



# Dulbecco's Modified Eagle Medium (DMEM), High glucose

With 4.5gms Glucose per liter, Sodium pyruvate and Sodium bicarbonate  
Without L-Glutamine

**Product Code: AL007**

## Product Description:

Dulbecco's Modified Eagle Medium (DMEM) is one of the most widely used modification of Eagle's medium. DMEM is a modification of Basal Medium Eagle (BME) that contains four-fold concentration of amino acids and vitamins. Additionally, the formulation also includes glycine, serine and ferric nitrate. The original formulation contains 1000mgs/L of glucose and was originally used to culture embryonic mouse cells.

DMEM high glucose is a further modification of original DMEM and contains 4500mgs/L of glucose. The additional glucose has proved to be useful in cultivating various other cell lines including primary cultures of mouse and chicken cells as well as various normal and transformed cell lines.

AL007 is Dulbecco's Modified Eagle Medium with 4.5gms glucose per litre, sodium pyruvate and sodium bicarbonate. It does not contain L-glutamine. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific for different cell lines.

|                          |          |
|--------------------------|----------|
| L-Lysine hydrochloride   | 146.000  |
| L-Methionine             | 30.000   |
| L-Phenylalanine          | 66.000   |
| L-Serine                 | 42.000   |
| L-Threonine              | 95.000   |
| L-Tryptophan             | 16.000   |
| L-Tyrosine disodium salt | 103.790  |
| L-Valine                 | 94.000   |
| <b>VITAMINS</b>          |          |
| Choline chloride         | 4.000    |
| D-Ca-Pantothenate        | 4.000    |
| Folic acid               | 4.000    |
| Nicotinamide             | 4.000    |
| Pyridoxal hydrochloride  | 4.000    |
| Riboflavin               | 0.400    |
| Thiamine hydrochloride   | 4.000    |
| i-Inositol               | 7.200    |
| <b>OTHERS</b>            |          |
| D-Glucose                | 4500.000 |
| Phenol red sodium salt   | 15.900   |
| Sodium pyruvate          | 110.000  |

## Composition:

| Ingredients                           | mg/L     |
|---------------------------------------|----------|
| <b>INORGANIC SALTS</b>                |          |
| Calcium chloride dihydrate            | 265.000  |
| Ferric nitrate nonahydrate            | 0.100    |
| Magnesium sulphate anhydrous          | 97.720   |
| Potassium chloride                    | 400.000  |
| Sodium bicarbonate                    | 3700.000 |
| Sodium chloride                       | 6400.000 |
| Sodium dihydrogen phosphate anhydrous | 109.000  |
| <b>AMINO ACIDS</b>                    |          |
| Glycine                               | 30.000   |
| L-Arginine hydrochloride              | 84.000   |
| L-Cystine dihydrochloride             | 62.570   |
| L-Histidine hydrochloride monohydrate | 42.000   |
| L-Isoleucine                          | 105.000  |
| L-Leucine                             | 105.000  |

## Directions:

1. Add 20ml of 200mM L-glutamine (TCL012) for 1 litre of medium.

## Material required but not provided:

L-Glutamine solution 200mM (TCL012)

## Quality Control:

### Appearance

Red colored, clear solution

### pH

7.00 -7.60

### Osmolality in mOsm/Kg H<sub>2</sub>O

320.00 -360.00

**Sterility**

No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.

**Cultural Response**

The growth promotion capacity of the medium is assessed qualitatively by analyzing the cells for the morphology and quantitatively by estimating the cell counts.

**Endotoxin Content**

NMT 1EU/ml

**Storage and Shelf Life:**

Store at 2-8°C away from bright light.

Shelf life is 18 months.

Use before expiry date given on the product label.

**Disclaimer :**

Revision : 04/2022

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.