

# MEM (Minimum Essential Media), Dry Powder Media

Cat# CM1006– 1 L/ CM1007—1 L\*10

Storage at 4 °C

## INTRODUCTION

MEM Media (Minimum Essential Media) was developed on the basis of Eagle basic Media. It is one of the most basic and widely used culture Media, and one of the most commonly used culture Media in animal cell culture. MEM Media contains 12 kinds of essential amino acids, glutamine and 8 vitamins, which is simple, mainly used in the culture of adherent cells. MEM (contain NEAA) Media is added L-alanine, L-glutamic acid, L-asparagine, L-aspartic acid, L-proline, L-serine and glycine on the basis of MEM Media. These 7 kinds of NEAA, can reduce the side effects of producing non-essential amino acids during cell culture and promote cell proliferation and metabolism. This product contains many kinds of amino acids, vitamins, inorganic salts and other ingredients for cell culture, but does not contain protein, lipids or any growth factors. Therefore, the product should be used with serum or serum-free additives. MEM contains no proteins, lipids, or growth factors. Therefore, DMEM requires supplementation, commonly with 10% Fetal Bovine Serum (FBS) or **Specsure® Bovine Growth Serum**. DMEM uses a sodium bicarbonate buffer system (1.5 g/L), and therefore requires a 5% CO<sub>2</sub> environment to maintain physiological pH.

Sterility	Sterile-filtered
Form	Powder
Application(s)	Cell culture/ mammalian: suitable
Impurities	Endotoxin, tested
Brand	ACE Biolabs
Components	HEPES (-) L-glutamine (+) D-glucose (1000 mg/ml) Phenol red (+) Sodium bicarbonate (+)
Storage temp	2-8 °C

## CONTENTS

No	Component	CM1006– 1 L	CM1007—1L*10
	MEM (Minimum Essential Media), Dry Powder Media	1 pack	1L x 10 packs

## **COMPOSITION**

<b>composition</b>	<b>g/L</b>
L-alanine	0.009
L-arginine hydrochloride	0.211
L-asparagine, monohydrate	0.01501
L-aspartic acid	0.0133
L-cysteine hydrochloride	0.035
L-glutamic acid	0.0147
L-glutamine	0.146
Glycine	0.00751
L-histidine hydrochloride, monohydrate	0.021
L-Isoleucine	0.0026
L-leucine	0.0131
L-lysine hydrochloride	0.0293
L-methionine	0.00448
L-phenylalanine	0.00496
L-proline	0.0115
L-serine	0.0105
L-threonine	0.00357
L-tryptophan	0.0006
L-Tyrosine disodium, dihydrate	0.00261
L-valine	0.0035
Calcium chloride, anhydrous	0.0333
Copper sulfate, pentahydrate	0.0000025
Ferrous sulfate, heptahydrate	0.000834
Magnesium sulfate, anhydrous	0.07464
Potassium chloride	0.285
Potassium dihydrogen phosphate, anhydrous	0.083
Sodium chloride	7.4
Disodium hydrogen phosphate, anhydrous	0.1537
Zinc sulfate, heptahydrate	0.0000288
D-biotin	0.000024
Choline chloride	0.000698
Folate	0.00132
Myo-inositol	0.000541
Nicotinamide	0.000615
D-pantothenic acid hemi-calcium salt	0.000715

Pyridoxine hydrochloride	0.000206
Riboflavin (Vitamin B2)	0.000376
Thiamine hydrochloride (vitamin B1)	0.001
Vitamin B12	0.00136
D-glucose	1.1
Hypoxanthine	0.00408
Sodium phenol red	0.0013
Sodium propionate	0.11
Lipoic acid	0.00021
Thymidine	0.00073

## **RELATED PRODUCTS**

Specsure Bovine Growth Serum	ACE002	500 ml
MEM (Minimum Essential Media)	CM1005	500 ml
MEM (Minimum Essential Media), Dry Powder Media	CM1006	1 L
MEM (Minimum Essential Media), Dry Powder Media	CM1007	10 x 1L
DMEM (Dulbecco's modified minimal essential Media, DMEM )	CM1008	500 ml
DMEM (Dulbecco's modified minimal essential Media, DMEM), Dry Powder Media	CM1009	1 L
DMEM (Dulbecco's modified minimal essential Media, DMEM), Dry Powder Media	CM1010	10 x 1L
Ham's F-12K Media	CM1011	500 ml
Ham's F-12K Dry Powder Media	CM1012	1 L
Ham's F-12K Dry Powder Media	CM1013	10 x 1L
DMEM/F12 Media	CM1014	500 ml
DMEM/F12 Dry Powder Media	CM1015	1 L
DMEM/F12 Dry Powder Media	CM1016	10 x 1L
RPMI-1640 Media	CM1017	500 ml
RPMI-1640 Dry Powder Media	CM1018	1 L
RPMI-1640 Dry Powder Media	CM1019	10 x 1L
M-199 Media	CM1020	500 ml
M-199 Dry Powder Media	CM1021	1 L
M-199 Dry Powder Media	CM1022	10 x 1L