

Lethen Broth Base



Medium used for the determination of phenol coefficient of quaternary ammonium compounds.

• CONTENTS (Liter)

Beef Extract	5.0 g
Peptone	10.0 g
Sodium Chloride	5.0 g
Tween 80	5.0 g
Lecithin	0.7 g
Final pH = 7.0 ± 0.2 at 25°C.	

• PROCEDURE

Suspend 25.7 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 tubes.

• INTERPRETATION

Lethen Broth Base is used for determining the phenol coefficient of quaternary ammonium compounds. The medium contains lecithin and tween 80, neutralizing agents for quaternary ammonium compounds contained in sanitizers. Peptone and beef extract provide nitrogen, carbon, vitamins and minerals in the medium. Dextrose is the carbohydrate. Lecithin neutralizes quaternary ammonium compounds and tween 80 neutralizes phenols, hexachlorophene, formalin, and with Lecithin, ethanol.

• TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Shake gently for spreading the bacteria. Incubate at 35 ± 2°C for 40 - 48 hours. Refer appropriate references and procedures for results.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: moist appearance, with a tendency to clump.

Color: beige.

Prepared medium

Appearance: slightly opalescent, may have a slight precipitate.

Color: light amber.

Incubation conditions: 35 ± 2°C / 40 - 48 hours.

Microorganism	ATCC	Inoculum CFU	Growth
<i>Escherichia coli</i>	25922	50-100	good
<i>Staphylococcus aureus</i>	25923	50-100	good
<i>Salmonella typhimurium</i>	14028	50-100	good

• STORE

The powder is very hygroscopic. Store the powder at 2-8°C, 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. Weber, G.L, and L.A. Black (1948). Soap and Sanit. Chem. 24:134-139.
2. Official methods of analysis, 16th ed. (1995). Association of Official Analytical Chemists, Washington, D.C.
3. Standard test method for preservatives in water containing cosmetics, E 640-78. (1991). Annual Book of ASTM Standards, Philadelphia, PA.

• PACKAGE

Cat. No : MB-L1208 Lethen Broth Base	500 G
---	-------

• MICROBIAL CULTURE IMAGES



Incubation conditions : 35±2°C 40-48h