

LT 100 BROTH MODIFIED
Neutralising diluent and liquid culture medium
for the total microbial count in cosmetics with MPN technique

Typical formula (g/L)

Tryptone	15.0
Soy Peptone	5.0
Sodium Chloride	4.0
Glucose	5.5
Lecithin	1.0
Triton X 100	1.0
Sodium Sulphite	0.2
L-Cystine	0.7

Directions

Suspend 32.4g in 1000 mL of cold distilled water. Heat to dissolve completely, distribute 9 mL or 90 mL in tubes or flasks and sterilise by autoclaving at 121 °C for 15 minutes.
Final pH 7.0 ± 0.2

Description

LT 100 Broth Modified is used for the total microbial count in cosmetics with MPN technique. Lecithin is included as neutralising of antimicrobial agents. The combined action with Triton X 100 assures a good dispersion of the sample into the liquid medium.

According to ISO Normes in the references, Tween ® 80 may to be added (5 mL /L) as a second neutralising agent.

LT 100 Broth Modified may be used also as neutralising diluent.

Technique

1. Prepare a 1:10 dilution of the sample adding 1g or 1 mL to 9 mL of LT 100 Broth Modified. Leave at room temperature for 2 hours.
2. Prepare the decimal dilutions of the initial suspension using LT 100 Broth Modified.
3. Incubate the initial suspension and the decimal dilutions at 37°C for 24-48 hours and observe for the presence of growth.

The initial suspension and the decimal dilutions can be inoculated into LT 100 Agar or Tryptic Soy Agar, for the total microbial count in a solid medium.

Packaging

401581M2	LT 100 Broth Modified	500 g (15.4 L)
401581M4	LT 100 Broth Modified	5 kg (154 L)

References

- GUISSNO, R., I.W. GIBBY & M.J. FOTER (1946) A neutralizing medium for evaluation of the germicidal potency of the quaternary ammonium salts. Amer. J. Pharm. **118**:320-323.
- WILLIAMSON, P. & A.M. KLIGMAN (1965) A new method for the quantitative investigation of cutaneous bacteria. J. Inv. Dermatol. **45**:498-503
- ISO 21150:2006 Cosmetics -- Microbiology --Detection of *Escherichia coli*.
- ISO 22717:2006 Cosmetics -- Microbiology-- Detection of *Pseudomonas aeruginosa*.
- ISO 22718:2006 Cosmetics -- Microbiology --Detection of *Staphylococcus aureus*.