EUGON AGAR

(Formerly Luxurian Agar)

Dehydrated culture medium

1 - INTENDED USE

General purpose medium for the cultivation of a wide variety of microorganisms.

2 - COMPOSITION -TYPICAL FORMULA * (AFTER RECONSTITUTION WITH 1 L OF WATER)

Tryptone	15.0 g
Soy peptone	5.0 g
Sodium chloride	4.0 g
Sodium sulphite	0.2 g
L-cystine	0.7 g
Glucose	5.5 g
Agar	15.0 g

*The formula may be adjusted and/or supplemented to meet the required performances criteria.

3 - PRINCIPLE OF THE METHOD AND EXPLANATION OF THE PROCEDURE

Eugon Agar (formerly Luxurian Agar) is a culture medium based on the formula devised by Vera[1] to obtain eugonic (luxuriant) growth of fastidious microorganisms. This medium has been used for food and dairy testing[2,3] and for mass culture procedures[4]. Supplemented with blood, Eugon Agar supports the growth of pathogenic fungi including *Nocardia*, yeast stage of *Blastomyces*, and *Histoplasma capsulatum*.[5] With "chocolatized" Eugon Agar, supplemented with Biovitex, an excellent growth of *Neisseria* is achieved.
Tryptone and soy peptone provide nitrogen, vitamins and minerals for microbial growth; glucose is a source of energy; sodium chloride maintains osmotic balance. L-cystine and sodium sulphite are added to stimulate growth of microorganisms.

4- DIRECTIONS FOR MEDIUM PREPARATION

Suspend 45.4 g in 1000 mL of cold purified water. Heat to boiling with frequent agitation, distribute and sterilize by autoclaving at 121°C for 15 minutes.

5 - PHYSICAL CHARACTERISTICS

Dehydrated medium appearance	beige, fine, homogeneous, free-flowing powder
Solution and prepared plates appearance	yellow, limpid
Final pH at 20-25 °C	7.0 ± 0.2

6 - MATERIALS PROVIDED - PACKAGING

Product	Type	REF	Pack
Eugon Agar	Dehydrated medium	4016422	500 g (11 L)

7 - MATERIALS REQUIRED BUT NOT PROVIDED

Autoclave, water-bath, incubator, laboratory equipment as required, sterile loops, swabs, Petri dishes, tubes, Erlenmeyer flasks, ancillary culture media and reagents for the identification of the colonies.

8 - SPECIMENS

Luxurian Agar may be used with a variety of samples.

9- TEST PROCEDURE

Allow plates or the tubes to come to room temperature. Inoculate and streak the specimen with a loop over the four quadrants of the plate or over the slanted medium to obtain well isolated colonies. Routinely, incubate at 35-37°C in aerobic conditions for 18-24 hours.
The user is responsible for choosing the appropriate incubation time, temperature and atmosphere depending on the organisms to be cultivated and the local applicable protocols.

10 - READING AND INTERPRETATION

The presence of microorganisms is indicated by the appearance of colonies of various morphology and size. The characteristics of the growths are closely related to the type or types of cultivated microorganisms.

11 - USER QUALITY CONTROL

All manufactured lots of the product are released for sale after the Quality Control has been performed to check the compliance with the specifications. However, it is responsibility of the end-user to perform Quality Control testing in accordance with the local applicable regulations, in compliance with accreditation requirements and the experience of the Laboratory. Here below are listed some test strains useful for the quality control.

CONTROL STRAINS			INCUBATION T°/ T / ATM	EXPECTED RESULTS
S.Typhimurium	ATCC	14028	35-37°C / 18-24H / A	good growth
E.coli	ATCC	25922	35-37°C / 18-24H / A	good growth
Y.enterocolitica	ATCC	23715	29-31°C / 18-24H / A	good growth

A: aerobic incubation; ATCC is a trademark of American Type Culture Collection

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12 - PERFORMANCES CHARACTERISTICS

Prior to release for sale a representative sample of all lots of dehydrated Eugon Agar is tested for productivity by comparing the results with a previously approved Reference Batch.
Productivity is tested by a the semi-quantitative ecometric method with the target strains *S.aureus* ATCC 25923*, S.marcescens* ATCC 8100*, E.faecalis* ATCC 19433, *P.aeruginosa* ATCC 14207, *S.pyogenes* ATCC 19615, *S.pneumoniae* ATCC 6301; Eugon Agar plates are inoculated with decimal dilutions in saline of the colonies' suspensions. After incubation at 35-37°C for 18-24 hours the amount of growth is evaluated and recorded. All strains show a good growth, comparable with the Reference Batch.

