
EUGON BROTH

ENRICHMENT MEDIA

1 INTENDED USE

Eugon Broth is used to obtain luxuriant cultures (eugonic) with a wide variety of microorganisms including the most fastidious, with yeasts and with molds. It is used for the detection and growth of lactic acid bacteria from meats and other food products. It is appropriate in industrial microbiology for antigen production. Eugon Broth can also be used to detect microbial contamination in packaging materials destined for food products, cosmetics and pharmaceuticals.

2 HISTORY

The medium was recommended by Vera for obtaining excellent cultures of bacteria known to be difficult to grow, i.e. *Neisseria*, *Haemophilus*, and *Brucella*.

3 PRINCIPLES

Eugon Broth is composed of a mixture of peptones, cystine, glucose and salts, which contribute to the growth of microorganisms, whether or not they are fastidious.

4 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
- Glucose.....	5,0 g
- Sodium chloride.....	4,0 g
- L-cystine	0,3 g
- Sodium sulfite	0,2 g
- Sodium citrate.....	1,0 g

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

5 PREPARATION

- Dissolve 30,5 g of dehydrated media (BK068) in 1 liter of distilled or demineralized water.
- Slowly bring to boiling, stirring until complete dissolution.
- Dispense into tubes or vials.
- Sterilize in an autoclave at 121 °C for 15 minutes.
- Cool to room temperature.

✓ **Reconstitution :**
30,5 g/L

✓ **Sterilization :**
15 min at 121°C

6 INSTRUCTIONS FOR USE

- Inoculate the medium with purified cultures or with other types of mixed microflora inoculum.
- Incubate at the optimal required temperature, aerobically or else in a CO₂-enriched atmosphere, depending on the microorganisms to be cultured.

7 RESULTS

Growth results in turbidity in the tubes or vials, due to microbial multiplication.

8 QUALITY CONTROL

Dehydrated media : cream-white powder, free-flowing and homogeneous.

Prepared media : amber solution, limpid.

Typical culture response after 48-72 hours of incubation, inoculum $\leq 10^2$ microorganisms :

Microorganisms		Growth
(1) <i>Lactobacillus plantarum</i>	ATCC® 8014	Good, score 2
(1) <i>Staphylococcus aureus</i>	WDCM 00034	Good, score 2
(1) <i>Candida albicans</i>	WDCM 00054	Good, score 2
(2) <i>Aspergillus brasiliensis</i>	WDCM 00053	Good, score 2

(1) Incubation at 37 °C

(2) Incubation at 30 °C

9 STORAGE / SHELF LIFE

Dehydrated media : 2-30 °C.

The expiration date is indicated on the label.

Prepared media in tubes or vials (*) : 180 days at 2-8 °C.

(*) Benchmark value determined under standard preparation conditions, following manufacturer's instructions.

10 PACKAGING

Dehydrated media :

500 g bottle BK068HA

11 BIBLIOGRAPHY

Rosenthal, S.A., and Cox, C.D. 1933. The somatic antigens of *Corynebacterium michiganense* and *Corynebacterium insidiosum*. J. Bacteriol., 65: 532.

Vera, H.D. 1947. The ability of peptones to support surface growth of lactobacilli. J. Bacteriol., 54: 14.

12 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.

Document code : EUGON BROTH_ENV8.

Creation date : 01-2003

Updated : 05-2016

Origin of revision : General update.