Minimum Essential Medium Eagle (MEM)
With Earle’s salts, L-Glutamine, NEAA and Sodium bicarbonate
1X Liquid Cell Culture Medium

Product Code: AL047A

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.

AL047A is Minimum Essential Medium Eagle with Earle’s salts, L-glutamine, sodium bicarbonate and non-essential amino acids. 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
Calcium chloride dihydrate 265,000
Magnesium sulphate anhydrous 97,720
Potassium chloride 400,000
Sodium bicarbonate 2200,000
Sodium chloride 6800,000
Sodium dihydrogen phosphate anhydrous 122,000
AMINO ACIDS
Glycine 7.500
L-Alanine 8.900
L-Arginine hydrochloride 126,000
L-Asparagine monohydrate 15,000
L-Aspartic acid 13,300
L-Cystine dihydrochloride 31,300
L-Glutamic acid 14,700
L-Glutamine 292,000
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-Proline 11,500
L-Serine 10,500
L-Threonine 48,000
L-Tryptophan 10,000
L-Tyrosine disodium salt 51,900
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

Quality Control:
Appearance
Orangish red colored, clear solution.

pH
7.00 - 7.60

Osmolality in mOsm/Kg H2O
295.00 - 335.00

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.