13 - LIMITATIONS OF THE METHOD

- Even if the microbial colonies on the plates are differentiated on the basis of their morphological, chromatic, haemolytic characteristics, it is recommended that biochemical, immunological, molecular, or mass spectrometry testing be performed on isolates from pure culture for complete identification.

14 - PRECAUTIONS AND WARNINGS

- This product is for laboratory use and for professional use only; it is to be used by adequately trained and qualified laboratory personnel, observing approved biohazard precautions and aseptic techniques.
- Dehydrated media must be handled with suitable protection. Before use, consult the Material Safety Data Sheet.
- This culture medium contains raw materials of animal origin. The *ante* and *post mortem* controls of the animals and those during the production and distribution cycle of the raw materials, cannot completely guarantee that this product does not contain any transmissible pathogen. Therefore, it is recommended that the culture medium be treated as potentially infectious, and handled observing the usual specific precautions: do not ingest, inhale, or allow to come into contact with skin, eyes, mucous membranes. Download the TSE Statement from the website www.biolifeitaliana.it, describing the measures implemented by Biolife Italiana for the risk reduction linked to infectious animal diseases.
- Apply Good Manufacturing Practice in the production process of prepared media
- All laboratory specimens should be considered infectious.
- The laboratory area must be controlled to avoid contaminants such as culture medium or microbial agents.
- Sterilize all biohazard waste before disposal. Dispose the unused medium and the inoculated plates with samples or microbial strains in accordance with current local legislation.
- Do not use the culture medium as active ingredients for pharmaceutical preparations or as production material intended for human and animal consumption.
- The Certificates of Analysis and the Safety Data Sheet are available on the website www.biolifeitaliana.it.
- The information provided in this document has been defined to the best of our knowledge and ability and represents a guideline for the proper use of the product but without obligation or liability. In all cases existing local laws, regulations and standard procedures must be observed for the examination of samples collected from human and animal organic districts, for environmental samples and for products intended for human or animal consumption. Our information does not relieve our customers from their responsibility for checking the suitability of our product for the intended purpose.

15 - STORAGE CONDITIONS AND SHELF LIFE

Upon receipt, store at +10°C /+30°C away from direct light in a dry place. If properly stored, it may be used up to the expiration date. Do not use beyond this date. Avoid opening the bottle in humid places. After use, the container must be tightly closed. Discard the product if the container and/or the cap are damaged, or if the container is not well closed, or in case of evident deterioration of the powder (colour changes, hardening, large lumps).
The user is responsible for the manufacturing and quality control processes of prepared media and for the validation of the shelf life of the finished products, according to the type (plates/tubes/bottles) and the storage method (temperature and packaging).

16 - REFERENCES

1. Vera HD. The ability of peptones to support surface growth of lactobacilli J Bact 1947; 54:14
2. Pelczar and Vera Milk Plant Monthly, 38-30. 1949.
3. Downes and Ito (ed.). 2001. Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C.
4. Rosenthal SA, Cox CD. The somatic antigens of Corynebacterium michiganense and Corynebacterium insidiosus. J Bacteriol 1933; 65:532
5. MacFaddin JF. Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria. Baltimore: Williams & Wilkins; 1985.

TABLE OF APPLICABLE SYMBOLS

REF or REF Catalogue number	LOT Batch code	Manufacturer	Store in a dry place	Use by
Temperature limitation	Contents sufficient for <n> tests	Consult Instructions for Use	Keep away from direct light	

REVISION HISTORY

Version	Description of changes	Date
Revision 1	Updated layout and content	2022/05

Note: minor typographical, grammatical, and formatting changes are not included in the revision history.

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