

A Letheen Broth Base, modified

Letheen Broth is special formulations for the determination of bacterial activity of quaternary ammonium compounds.

The media formulations comply with the recommendations of FDA/BAM (1995).

Mode of Action

Letheen media are highly nutritious containing Lecithin and Tween® 80 for neutralizing quaternary ammonium compounds. These media are modifications of the AOAC formulae.

Letheen Broth Base is used for determining the phenol coefficient of quaternary compounds.

Typical Composition (g/litre)

Letheen Broth Base:

Peptone from meat 20.0; peptone from casein 5.0; meat extract 5.0; yeast extract 2.0; sodium chloride 5.0; lecithin 0.7; sodium bisulfite 0.1.

Preparation of Letheen Broth

Suspend 37.8 g and 5 ml of Tween® 80 in 1 litre of distilled or demin. water until evenly dispersed. Heat, if necessary, with repeated stirring to dissolve completely and autoclave at 121 °C for 15 min.

pH: 7.2 ± 0.2 at 25 °C.

The prepared broth is turbid and yellowish-brown.

Incubation: 24 - 48 hours at 35 °C aerobically.

Experimental Procedure

Depending on the purpose for which the media are used.

Literature

FDA Bacteriological Analytical Manual (BAM), 8th ed. (1995), chapter 23: Microbiological Methods for Cosmetics, Letheen Agar (modified) = M 78, Letheen Broth (modified) = M 79.

Ordering Information

Product	Merck Cat. No.	Pack size
Letheen Broth Base, modified	1.10405.0500	500 g
Tween® 80	8.22187.0500	500 ml

Quality control

Test strains	Growth
Escherichia coli ATCC 25922	good / very good
Enterococcus faecalis ATCC 29212	good / very good
Pseudomonas aeruginosa ATCC 27853	good / very good
Staphylococcus aureus ATCC 25923	good / very good
Staphylococcus epidermidis ATCC 12228	good / very good
Salmonella typhimurium ATCC 14028	good / very good