TECHNICAL DATA SHEET

EUGON LT 100 BROTH

ENRICHMENT MEDIA FOR TOTAL VIABLE COUNTS

1 INTENDED USE

Eugon LT 100 broth is used as a neutralizing diluent and as an enrichment media for microorganisms in cosmetic products with and without preservatives.

The typical formula corresponds to that defined in all the cosmetic standards cited as references in the bibliography.

2 PRINCIPLES

The medium is composed of a mixture of peptones, cystine, glucose and salts which favor the growth of a wide variety of microorganisms.

Sodium chloride maintains osmotic pressure.

Lecithin and tween neutralize the antibacterial activity of most antiseptics or preservatives, such as phenolic derivatives, aldehydes and quaternary ammonium salts.

Triton X-100 favors the dispersion of microorganisms and thus improves enumeration.

3 TYPICAL COMPOSITION

The composition can be adjusted in order to obtain optimal performance.

For 1 liter of media :

- Tryptone ..... 15,0 g
- Papaic digest of soybean meal ..... 5,0 g
- L-cystine ..... 0,7 g
- Glucose ..... 5,5 g
- Sodium chloride ..... 4,0 g
- Sodium sulfite ..... 0,2 g
- Lecithin ..... 1,0 g
- Polysorbate 80 (Tween 80) ..... 5,0 g
- Octoxynol 9 (Triton X-100) ..... 1,0 g

pH of the ready-to-use media at 25 °C : 7,0 ± 0,2.

4 PREPARATION

- Dissolve 37,4 g of dehydrated media (BK137) into 1 liter of sterile distilled or demineralized water.
- Slowly bring to boiling, stirring with constant agitation until complete dissolution.
- Dispense into 9 mL tubes or into 90 mL vials.
- Sterilize in an autoclave at 121°C for 15 minutes.
- Let cool to room temperature.

NOTE : The media becomes limpid when cooled.

✓ **Reconstitution : 37,4 g/L**

✓ **Sterilization : 15 min at 121 °C**

5 INSTRUCTIONS FOR USE

Enrichment media

- Using the media prepared as above or using the ready-to-use references (BM006 or BM043), inoculate X g or X mL of product in order to obtain a 1:10 dilution.
- Incubate at (32,5 ± 2,5) °C for at least 20 hours (72 hours maximum).

Neutralizing diluent

- From media prepared as cited or by using the ready-to-use references (BM006 or BM043), inoculate X g or X mL of product in order to obtain a 1:10 dilution.

6 QUALITY CONTROL

Dehydrated media : yellowish powder, homogeneous, may be slightly clumped.
Prepared media : amber solution, limpid after cooling.

Typical culture response after incubation 48 h at 30-35 °C (inoculum ≤10^2 microorganisms) :

Microorganisms		Growth
Escherichia coli	WDCM 00012	Positive
Bacillus subtilis	WDCM 00003	Positive
Staphylococcus aureus	WDCM 00032	Positive
Pseudomonas aeruginosa	WDCM 00026	Positive

7 STORAGE / SHELF LIFE

Dehydrated media : 2-20 °C.
Ready-to-use media : 2-25 °C.
The expiry dates are indicated on the labels.

Prepared media in tubes or vials (*) : 180 days at 2-25 °C.
(*) Benchmark value determined under standard preparation conditions, following manufacturer's instructions.

8 PACKAGING

Dehydrated media :
500 g bottle BK137HA

Ready-to-use media in tubes :
50 x 9 mL tubes BM00608
50 x 9 mL tubes + glass balls BM17508

Ready-to-use media in vials :
10 x 100 mL BM04308

9 BIBLIOGRAPHY

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10 ADDITIONAL INFORMATION

The information provided on the labels take precedence over the formulations or instructions described in this document and are susceptible to modification at any time, without warning.

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