

Minimum Essential Media w/ Earle's Salts w/ Stable Glutamine

CAT N° : L0416

Theoretical pH : 7.3 ± 0.3

Osmolality : 302 mOsm/kg $\pm 10\%$

Colour : Red, orange solution

Storage conditions : +2°C to +8°C, protected from light.

Shelf life : 24 months

Sterility tests :

- Bacteria in aerobic and anaerobic conditions
- Fungi and yeasts

Endotoxin : < 1 EU/ml

Cell growth test :

Medium tested for the ability to support L929 cell growth.

Composition : Displayed on the website; also available on request.

Recommended use :

- Respect storage conditions of the product
- Do not use the product after its expiry date
- Store product in an area protected from light (not necessary for saline solutions).
- Manipulate the product in aseptic conditions (e.g. : under laminar air flow)
- Wear clothes adapted to the manipulation of the product to avoid contamination (e.g. : gloves, mask, hygiene cap, overall...)

The product is intended to be used in vitro, in laboratory only. Do not use it in therapy, human or veterinary applications.

Description :

Minimum Essential Medium (MEM) with Earle's Balanced Salts is a modification of Eagle's earlier medium Basal Medium Eagle (BME), containing higher concentrations of the essential nutrients. These media have demonstrated the ability to support a variety of normal and transformed cells in culture and contain Earle's Balanced Salts, which make them suitable for use in atmospheres charged with CO₂ gas.

The stable Glutamine prevents the intramolecular cyclization reaction associated with solutions of L-Glutamine. This derivative is therefore stable in solution and allows the formulation of cell culture media containing L-Glutamine that may be stored between +2°C to +8°C for extended periods. The dipeptide is metabolized within the cells to yield L-Glutamine plus a second amino acid.

Uses :

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. Sterile serum should not be refiltered before or after being added to sterile medium because growth promoting capacity may be reduced upon re-filtration.

Signs 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.

Product code : L0416

Product name : MEM w/ Earle's Salts w/ stable Glutamine

CAS Number	Components	Quantity in g/l
10035-04-8	Calcium Chloride Dihydrate	0.26500000
7487-88-9	Magnesium Sulfate Anhydrous	0.09767000
7447-40-7	Potassium Chloride	0.40000000
7647-14-5	Sodium Chloride	6.80000000
7558-80-7	Sodium Phosphate Monobasic Anhydrous	0.12200000
50-99-7	D-Glucose Anhydrous	1.00000000
39537-23-0	L-Alanyl-L-Glutamine	0.43440000
1119-34-2	L-Arginine Monohydrochloride	0.12600000
30925-07-6	L-Cystine Dihydrochloride	0.03130000
5934-29-2	L-Histidine Monohydrochloride Monohydrate	0.04200000
73-32-5	L-Isoleucine	0.05200000
61-90-5	L-Leucine	0.05200000
657-27-2	L-Lysine Monohydrochloride	0.07250000
63-68-3	L-Methionine	0.01500000
63-91-2	L-Phenylalanine	0.03200000
72-19-5	L-Threonine	0.04800000
73-22-3	L-Tryptophan	0.01000000
69847-45-6	L-Tyrosine Disodium Salt Dihydrate	0.05190000
72-18-4	L-Valine	0.04600000
67-48-1	Choline Chloride	0.00100000
137-08-6	D-Ca Pantothenate	0.00100000
59-30-3	Folic Acid	0.00100000
87-89-8	Myo-Inositol	0.00200000
98-92-0	Nicotinamide (Nicotinic acid amide)	0.00100000
58-56-0	Pyridoxine Hydrochloride	0.00100000
83-88-5	Riboflavin	0.00010000
67-03-8	Thiamine Hydrochloride	0.00100000
34487-61-1	Phenol Red Sodium Salt	0.01100000
144-55-8	Sodium Bicarbonate	2.20000000
WATER		988.08313000

