TECHNICAL DATA SHEET

EUGON LT SUP BROTH

ENRICHMENT MEDIA FOR MESOPHILIC AEROBIC BACTERIA AND NEUTRALIZING DILUENT

1 INTENDED USE

Eugon LT SUP broth is used as a neutralizing diluent and as an enrichment medium for mesophilic aerobic bacteria in cosmetic products with and without preservatives.

This broth substitutes the Eugon LT 100 broth, cited in the reference standards related to the microbiology of cosmetic products.
It does not contain Octoxynol 9, nor other products classified as CMR in the REACH regulation.

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.

Sodium Lauryl ether sulphate favors the dispersion of microorganisms and thus improves enumeration. The use of this product is permitted under the REACH regulation.

The formulations of EUGON LT 100 and EUGON LT SUP broth have been the subject of inter-laboratory and internal studies, demonstrating the equivalence of the formulas and performances.

3 TYPICAL COMPOSITION

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

For 1 liter of media:

- Pancreatic digest of casein ..... 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
- Egg lecithin ..... 1.0 g
- Polysorbate 80 ..... 15.0 g
- Sodium Lauryl ether sulphate ..... 1.56 g

pH of the ready-to-use media at 25 °C: 7.0 ± 0.2.

4 PREPARATION

- Suspend 48.0 g of dehydrated medium (BK230) in 1 liter of distilled or demineralized water.
- Bring to a boil slowly, stirring until completely dissolved.
- Dispense into 9 mL tubes or 90 mL vials.
- Autoclave at 121°C for 15 minutes.
- Cool to room temperature.

✓ **Reconstitution :**
48,0 g/L

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

5 INSTRUCTIONS FOR USE

Enrichment media
- Using the ready-to-use references (BM219, BM222 or BM229), inoculate x g or x mL of product in order to obtain a 1:10 or 1:100 dilution.
- Incubate at (32.5 ± 2.5) °C for at least 20 hours (72 hours maximum).

Neutralizing diluent
- Using the ready-to-use references (BM219, BM222 or BM229), inoculate x g or x mL of product in order to obtain a 1:10 or 1:100 dilution.

6 QUALITY CONTROL

Dehydrated medium: yellowish powder, homogeneous, 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
Staphylococcus aureus	WDCM 00032	Positive
Pseudomonas aeruginosa	WDCM 00026	Positive

Typical culture response after incubation 72 h at 20-25 °C (inoculum ≤10^2 microorganisms):

Microorganisms		Growth
Candida albicans	WDCM 00054	Positive
Aspergillus brasiliensis	WDCM 00053	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.

Medium prepared in tubes or vials (*): 180 days at 2-25 °C.
(*) Indicative value determined under standard preparation conditions, according to the manufacturer's instructions.

8 PACKAGING

Dehydrated media:
Bottle of 500 g BK230HA

Ready-to-use media in tubes:
50 x 9 mL tubes BM21908
50 x 9 mL tubes + glass balls BM22408

Ready-to-use media in vials:
10 x 100 mL BM22208

Ready-to-use media in flexible bags:
3 x 3L BM22908

9 BIBLIOGRAPHY

NF EN ISO 18416. February 2016. Cosmetics - Microbiology - Detection of candida albicans

NF EN ISO 21149. August 2017. Cosmetics - Microbiology - Enumeration and detection of aerobic mesophilic bacteria.

NF EN ISO 21150. February 2016. Cosmetics - Microbiology - Detection of Escherichia coli

NF EN ISO 22717. February 2016. Cosmetics - Microbiology - Detection of pseudomonas aeruginosa

NF EN ISO 22718. February 2016. Cosmetics - Microbiology - Detection of Staphylococcus aureus

NF EN ISO 16212. August 2017. Cosmetics - Microbiology - Enumeration of yeast and mould

NF EN ISO 18415. August 2017. Cosmetics - Microbiology - Detection of specified and non-specified microorganisms

NF EN ISO 11930. April 2019. Cosmetics - Microbiology - Evaluation of the antimicrobial protection of a cosmetic product

9 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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