

Eugon Agar

Cat. 1036

For the eugonic growth of most microorganisms.

Practical information

Applications	Categories
Enrichment	General use
Industry: Food	



Principles and uses

Eugon Agar is a medium recommended for the growth of a wide variety of microorganisms. It yields a high level of growth of microorganisms (eugonic growth) even with bacteria which are more difficult to cultivate, such as Haemophilus, Neisseria, Pasteurella, Brucella, Lactobacillus, etc. It is very useful in medical bacteriology and food testing, such as cured meat, dairy products and other foods. Likewise, this medium is ideal for cultivating delicate pathogenic microorganisms and for obtaining high counts of bacterial cultures in the preparation of antigens and vaccines.

L-Cystine and sodium sulfite are added to stimulate growth. Casein and soy peptones provide nitrogen, vitamins, minerals and amino acids essential for growth. Dextrose is the fermentable carbohydrate providing carbon and energy. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Bacteriological agar is the solidifying agent. The addition of blood provides extra growth factors for fastidious microorganisms and the Polyenrichment supplement (Cat. 6011) is a supplement specifically formulated for Neisseria, Francisella and Brucella.

The non-enriched medium is recommended for the rapid growth of lactobacilli linked to cured meat products, dairy products and other foods.

The addition of defibrinated blood, chocolate or not, permits the development of Histoplasma capsulatum and Nocardia. The medium also is used for the analysis of clinical materials such as blood and cerebrospinal or pleural fluids that generally contain pure cultures.

Formula in g/L

Dextrose	5,5	Bacteriological agar	15
Casein peptone	15	L-Cystine	0,7
Sodium chloride	4	Sodium sulfite	0,2
Soy peptone	5		

Typical formula g/L * Adjusted and/or supplemented as required to meet performance criteria.

Preparation

Suspend 45,4 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. Sterilize in autoclave at 118 °C for 15 minutes. Cool to 45-50 °C and, if desired, aseptically add 5-10 % sterile defibrinated sheep blood and two vials of Polyenrichment Supplement (Cat. 6011), previously reconstituted with 1 vial of Polyenrichment Restoring Solution (vial B). Homogenize gently and dispense into Petri dishes. Be careful to avoid bubble formation when adding the blood to the cooled medium and rotate the flask or bottle slowly to create a homogeneous solution.

Instructions for use

Inoculate sample and incubate for at 35±2 °C for 40-48 hours. Candida albicans and Aspergillus niger should be incubated at 30±2 °C.

Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Beige	Clear amber, slightly opalescent	7,0±0,2

Microbiological test

Incubation conditions: (35±2 °C / 40-48 h).

Microorganisms	Specification
Neisseria meningitidis ATCC 13090	Good growth
Streptococcus pyogenes ATCC 19615	Good growth
Streptococcus pneumoniae ATCC 6305	Good growth

Storage

Temp. Min.:2 °C
Temp. Max.:25 °C

Bibliography

Vera H.J. Bact. 54:14. 1947. Pelczar and Vera Milk Plant Monthly, 38-30. 1949.
Frank J. Bact. 70:269, 1955. Ramos C., Mario "Manual of Milk and Lactides". Edition of Author, Berna 12:201. Mexico 6. D.F., 1976.