillus niger*.

## PACKAGING

In 100 & 500 gm packaging size.

## STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers 10-25°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 powder show evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

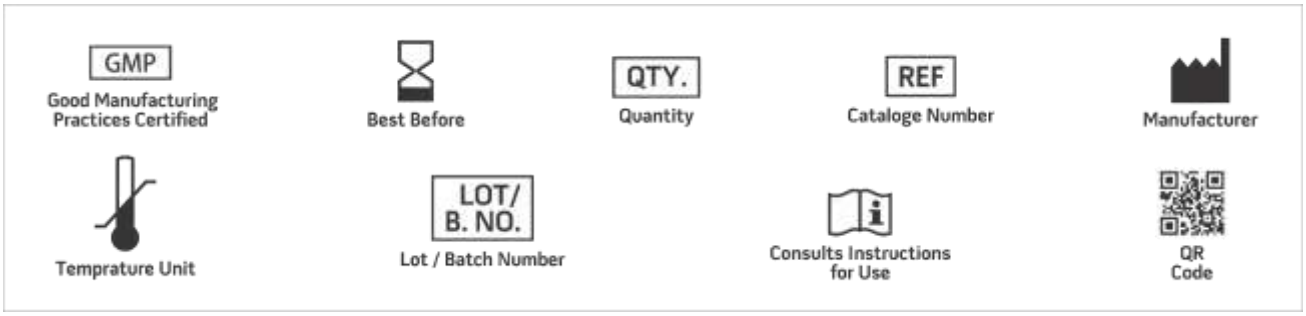
## DISPOSAL

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

## REFERENCES

1. British Pharmacopoeia, 2016, The Stationery Office British Pharmacopoeia
2. European Pharmacopoeia, 2017, European Dept. for the quality of Medicines.
3. Japanese Pharmacopoeia, 2016.
4. Indian Pharmacopoeia, 2018, Govt. of India, the controller of Publication, Delhi, India.
5. The United States Pharmacopoeia, 2019, The United States Pharmacopoeial Convention. Rockville, MD.

6. Wright and Welch, 1959-60, Antibiotics Ann., 61.




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

***For professional use only.**

**Revision: 23rd Nov 2023.**