

## EUGON BROTH (EUGON LT 100 BROTH)

Neutralizing diluent and liquid culture medium for detection of aerobic mesophilic bacteria.

### DESCRIPTION

EUGON BROTH (EUGON LT 100 BROTH) is a liquid culture medium used for detection of aerobic mesophilic bacteria and other organisms, such as yeast and mould, present in cosmetics (ISO 21149). It can be used as diluent for the preparation of test suspensions and as enrichment as well.

### PRINCIPLE

Pancreatic digest of casein and papaic digest of soybean meal provide nutrients (nitrogen, vitamins, minerals and amino acids) to support organisms growth. L-cystine is a reducing agent and along with glucose and sodium sulfite are incorporated in the medium to stimulate growth of microorganisms. Sodium chloride maintains the osmotic balance of the medium. Lecithin and polysorbate 80 (Tween 80) neutralize inhibitory substances present in the sample. Octoxynol 9 (Triton X-100) is an excellent detergent that enhances the release of microorganisms from the slack matrix of the cosmetic emulsion.

COMPOSITION	g/L
Pancreatic Digest of casein	15.0
Papaic Digest of Soybean Meal	5.0
L-Cystine	0.7
Sodium Chloride	4.0
Sodium Sulfite	0.2
Glucose	5.5
Egg Lecithin	1.0
Polysorbate 80	5.0
Octoxynol 9 (Triton X-100)	1.0

**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

<b>Dehydrated medium:</b>	10-30°C
<b>Prepared medium:</b>	10-25°C

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

### PREPARATION

Suspend 37.4 g of the powder in 1 liter of distilled or deionized water. Mix well. Heat to boil shaking frequently until completely dissolved. Distribute into appropriate final containers. Sterilize in autoclave at 121°C for 15 minutes.

### PROCEDURE

Use Eugon LT 100 Broth to prepare the initial suspension of the sample and further decimal dilutions. Incubate the suspension at 32.5 ± 2.5°C for at least 20 hours.

### RESULTS

Examine for growth as demonstrated by turbidity in the medium.

For enumeration, identification and further testing, subculture onto appropriate non-selective solid agar media.

### QUALITY CONTROL

**Dehydrated medium:** free-flowing, homogeneous, beige powder.

**Prepared medium:** clear to slightly opalescent, amber solution.

**Typical response after incubation at 32.5±2.5°C for at least 20 hours:**

MICROORGANISM	GROWTH
Aspergillus brasiliensis ATCC 16404	Good growth
Bacillus subtilis ATCC 6633	Good growth
Candida albicans ATCC 10231	Good growth
Escherichia coli ATCC 8739	Good growth
Pseudomonas aeruginosa ATCC 9027	Good growth
Staphylococcus aureus ATCC 6538	Good growth

### REFERENCES

- European Pharmacopoeia 8.0 (2014):2.6.1. Sterility; 2.6.12. Microbial examination of non-sterile products (total viable aerobic count).
- ISO 21148 Standard Cosmetics – Microbiology – General instructions for micro-biological examination.
- ISO 21149 Standard Cosmetics – Microbiology – Enumeration and detection of aerobic mesophilic bacteria.
- ISO 18415 Standard Cosmetics – Microbiology – Detection of specified and non-specified microorganisms.
- ISO 18416 Standard Cosmetics – Microbiology – Enumeration and detection of aerobic mesophilic bacteria.
- ISO 21150 Standard Cosmetics – Microbiology – Detection of Escherichia coli.
- ISO 22717 Standard Cosmetics – Microbiology – Detection of Pseudomonas aeruginosa.
- ISO 22718 Standard Cosmetics – Microbiology – Detection of Candida albicans.
- US Pharmacopoeia, 2007.

PRESENTATION	Packaging	REF.
<b>Dehydrated medium</b> <b>EUGON BROTH (EUGON LT 100 BROTH)</b>	100 g	11554
	500 g	10544
<b>Prepared medium</b> <b>EUGON BROTH (EUGON LT 100 BROTH)</b>	20 x 9 mL tubes	5194/20P
	6 x 45 mL bottles	63664
	6 x 100 mL bottles	63714
	12 x 200 mL bottles	63704

### 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