

DATA SHEET

Rev.ver: 01

1. Identification

Product name Dulbecco's Modified Eagle Medium (DMEM), High glucose w/4.5gms Glucose per litre, 25mM HEPES buffer, L-Glutamine, Sodium pyruvate and Sodium bicarbonate w/o Phenol red

Catalog.no CCML025

2. Description

Dulbecco's Modified Eagle Medium (DMEM) is one of the most widely used modifications 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 1000mg/L of glucose and was originally used to culture embryonic mouse cells. DMEM high glucose is a further modification of original DMEM and contains 4500mg/L of glucose. 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. Dulbecco's Modified Eagle Medium with 4.5gms glucose per liter, L-Glutamine, sodium bicarbonate without sodium pyruvate. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific for different cell lines.

3. Product Specifications

Appearance	Clear, colorless solution
CO ₂ concentration, optimum	5.0 %
Storage and shelf life	Store at +2°C to +8°C protected from light. Once opened, store at 4°C and use within 6-8 weeks.
Shipping conditions	Ambient

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4. Formulation

Components	Concentration mg/L
Amino Acids:	
L-Arginine HCl	84.00
L-Cystine 2HCl	62.57
L-Glutamic Acid	22.070
L-Glutamine	584.000
Glycine	30.00
L-Histidine HCl H ₂ O	42.00
L-Isoleucine	105.00
L-Leucine	105.00
L-Lysine HCl	146.00
L-Methionine	30.00
L-Phenylalanine	66.00
L-Serine	42.00
L-Threonine	95.00
L-Tryptophan	16.00
L-Tyrosine 2Na 2H ₂ O	103.79
L-Valine	94.00
Vitamins:	
Choline chloride	4.000

Components	Concentration mg/L
D-Ca-Pantothenate	4.00
Folic Acid	4.00
Nicotinamide	4.00
Riboflavin	0.400
Pyridoxal HCl	4.00
myo-Inositol	7.20
Thiamine HCl	4.00
Inorganic Salts	
CaCl ₂ .2H ₂ O	265.000
Fe(NO ₃) ₃ .9 H ₂ O	0.10
KCl	400.000
Magnesium sulphate, anhydrous	97.720
Sodium chloride	4400.000
Sodium bicarbonate	3700.000
Sodium dihydrogen phosphate anhydrous	109.000
Other Components:	
D-Glucose	4500.00
HEPES Buffer	5958.000
Sodium pyruvate	110.000

5. Precautions and Disclaimer

This product is for research use only. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.