

CTA (Cystine Tryptic Agar)



Medium used for the identification and determination of fastidious organisms such as *Neisseria*, pneumococci, streptococci, and nonsporeforming anaerobes on the basis of motility and fermentation reaction.

• CONTENTS (Liter)

Pancreatic Digest of Casein	20.0 g
L-Cystine	0.5 g
Sodium Chloride	5.0 g
Sodium Sulfite	0.5 g
Phenol Red	0.017 g
Agar	2.5 g
Final pH = 7.3 ± 0.2 at 25°C	

• PROCEDURE

Suspend 28.52 G of powder in 1 L of distilled or deionized water. For fermentation test, add 5 - 10 g of carbohydrate. Heat to boiling until completely dissolved. Sterilize by autoclave at 118°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into tubes.

• INTERPRETATION

CTA (Cystine Tryptic Agar) is a medium used for the identification and determination of fastidious organisms such as *Neisseria*, pneumococci, streptococci, and nonsporeforming anaerobes on the basis of motility and fermentation reaction. Pancreatic digest of casein provides nitrogen, carbon, amino acids and minerals. L-Cystine and sodium sulfite promote the growth of organisms. Sodium chloride maintains the osmotic balance. Phenol red is the pH indicator. Agar is the solidifying agent. *Neisseria* spp. usually produces acid only in the upper third of the medium.

• TECHNIC

Inoculate well isolated colonies from fresh cultures using a sterile loop. Incubate at 35 ± 2°C for 18 - 48 hours up to 72 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: pinkish beige

Prepared medium

Appearance: opalescent with a slight precipitate

Color: orange-red

Incubation conditions: 35 ± 2°C / 18 - 48 hours up to 72 hours

Microorganism	ATCC	Growth	Motility	Acid Production with Dextrose
<i>Corynebacterium diphtheriae</i>	11913	good	-	+
<i>Neisseria meningitidis</i>	13100	good	-	+
<i>Escherichia coli</i>	25922	good	+	+
<i>Enterococcus faecalis</i>	29212	good	-	+
<i>Salmonella typhimurium</i>	14028	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. Vera, (1948). J. Bacteriol. 55: 531.
2. Baron, Peterson, Finegold (1994). Bailey & Scott's diagnostic microbiology, 9th ed.

• PACKAGE

Cat. No : MB-C1185 CTA (Cystine Tryptic Agar)	500 G
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