

Technical Information

Minimum Essential Medium Eagle (MEM)

With Earle's salts, NEAA, L-Glutamine and Sodium bicarbonate Without Phenol red 2X Liquid Cell Culture Medium

Product Code: AL1178A

Application: -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.

AL1178A is Minimum Essential Medium Eagle with Earle's salts, NEAA, L-glutamine and sodium bicarbonate. It does not contain phenol red. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific for different cell lines.

Composition**

Ingredients	mg/Litre
INORGANIC SALTS	
Calcium chloride dehydrate	530.000
Magnesium sulphate anhydrous	195.440
Potassium chloride	800.000
Sodium bicarbonate	4400.000
Sodium chloride	13600.000
Sodium dihydrogen phosphate anhydrous	244.000
AMINO ACIDS	
Glycine	15.000
L-Alanine	17.800
L-Arginine hydrochloride	252.000
L-Asparagine monohydrate	30.000
L-Aspartic acid	26.600
L-Cystinedihydrochloride	62.600
L-Glutamic acid	29.400
L-Glutamine	584.000
L-Histidine hydrochloride monohydrate	84.000
L-Isoleucine	104.000
L-Leucine	104.000
L-Lysine hydrochloride	145.000
L-Methionine	30.000
L-Phenylalanine	64.000
L-Proline	23.000
L-Serine	21.000
L-Threonine	96.000
L-Tryptophan	20.000
L-Tyrosine disodium salt	103.800
L-Valine	92.000

VITAMINS

Choline chloride	2.000
D-Ca-Pantothenate	2.000
Folic acid	2.000
Nicotinamide	2.000
Pyridoxal hydrochloride	2.000
Riboflavin	0.200
Thiamine hydrochloride	2.000
i-Inositol	4.000

OTHERS

D-Glucose	2000.000
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Quality Control

Appearance

Clear, colourless solution.

pH

7.00 -7.60

Osmolality in mOsm/Kg H₂O

590.00 -630.00

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 and comparing it with a control medium through minimum three subcultures

Endotoxin Content

NMT 5EU/ml

Storage and Shelf Life

Store at 2-8°C away from bright light. Shelf life is 12 months. Use before expiry date given on the product label.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
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