



Minimum Essential Medium Eagle (MEM)

(For Suspension Culture)

With Spinner salts and Sodium bicarbonate
Without L-Glutamine

Product Code: AL019

Product Description:

Minimum Essential Medium (MEM) is a modification of Basal Medium Eagle (BME). It was developed by Harry Eagle to meet the specific nutritional requirements of certain subtypes of HeLa cells and normal mammalian fibroblasts. MEM includes higher concentration of amino acids so as to closely approximate the protein composition of cultured mammalian cells. MEM can be used either with Earle's salts or Hank's salts and can also be additionally supplemented with Non-essential amino acids (NEAA). This medium can be further modified by eliminating calcium to facilitate growth of cells in suspension cultures.

AL019 is Minimum Essential Medium with Spinner balanced salts for suspension culture. 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.

Composition:

Ingredients	mg/L
INORGANIC SALTS	
Magnesium sulphate anhydrous	97.720
Potassium chloride	400.000
Sodium bicarbonate	2200.000
Sodium chloride	6800.000
Sodium dihydrogen phosphate anhydrous	1220.000
AMINO ACIDS	
L-Arginine hydrochloride	126.000
L-Cystine dihydrochloride	31.300
L-Histidine hydrochloride monohydrate	42.000
L-Isoleucine	52.000
L-Leucine	52.000
L-Lysine hydrochloride	72.500
L-Methionine	15.000
L-Phenylalanine	32.000
L-Threonine	48.000
L-Tryptophan	10.000

L-Tyrosine disodium salt dihydrate	52.000
L-Valine	46.000
VITAMINS	
Choline chloride	1.000
D-Ca-Pantothenate	1.000
Folic acid	1.000
Nicotinamide	1.000
Pyridoxal hydrochloride	1.000
Riboflavin	0.100
Thiamine hydrochloride	1.000
i-Inositol	2.000
OTHERS	
D-Glucose	1000.000
Phenol red sodium salt	11.000

Directions:

1. Add 10ml of 200mM L-glutamine (TCL012) for 1 litre of medium.

Material required but not provided:

L-Glutamine solution 200mM (TCL012)

Quality Control:

Appearance

Orangish red colored, clear solution.

pH

7.00 -7.60

Osmolality in mOsm/Kg H₂O

280.00 -320.00

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.