Eugon LT 100 Broth ISO

Cat. 2110

For the enrichment of aerobic bacteria present in cosmetic products.

Practical information

Aplications	Categories
Selective enumeration	Pseudomonas
Enrichment	Mesophilic aerobic

Industry: Cosmetics

Regulations: ISO 16212 / ISO 18415 / ISO 18416 / ISO 21149 / ISO 21150 / ISO 22717 / ISO 22718

Principles and uses

EUGON LT 100 BROTH is used as an enrichment broth to increase the initial microbial population. This medium contains ingredients that neutralize inhibitory substances present in the sample, as lecithin and polydorbate 80, and dispersing agents, as octoxynol 9.

This medium is formulated according to ISO 21149, ISO 21150, ISO 16212, ISO 18415, ISO 22718, ISO 22717 and ISO 18416 for the enrichment of aerobic bacteria, yeast and molds.

Pancreatic digest of casein and papainic digest of soy bean, obtained by the enzymatic hydrolysis of casein and soy proteins, provide nitrogen, vitamins, minerals and amino acids essential for growth of a great variety of microorganisms. Glucose is the main source of carbohydrates. Papainic digest of soy bean also contains natural sugars which promote bacterial growth. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Sodium sulfite neutralizes aldehydes. Lecithin and Polisorbate 80 neutralize inhibiting substances preent in the sample. Octoxynol 9 act as a dispersing agent.

Formula in g/L

Glucose	5,5	L-Cystine	0,7
Lecithin	1	Pancreatic digest of casein	15
Papainic digest of soy bean	5	Polysorbate 80	5
Sodium chloride	4	Sodium sulfite	0,2
Octoxynol 9	1		

Preparation

Suspend 37,4 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Distribute intoappropriate containers and sterilize in autoclave at 121ºC for 15 minutes.

Instructions for use

- Prepare the initial suspension and disperse in the broth.
- Incubate at 32,5±2,5 ºC for at least 20 hours, with a maximum of 72 hours.
- Subculture a defined amount of the above solution onto appropriate media depending on the microorganism to be detected; MacConkey Agar (Cat. 1052) for E. coli, Baird Parker Agar (Cat. 1100) for S. aureus, Cetrimide Agar (Cat. 1102) for P. aeruginosa and Sabouraud Dextrose Agar + Chloramphenicol for C. albicans.

Quality control

Solubility	Appareance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25ºC)
w/o rests	Fine powder	Beige	Amber	7,0±0,2

Microbiological test

Incubation conditions: (32,5±2,5 ºC / 20-72 h)

Microrganisms	Specification
Staphylococcus epidermidis ATCC 12228	Good growth
Salmonella typhimurium ATCC 14028	Good growth
Escherichia coli ATCC 25922	Good growth
Staphylococcus aureus ATCC 25923	Good growth
Pseudomonas aeruginosa ATCC 27853	Good growth

Storage

Temp. Min.:2 ºC
Temp. Max.:25 ºC

Bibliography

ISO 21149 Cosmetics – Microbiology - Detection and counting of mesophilic aerobic bacteria.
ISO 21150 Cosmetics - Microbiology - Detection of Escherichia coli.
ISO 16212 Cosmetics – Microbiology – Counting of yeast and molds.

ISO 18415 Cosmetics – Microbiology – Detection of specific and non-specific microorganism.

ISO 22718 Cosmetics – Microbiology – Detection of Staphylococcus aureus.

ISO 22717 Cosmetics – Microbiology – Detection of Pseudomonas aeruginosa.

ISO 18416 Cosmetics – Microbiology – Detection of Candida albicans.