TM 2072 – EUGONIC LT 100 MEDIUM BASE W/O TWEEN 80

INTENDED USE

For cultivation of fastidious microorganisms like *Haemophilus, Neisseria, Pasteurella, Brucella* and *Lactobacillus* species.

PRODUCT SUMMARY AND EXPLANATION

Eugonic LT 100 Medium Base was developed by Pelczar and Vera for cultivation of fastidious organisms like *Brucella.* Eugon media were developed to obtain eugonic (luxuriant) growth of fastidious microorganisms like *Brucella* which are otherwise difficult to cultivate. The unenriched medium supports rapid growth of lactobacilli associated with cured meat products, dairy products and other foods. Eugonic media is quite similar to Tryptone Soya Agar but more bacterial propagation is expected on Eugonic media. Organisms like *Bordetella* and *Neisseria* form minute colonies on Tryptone Soya Agar. They may become large on Eugon Media because large amount of sulfur and carbon sources have been added in addition to the Tryptone Soya Agar formula. Eugonic LT 100 Medium w/o Tween 80 can be used for growth of a variety of fastidious microorganisms like *Neisseria, Francisella* and *Brucella*.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	15.000
Papaic digest of soyabean meal	5.000
Glucose	5.500
Sodium chloride	4.000
Sodium sulphite	0.200
L-Cystine	0.700
Egg lecithin	1.000
Triton X-100	1.000
Agar	15.000

PRINCIPLE

The medium consists of Casein enzymic hydrolysate and papaic digest of soyabean meal which provide the nitrogen, vitamins and amino acids, which supports the growth of fastidious microbial species. The high concentration of glucose is the energy source for rapid growth of bacteria. L-Cystine and sodium sulphite are added to stimulate growth. Sodium chloride maintains the osmotic balance of the media. The high carbohydrate content along with high sulfur (cystine) content improves growth with chromogenicity. Lecithin and polysorbate 80 in Eugonic LT 100 Medium w/o Tween 80 neutralize antimicrobial agents hence this medium can be used as a neutralizing diluent.

INSTRUCTION FOR USE

- Dissolve 47.40 grams in 1000 ml purified / distilled water containing 5 grams of polysorbate 80 (Tween 80).
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Yellow coloured, clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 7.0 ± 0.2

INTERPRETATION

Cultural characteristics observed with added 5-10% sterile defibrinated blood after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Bacillus pumilus	14884	50-100	Good (with 0.1% starch)	40-50%	35-37°C	48 Hours
Brucella abortus	4315	50-100	Good (under 3-5% CO2)	40-50%	35-37°C	48 Hours
Candida albicans	26790	10-100	Good	40-50%	25-30°C	48 Hours
Lactobacillus fermentum	9338	50-100	Good	40-50%	35-37°C	48 Hours
Neisseria meningitidis	13090	50-100	Good	40-50%	35-37°C	48 Hours
Streptococcus pneumoniae	6303	50-100	Good-luxuriant (under 3-5% CO2)	>=50%	35-37°C	48 Hours
Streptococcus pyogenes	19615	50-100	Good-luxuriant (under 3-5% CO2)	>=50%	35-37°C	48 Hours
Staphylococcus aureus	25923	50-100	Good-luxuriant	>=50%	35-37°C	48 Hours
Staphylococcus aureus	6538	50-100	Good-luxuriant	>=50%	35-37°C	48 Hours
Candida albicans	10231	10-100	Good	40-50%	25-30°C	48 Hours

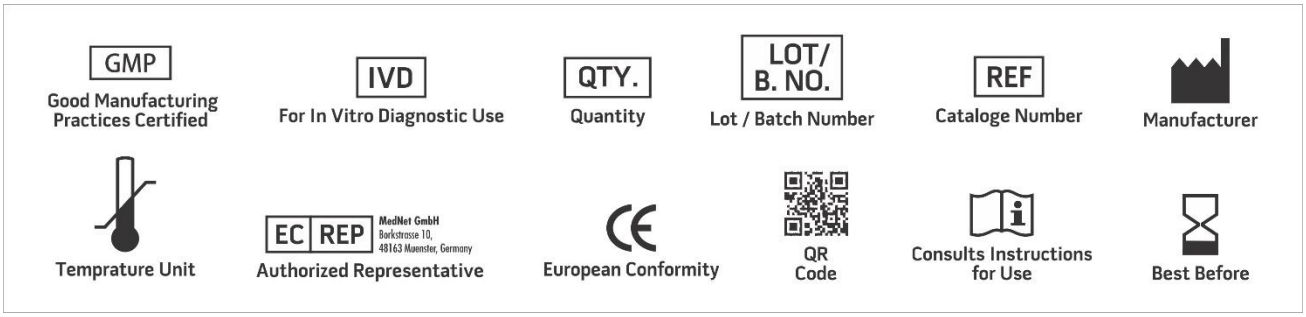
Bacillus subtilis	6633	50-100	Good	40-50%	35-37°C	48 Hours
Pseudomonas aeruginosa	9027	50-100	Good	40-50%	35-37°C	48 Hours
Escherichia coli	8739	50-100	Good-luxuriant	>=50%	35-37°C	48 Hours

PACKAGING:
In pack size of 500 gm bottles.

STORAGE
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL
After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES
1. Pelczar and Vera J., 1949, Milk Plant Monthly 38:30
2. Frank H. A., 1955, J. Bacteriol., 70:269.
3. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams & Wilkins, Baltimore, Md.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.
***For Lab Use Only**
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