

Product Information

DMEM/Ham's F-12

Product	Volume	Cat. No.
DMEM/Ham's F-12, w/o L-Glutamine, with 15 mM HEPES	500 ml	E0500-200
DMEM/Ham's F-12, with L-Glutamine	500 ml	E0500-210

Product Specifications

CO ₂ concentration, optimum	5.5 %
pH	7.0 – 7.5
Osmolality	260 – 320 mOsm/kg
Colour and Appearance	Clear red orange solution
Endotoxin	<1 EU/ml (<0.1 ng/ml)
Cell Culture	Tested
Sterility	Tested
Storage	+2°to +8°C protected from light

Formulation

Components	Concentration mg/l	Molecular Weight g/mol	Concentration mM
Amino Acids			
L-Alanine	4.45	89.09	0.05
L-Arginine HCl	147.50	210.66	0.70
L-Asparagine H ₂ O	7.50	150.13	0.05
L-Aspartic Acid	6.65	133.10	0.05
L-Cysteine HCl H ₂ O	17.56	175.63	0.10
L-Cystine 2HCl	31.29	240.30	0.13
Glycine	18.75	75.07	0.25
L-Glutamine (<i>not in E0500-200</i>)	365.00	146.15	2.50
L-Glutamic Acid	7.35	147.13	0.05
L-Histidine HCl H ₂ O	31.48	209.63	0.15
L-Isoleucine	54.47	131.17	0.42
L-Leucine	59.05	131.17	0.45
L-Lysine HCl	91.25	182.65	0.50
L-Methionine	17.24	149.21	0.12
L-Phenylalanine	35.48	165.19	0.21
L-Proline	17.25	115.13	0.15
L-Serine	26.25	105.09	0.25
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L-Threonine	53.45	119.12	0.45
L-Tryptophan	9.02	204.23	0.04
L-Tyrosine 2Na 2H ₂ O	55.79	261.19	0.21
L-Valine	52.85	117.15	0.45
Vitamins			
D-Biotin	0.0035	244.31	0.000014
Choline chloride	8.98	139.62	0.06
D-Calcium Pantothenate	2.24	476.53	0.005
Folic Acid	2.66	441.40	0.006
myo-Inositol	12.60	180.16	0.07
Nicotinamide	2.02	122.12	0.02
Pyridoxal HCl	2.00	203.62	0.01
Pyridoxine HCl	0.31	203.62	0.002
Riboflavin	0.22	376.36	0.0006
Thiamine HCl	2.17	337.27	0.006
Vitamin B ₁₂	0.68	1355.37	0.0005
Inorganic Salts			
Calcium Chloride 2H ₂ O	154.50	147.01	1.05
Cupric Sulfate 5H ₂ O	0.0013	249.69	0.0000052
Iron(III) Nitrate 9H ₂ O	0.05	404.00	0.00012
Iron(II) Sulfate 7H ₂ O	0.417	278.01	0.0015
Magnesium Chloride 6H ₂ O	61.20	203.30	0.30
Magnesium Sulfate	48.84	120.37	0.41
Potassium Chloride	311.8	74.55	4.18
Sodium Bicarbonate	2438.00	84.01	29.02
Sodium Chloride	6996.00	58.44	119.71
Sodium Phosphate Dibasic Anhydrous	71.02	141.96	0.50
Sodium Phosphate Monobasic Anhydrous	54.30	119.98	0.45
Zinc Sulfate 7H ₂ O	0.43	287.56	0.0015

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Other Components			
D-Glucose	3151.00	180.16	17.49
HEPES (<i>not in E0500-210</i>)	3574.50	238.30	15.00
Hypoxanthine	2.10	136.11	0.015
Linoleic Acid	0.04	280.45	0.00015
Lipoic Acid	0.105	206.33	0.00051
Phenol Red Sodium Salt	8.63	376.36	0.02
Putrescine 2HCl	0.081	161.07	0.0005
Sodium Pyruvate	55.00	110.04	0.50
Thymidine	0.365	242.23	0.0015

Precautions and Disclaimer

This product is for research use only. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.