

## **CM 22057 – EUGONIC LT 100 BROTH BASE W/O TWEEN 80 (ISO 21149:2017)**

### INTENDED USE

For the enrichment and detection of mesophilic aerobic bacteria present in cosmetic products.

### PRODUCT SUMMARY AND EXPLANATION

Eugonic LT 100 Broth Base was developed by Pelczar and Vera for cultivation of fastidious organisms like Brucella. Eugonic 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 grow luxuriantly in Eugonic Media because large amount of sulfur and carbon sources have been added in the formula. Eugonic LT 100 Broth Base can be used for growth of a variety of fastidious microorganisms like Neisseria, Francisella and Brucella. The composition of the medium is as per ISO for the detection of mesophilic aerobic bacteria from cosmetic products.

### COMPOSITION

Ingredients	Gms / Ltr
Tryptone	15.000
Soya peptone	5.000
Sodium chloride	4.000
L-Cystine	0.700
Sodium sulphite	0.200
Glucose	5.500
Egg lecithin	1.000
Triton X-100	1.000

### PRINCIPLE

The medium consists of Tryptone and soya peptone 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 32.4 grams in 1000 ml distilled water containing 5 grams of polysorbate 80 (Tween 80).

Heat if necessary to dissolve the medium completely.

Dispense into tubes or flasks as desired. Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

### QUALITY CONTROL SPECIFICATIONS



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

#### INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation temperature	Incubation Period
Bacillus pumilus	14884	50-100	Good	35-37°C	24-48 Hours
Candida albicans	26790	10-100	Good	25-30°C	2-7 Days
Lactobacillus fermentum	9338	50-100	Good	35-37°C	24-48 Hours
Streptococcus pneumoniae	6303	50-100	Good-luxuriant (under 3-5% CO <sub>2</sub> )	35-37°C	24-48 Hours
Streptococcus pyogenes	19615	50-100	Good-luxuriant (under 3-5% CO <sub>2</sub> )	35-37°C	24-48 Hours
Staphylococcus aureus	25923	50-100	Good-luxuriant	35-37°C	24-48 Hours
Staphylococcus aureus	6538	50-100	Good	35-37°C	24-48 Hours
Bacillus subtilis	6633	50-100	Good	35-37°C	24-48 Hours
Pseudomonas aeruginosa	9027	50-100	Good	35-37°C	24-48 Hours



Escherichia coli	8739	50-100	Good	35-37°C	24-48 Hours
Candida albicans	10231	10-100	Good	25-30°C	2-7 Days
Neisseria meningitidis	13090	50-100	Good	35-37°C	24-48 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.

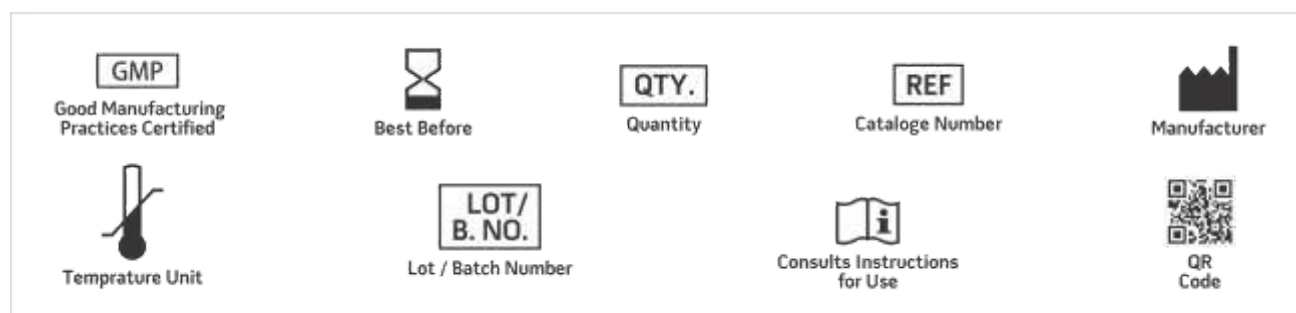
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### 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.
4. ISO 21149 (2006) Cosmetics-Microbiology- Enumeration and detection of aerobic mesophilic bacteria.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

\*For Lab Use Only  
Revision: 08 Nov., 2019

