

Eagle's MEM®

(Without Kanamycin, Phenol Red, L-Glutamine and Sodium Bicarbonate, autoclavable)

Code	Form	Package	Storage	Shelf Life
05902	Powder	100 g	Cool	1 Year

Directions

Dissolve 9.4 g of the medium in distilled water and adjust the volume to 1,000 mL. Sterilize by autoclaving at 121 centigrade for 15 minutes. Cool the sterilized medium to room temperature and add a proper amount of sterile 10% sodium bicarbonate solution (pH will be 7.1 - 7.4 at 37 centigrade in an atmosphere of 5 % CO₂ in air by adding 12.5 - 22.0 mL of sodium bicarbonate solution). This mixture should be stopper tightly and stored in a cool, dark place. At the time of use, aseptically add 0.292 g of L-glutamine (sterilized) and the desired amount of serum.

Summary

Eagle's MEM is a powdered medium prepared according to prescription published by Harry Eagle in 1959. Up to now, such media were not autoclavable because of decomposition or deterioration of the constituents, so that sterilization was performed by filtration using a membrane filter.

Autoclavable-powdered medium is specially manufactured so that constituents of the medium and growth of cells with this medium are not impaired. This medium has a growth-promoting effect for cells such as HeLa or L and other cell lines.

Storage and Expiration

Close tightly and store at 2 - 5 °C in a dark and dry place. May be stored up to one (1) year.

Precautions

Do not use the product after its expiry date. Quality of the product is not warranted after its shelf life.

When if medium or reagent touched eyes or mouth, immediately wash with plenty of water, and consult a physician. Any medium, reagent and materials must be sterilized by autoclaving or boiling water after use, and then disposed as industrial waste according to the law or regulations related to dispose.

Formula

Components	In 9.4 g/L
Sodium Chloride	6,800.0 mg
Potassium Chloride	400.0 mg
Calcium Chloride	200.0 mg
Magnesium Sulfate	93.5 mg
Sodium Dihydrogen Phosphate	115.0 mg
Glucose	1,000.0 mg
L-Arginine Hydrochloride	126.0 mg
L-Cystine Dihydrochloride, H₂O	31.4 mg
L-Tyrosine	36.0 mg
L-Histidine Hydrochloride, H₂O	42.0 mg
L-Isoleucine	52.0 mg
L-Leucine	52.0 mg
L-Lysine Hydrochloride	73.0 mg
L-Methionine	15.0 mg
L-Phenylalanine	32.0 mg
L-Threonine	48.0 mg
L-Tryptophan	10.0 mg
L-Valine	46.0 mg
Succinic Acid	75.0 mg
Sodium Succinate, 6H₂O	100.0 mg
Choline Bitartrate	1.8 mg
Folic Acid	1.0 mg
Inositol	2.0 mg
Nicotinamide	1.0 mg
Calcium Pantothenate	1.0 mg
Pyridoxal Hydrochloride	1.0 mg
Riboflavin	0.1 mg
Thiamin Hydrochloride	1.0 mg
Biotin	0.02 mg