

TSA (Tryptic Soy Agar)



Medium used for the cultivation and enumeration of a wide variety of microorganisms.

*Equally use with NIER (MB-T1052N), KP (MB-T1052P), USP, EP 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. Pour into petri dishes.

• INTERPRETATION

TSA (Tryptic Soy Agar) is a medium used for the cultivation and enumeration of a wide variety of microorganisms. Pancreatic digest of casein and papaic digest of soybean meal provide nitrogen, carbon, vitamins and minerals. Sodium chloride maintains the osmotic balance. Agar is the solidifying agent.

• TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 30 - 35°C for 18 - 24 hours up to 3 days (*up to 5 days). Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige

Prepared medium

Appearance: clear

Color: light amber

Incubation conditions: 30 - 35°C / 18 - 24 hours up to 3 days (*up to 5 days)

Microorganism	ATCC	Inoculum CFU	Growth
<i>Escherichia coli</i>	8739	50-100	good
<i>Staphylococcus aureus</i>	6538	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>	9027	50-100	good
<i>Bacillus subtilis</i>	6633	50-100	good
* <i>Candidia albicans</i>	10231	50-100	good
* <i>Aspergillus brasiliensis</i>	16404	heavy	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. 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. ISO 9308-1:2000 Water quality - Detection and enumeration of Escherichia coli and coliform bacteria - Part 1: Membrane filtration method.
3. Refer to the NIER, KP, USP, EP and KFCC.

• PACKAGE

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