



## Technical Data Sheet

Date: 22/12/05

Product Code: LM-E1149

Description: MEM ALPHA w/o L-Glutamine w/o Ribonucleosides w/o Deoxyribonucleosides

<b>Theoretical pH:</b>	7.3 ± 0.3
<b>Osmolarity:</b>	280 ± 10%
<b>Colour:</b>	Clear orange – red solution
<b>Storage conditions:</b>	+4° C in the dark
<b>Shelf life:</b>	24 months
<b>Endotoxin:</b>	<1 EU/ml (<0.1 ng/ml)
<b>Sterility Tests</b>	- Bacteria in aerobic and anaerobic conditions - Fungi and yeasts

### Cell growth test

Medium tested for the ability to support L929 cell growth.

### Composition

Available upon request

### Recommended Use:

Use aseptic technique when handling or supplementing this medium.

Product is provided for laboratory use only, and not for drug, human or veterinary use.

### Applications:

Minimum Essential Medium (MEM), developed by Harry Eagle, is one of the most widely used of all synthetic cell culture media. Early attempts to cultivate normal mammalian fibroblasts and certain subtypes of HeLa cells revealed that they had specific nutritional requirements that could not be met by Eagle's Basal Medium (BME).

Subsequent studies using these and other cells in culture indicated that additions to BME could be made to aid growth of a wider variety of fastidious cells. MEM, which incorporates these modifications, includes higher concentrations of amino acids so that the medium more closely approximates the protein composition of cultured mammalian cells. MEM has been used for cultivation of a wide variety of cells grown in monolayers. Optional supplementation of non-essential amino acids to the formulations that incorporate either Hanks' or Earle's salts has broadened the usefulness of this medium. The formulation has been further modified by optional elimination of calcium to permit growth of cells in suspension culture.

### Uses:

This medium is formulated without antibiotics, serum supplement, and L-Glutamine. This prolongs shelf life and gives additional flexibility to its applications. The desired amount of serum and antibiotics should be added, using aseptic techniques, immediately prior to use.

Add 10 ml/l of L-Glutamine 200mM (cat: XC-T1715) before using this medium.

Supplements, such as antibiotics, should be added as sterile supplements to the medium. Storage conditions and shelf life of supplemented product will be affected by the nature of the supplements.

### Indication of Deterioration:

Medium should be clear and free of particulate and flocculent material. Do not use if medium is cloudy or contains precipitate.

Other evidence of deterioration may include colour change or degradation of physical or performance characteristics.