SULFITE TRYPTOSE BROTH

CAT Nº: 1378

For the detection of *Clostridium perfringens*

FORMULA IN g/l

Tryptose	15.00	Sodium Metabisulfite	1.00
Soy Peptone	5.00	Ferric ammonium Citrate	1.00
Yeast Extract	5.00		

Final pH 7.6 ± 0.1 at 25ºC

PREPARATION

Suspend 27 grams of medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Distribute in tubes in amounts of 18 ml. Sterilize in autoclave at 121ºC for 15 minutes. Cool to 45-50ºC and aseptically add 0.4 grams of D-cylcoserine and homogenize gently. The prepared medium should be stored at 2-8°C. The color of the prepared medium is amber.

The dehydrated medium should be homogeneous, free-flowing and beige in color. If there are any physical changes, discard the medium.

USES

SULFITE TRYPTOSE BROTH is a liquid nutrient medium for *Clostridium perfringens*.

Tryptose and Soy peptone provide nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is source of vitamins, particularly the B-group. Cycloserine inhibits the accompanying bacterial flora and causes the colonies, which develop, to remain smaller. It also reduces, thus, disturbs the blackening around the *C. perfringens* colonies. Colonies producing hydrogen sulfide are characterized by a blackening due to the reaction of Sodium metabisulfite and the Ferric ammonium citrate salt. The containers showing a blackening indicate the presence of *C. perfringens.*

Inoculate and incubate at 37± 1°C for 20±4 hours and after 44±4 hours.

MICROBIOLOGICAL TEST

The following results were obtained from type cultures in the performance of the medium, with the respective supplements added, after incubation at a temperature of 37± 1°C and observed after 20±4 hours and after 44±4 hours.

Microorganisms	Growth	Blackering
Clostridium perfringens ATCC 12919	Good	+

BIBLIOGRAPHY

Sahidi S.A. and Ferguson A.R. (1971) Appl. Microbiol.,21 500-506. Harmon S.M., Kauttar D.A. and Peeler J.T.(1971) Appl. Microbiol. 21. 922-927. Hauschild A.H.W and Hilsheimar R. (1973) Appl. Microbiol.27. 78-82.

STORAGE

Once opened keep powdered medium closed to avoid hydration.