

TM 1045 - MINIMUM SALTS W/ CASEIN ACID HYDROLYSATE

INTENDED USE

For cultivation of *Escherichia coli* strains used for genetic and molecular studies.

PRODUCT SUMMARY AND EXPLANATION

Minimum Salt with Casein Acid Hydrolysate is prepared based on the formula originally suggested by Davis et al. The medium with the addition of casein acid hydrolysate is used for cultivating *Escherichia coli* strains used for genetic and molecular studies.

COMPOSITION

Ingredients	Gms / Ltr
Casein acid hydrolysate	4.000
Disodium hydrogen phosphate	6.800
Monopotassium hydrogen phosphate	3.000
Sodium chloride	0.500
Ammonium chloride	1.000
Dextrose	4.000
Magnesium sulphate	0.240

PRINCIPLE

The medium consists of Casein acid hydrolysate which supplies many amino acids (except tryptophan) to *E. coli*. Ammonium chloride is added as a nitrogen source. Dextrose serves as the carbon and energy source while the two phosphates buffer the medium against pH changes due to the utilization of carbohydrate. Magnesium ions are required in a variety of enzymatic reactions including DNA replication.

INSTRUCTION FOR USE

- Dissolve 19.54 grams in 1000 ml purified/distilled water.
- Heat, if necessary, to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and dispense as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light amber coloured clear to slightly opalescent solution.
pH (at 25°C)	: 6.8±0.2

INTERPRETATION

Cultural characteristics observe after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period



<i>Escherichia coli strain B</i>	23226	50-100	Luxuriant	35-37°C	18-24 Hours
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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. Davis L.G., Dibner M. D. and Battey J. F., 1986, Basic Methods in Molecular Biology, Elsevier, New York.
2. Sambrook J., Fritsch E. F. and Maniatis T., 1989, Molecular Cloning: A Laboratory Manual, 2nd Ed., Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

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