



## **Product Data Sheet**

### **CASEIN YEAST MAGNESIUM BROTH (NYZM BROTH)**

**Product No.** GB-DCM-00041-1A

#### **INTENDED USE**

For cultivation of recombinant strains of Escherichia coli.

#### **Product Specifications**

<b>Ingredients</b>	<b>Gms / Ltr</b>
Tryptone	10.000
Yeast extract	5.000
Sodium chloride	5.000
Magnesium sulphate	0.980

#### **PRINCIPLE**

The medium constituents like tryptone and yeast extract supply the essential nutrients and cofactors required for excellent growth of recombinant strains of Escherichia coli. Sodium chloride maintains the osmotic balance of the medium. Magnesium sulphate is incorporated as a source of magnesium ion necessary in a variety of enzymatic reactions including DNA replication.

#### **INSTRUCTION FOR USE**

- Dissolve 20.98 grams in 1000 ml purified / distilled water.
- Heat gently to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.

#### **QUALITY CONTROL SPECIFICATIONS**

Appearance of Powder: Light yellow to beige homogeneous free flowing powder. Appearance of prepared medium: Amber coloured, clear solution without any precipitate in tubes.

pH (at 25°C) : 7.0±0.2

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Escherichia coli	23724	50-100	Good-luxuriant	$\geq 50\%$	35-37°C	18-24 Hours
Escherichia coli	53868	50-100	Good-luxuriant	$\geq 50\%$	35-37°C	18-24 Hours

### 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.

**This product is for research use only.**