# TSA (Tryptic Soy Agar) (MFDS)

Medium used for the wide variety of microorganisms cultivation.

## • CONTENTS (Liter)

| | |
|---|---|
| Tryptose | 17.0 g |
| Soytone | 3.0 g |
| Glucose | 2.5 g |
| Sodium Chloride | 5.0 g |
| Dipotassium Phosphate | 2.5 g |
| Agar | 15 g |

Final pH = 7.3 ± 0.2 at 25°C.

## • PROCEDURE

Suspend 45.0 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. Mix well. Dispense in petri dishes.

## • INTERPRETATION

TSA (Tryptic Soy Agar) (MFDS) is a medium used for the wide variety of microorganisms cultivation. Tryptose, soytone and glucose provide nitrogen, carbon, vitamins and minerals. Sodium chloride maintains osmotic balance. Dipotassium phosphate is buffering agents. Agar is the solidifying agent.

## • TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate at 30 - 35°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

Dehydrated medium
Appearance: free-flowing, homogeneous.
Color: light beige.
Prepared medium
Appearance: clear with no precipitate.
Color: amber.
Incubation conditions: 30 - 35°C / 18 - 24 hours

| Microorganism | ATCC | Inoculum CFU | Growth |
|---|---|---|---|
| *Escherichia coli* | 25922 | 50-100 | good |
| *Staphylococcus aureus* | 25923 | 50-100 | good |
| *Pseudomonas aeruginosa* | 27853 | 50-100 | good |

## • STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

## • REFERENCES


1. Swanson, K.J., F.F. Busta, E.H. Peterson, and M.G. Johnson. (1992). Colony Count Methods, p. 75-95.
2. The United States Pharmacopeia . (1995). Microbiological tests, p. 1681- 1686. The United States pharmacopeia, 23rd Ed. United States Pharmacopeial Convention, Rockville, MD.
3. Refer to the MFDS.


## • PACKAGE

| | |
|---|---|
| Cat. No : MB-T1052K<br>TSA (Tryptic Soy Agar) (MFDS) | 500 G |