

Eugon Broth (i23337)

A general-purpose medium used for cultivating a wide variety of microorganisms.

Industry: Food / Clinical

Principles & Uses

Eugon Broth, innovated by Pelczar and Vera, serves as a versatile medium for cultivating challenging microorganisms, particularly *Brucella*, *Mycobacteria*, and pathogenic fungi like *Nocardia* and *Histoplasma*, especially when enriched with blood. Developed for obtaining luxuriant growth of fastidious microorganisms, this broth supports rapid *lactobacilli* growth in unenriched form, making it applicable in various food products.

Key components like peptones, glucose, L-Cystine, sodium sulphite, and sodium chloride play vital roles. Peptones provide essential nutrients for microbial growth, while the high concentration of glucose serves as an energy source. L-Cystine and sodium sulphite stimulate microbial growth, and sodium chloride maintains osmotic balance. The considerable carbohydrate and sulfur content enhances growth with chromogenicity.

In summary, Eugon Broth stands as a robust medium with a broad range of applications in microbiology, particularly in cultivating and isolating challenging microorganisms.

Composition (gr/L)

Pancreatic Digest of Casein 15 g, Soybean meal 5 g, Sodium chloride 4 g, L-Cystine 0.7 g, Sodium Sulphite 0.2 g, Glucose 5.5 g.

Final pH at 25°C 7.0 ± 0.2

Preparation from dehydrated Powder

Suspend 30.4 g of the medium in 1 L of distilled water. Mix thoroughly. Autoclave at 121°C for 15 minutes.

Quality Control

Dehydrated Appearance: Beige, homogeneous, free-flowing.

Prepared Appearance: Light amber, clear, may have a slight precipitate.

Reaction of 3.04% Solution at 25°C: pH 7.0 ± 0.2

Cultural Response

Cultural response observed after 18-48 hours of incubation at 35 ± 2°C. For *Candida albicans* incubation temperature was 30 ± 2°C.

Organism (ATCC*)	Recovery
<i>Candida albicans</i> (26790)	Good
<i>Streptococcus pyogenes</i> (19615)	Good
<i>Staphylococcus aureus</i> (25923)	Good

*ATCC is a registered trade mark of the American Type Culture Collection.



Candida albicans (left). Prepared culture medium (right).

Storage

Keep the container at 15-30 °C. Store prepared medium at 2-8 °C.