

TSA (Tryptic Soy Agar)



Medium used for the wide variety of microorganisms cultivation.

*Equally use with NIER (MB-T1052N), KP (MB-T1052P) and KFCC (MB-T1052C).

• CONTENTS (Liter)

Pancreatic Digest of Casein	15.0 g
Papaic Digest of Soybean Meal	5.0 g
Sodium Chloride	5.0 g
Agar	15.0 g
Final pH = 7.3 ± 0.2 at 25°C.	

• PROCEDURE

Suspend 40.0 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) is a medium used for the wide variety of microorganisms cultivation. Pancreatic digest of casein and papaic digest of soybean meal provide nitrogen, carbon, vitamins and minerals. Sodium chloride maintains osmotic balance. 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
<i>Escherichia coli</i>	25922	50-100	good
<i>Staphylococcus aureus</i>	25923	50-100	good
<i>Streptococcus pneumoniae</i>	6305	50-100	good
<i>Streptococcus pyogenes</i>	19615	50-100	good
<i>Salmonella typhimurium</i>	14028	50-100	good
<i>Shigella flexneri</i>	12022	50-100	good
<i>Pseudomonas aeruginosa</i>	27853	50-100	good
<i>Candidia albicans</i>	10231	50-100	good
<i>Aspergillus brasiliensis</i>	16404	-	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. ISO 9308-1:2000 Water quality - Detection and enumeration of Escherichia coli and coliform bacteria - Part 1: Membrane filtration method.
4. Refer to the NIER, KP and KFCC.

• PACKAGE

Cat. No : MB-T1052 TSA (Tryptic Soy Agar)	500 G
--	-------