

**Catalog Number:**

M33850

**Size:**

500 mL

## PRODUCT DESCRIPTION

Eagle's Minimum Essential Medium (MEM) is one of the most commonly used cell culture media. MEM is suitable for a broad spectrum of mammalian cells in culture. In comparison with BME, it contains higher concentrations of amino acids and other essential nutrients. A variety of MEM versions are available with Earle's salts for use in a CO<sub>2</sub> incubator, with Hanks' salts for use without CO<sub>2</sub>, with or without non-essential amino acids, or as Alpha modification with or without nucleosides. MEM derivatives require supplementation with serum, typically 10% Fetal Bovine Serum (FBS), since this medium does not contain proteins, lipids, or growth factors.

Each lot of MEM (Hanks' Salts) is prepared from a powdered base medium and tissue culture-grade water. Representative samples of each lot of MEM (Hanks' Salts) are tested to confirm the absence of bacterial or fungal contamination using methods adapted from the current U.S. Pharmacopeia. MEM (Hanks' Salts) is manufactured in our ISO 9001:2015 certified facility.

For the specific media formulation, please refer to the Media Formulation section of the datasheet.

## STORAGE AND HANDLING

MEM (Hanks' Salts) is supplied in gamma-irradiated, sterile PETG or PETE bottles. We recommend that MEM (Hanks' Salts) be stored at a temperature of 2-8 °C, and protected from strong light. Always use aseptic techniques when handling and supplementing MEM (Hanks' Salts).

## PRECAUTION

When handling bio-hazardous materials such as human cells, safe laboratory procedures should be followed, and personal protective equipment should be worn.

## LIMITATIONS

- FOR LABORATORY RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.
- The safety and efficacy of this product in diagnostic or other clinical uses has not been established.
- Results may vary due to variations among tissue/cells derived from different donors or sources.

# MEDIA FORMULATION

## INORGANIC SALTS mg/L

Calcium Chloride • 2H <sub>2</sub> O	185.45
Magnesium Sulfate (Anhydr.)	97.67
Potassium Chloride	400.00
Potassium Phosphate, Monobasic (Anhydr.)	60.00
Sodium Chloride	7500.00
Sodium Phosphate, Dibasic (Anhydr.)	47.69

## AMINO ACIDS mg/L

L-Alanine	8.90
L-Arginine • HCl	126.98
L-Asparagine • H <sub>2</sub> O	15.00
L-Aspartic Acid	13.30
L-Cystine • 2HCl	31.29
L-Glutamic Acid	14.70
GlutaminePlus	434.46
Glycine	7.50
L-Histidine • HCl • H <sub>2</sub> O	42.00
L-Isoleucine	52.00
L-Leucine	52.00
L-Lysine • HCl	72.46
L-Methionine	15.00
L-Phenylalanine	32.00
L-Proline	11.50
L-Serine	10.50
L-Threonine	48.00
L-Tryptophan	10.00
L-Tyrosine • Na <sub>2</sub> • 2H <sub>2</sub> O	51.90
L-Valine	46.00

## VITAMINS mg/L

Choline Chloride	1.00
Folic Acid	1.00
myo-Inositol	2.00
Nicotinamide	1.00
D-Pantothenic Acid, Hemicalcium Salt	1.00
Pyridoxal • HCl	1.00
Riboflavin	0.10
Thiamine • HCl	1.00

## OTHER COMPONENTS mg/L

D-Glucose	1000.00
HEPES	5958.00
Phenol Red • Na	10.20
Sodium Bicarbonate	350.00