LICKSON®

CE

TECHNICAL SHEET

LETHEEN MODIFIED BROTH

Non-selective liquid medium for the microbiological examination of cosmetics.

DESCRIPTION
Letheen Modified Broth is a liquid medium used for the recovery and cultivation of stressed organisms. This medium complies with ISO 21149 for detection of aerobic mesophilic bacteria.

PRINCIPLE
Enzymatic digest of animal casein, enzymatic digest of animal casein and meat extract provide nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is a source of vitamins, particularly of group B. Sodium chloride maintains the osmotic balance the medium. Lecithin, sodium bisulfite and polysorbate 80 neutralize quaternary ammonium compounds, phenols, hexachlorophene, formalin and ethanol.

COMPOSITION	g/L
Peptone	20.0
Tryptone	5.0
Beef extract	5.0
Yeast extract	2.0
Sodium chloride	5.0
Sodium bisulphite	0.1
Lecithin	0.7
Polysorbate 80	5.0

Final pH 7,0 ± 0,2 at 25°C

WARNING AND PRECAUTIONS
For in vitro diagnostic use.
Observe the precautions normally taken when handling laboratory reagents.
Dehydrated medium: HIGHLY HYGROSCOPIC. During the handling, wear dust protection mask. Avoid the eye contact. Do not use beyond the expiration date or if the product shows signs of deterioration, an altered color or has compacted.
Prepared Medium: The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous.
Safety Data Sheet is available on request for professional users.
All wast must be disposed of according to local directives.

STORAGE AND STABILITY	
Dehydrated medium:	10-30°C
Prepared medium:	10-25°C

The product is stable until the expiration date indicated on the label under the recommended storage conditions.

PREPARATION
Suspend 37.8 grams in 1000 ml purified / distilled water and add 5 g/L of Polysorbate 80. Heat if necessary to ensure complete dissolution. Dispense into tubes or flasks as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C.

SPECIMEN COLLECTION AND HANDLING
For cosmetics samples follow appropriate techniques for handling specimens as per established guidelines (4,5).

QUALITY CONTROL
Dehydrated medium: Cream to yellow homogeneous free flowing powder.
Prepared medium: Yellow coloured, clear solution.

Typical response after incubation at 35-37°C for 24-48 hours:

MICROORGANISM	GROWTH
Escherichia coli ATCC 25922	Luxuriant
Staphylococcus aureus subsp. aureus ATCC 25923	Luxuriant
Staphylococcus aureus subsp. aureus ATCC 6538	Luxuriant

REFERENCES
1. Bacteriological Analytical Manual, 1995, Food and Drug Administration, 8th Ed., AOAC International, Gaithersburg, MD, U.S.A.
2. Dunningan A. P., 1968, Drug Cosmet. Ind., 102:43.
3. Favero (Chm.), 1967, A State of the Art Report, Biological Contamination Control Committee, American Association for Contamination Control.
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition
5. Jorgensen, J.H., Pfaller , M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
6. Smart R. and Spooner D. F., 1972, J. Soc. Cosmet. Chem., 23:721
7. Weber and Black, 1948, Soap Sanitary Chem., 24:134-139
8. Wilson L. A. and Ahearn D. G., 1977, Am. J. Opthalmol., 84:112.
9.ISO 21149:2017. Cosmetics -- Microbiology -- Enumeration and detection of aerobic mesophilic bacteria.

PRESENTATION	Packaging	REF.
Dehydrated medium		
LETHEEN MODIFIED BROTH	**500 g**	**10656**
Prepared medium		
LETHEEN MODIFIED BROTH	**100 x 10 mL Tubes**	**5286**

SYMBOLS

Read the instructions

Biological hazard

CE Mark (product complies with the requirements of Regulation (EU) 746/2017)

Temperature limitation

Use by

For in vitro diagnostic use

Manufacturer