



ISO 13485:2016 Certified | GMP Certified

2235 Cornell Ave. Montgomery, IL 60538 | (800) 246 - 4088 | CustomerService@Biologos.com | Biologos.com

SPECIFICATION SHEET

PRODUCT: DULBECCO'S MODIFIED EAGLE'S MEDIUM/HAM'S F12 MEDIUM (1X)

With L-Glutamine and HEPES Buffer

Sterile Filtered 0.2 μ

Catalog Number: LDF9111

MEDIA FORMULATION

LDF9111

DMEM/Ham's F12 Medium (1X)

With L-Glutamine & HEPES Buffer

<u>Components</u>	<u>mg/L</u>
INORGANIC SALTS	
Calcium Chloride, Anhydrous (CaCl ₂)	116.6000
Cupric Sulfate, Pentahydrate (CuSO ₄ · 5H ₂ O)	0.00130
Ferric Nitrate, Nonahydrate (Fe(NO ₃) ₃ · 9H ₂ O)	0.05000
Ferrous Sulfate, Heptahydrate (FeSO ₄ · 5H ₂ O)	0.41700
Potassium Chloride (KCl)	311.800
Magnesium Chloride, Anhydrous (MgCl ₂)	28.6100
Magnesium Sulfate, Anhydrous (MgSO ₄)	48.9300
Sodium Chloride (NaCl)	6995.50
Sodium Bicarbonate (NaHCO ₃)	1200.00
Sodium Phosphate Dibasic, Anhydrous (Na ₂ HPO ₄)	70.960
Sodium Phosphate, Monobasic, Monohydrate (NaH ₂ PO ₄ · H ₂ O)	62.500
Zinc Sulfate, Heptahydrate (ZnSO ₄ · 7H ₂ O)	0.43200
OTHER COMPONENTS	
D-Glucose, Anhydrous (C ₆ H ₁₂ O ₆)	3151.00
Hypoxanthine, Sodium Salt (C ₆ H ₃ N ₄ O · Na)	2.39000
HEPES Buffer (C ₈ H ₁₈ N ₂ O ₄ S)	3574.50
Linoleic Acid (C ₁₈ H ₃₂ O ₂)	0.04200
Lipoic Acid (DL-Thiolic Acid) (C ₈ H ₁₄ O ₂ S ₂)	0.10500
Phenol Red, Sodium Salt (C ₁₉ H ₁₃ NaO ₅ S)	8.10000
Putrescine, Dihydrochloride (C ₄ H ₁₂ N ₂ · 2HCl)	0.08100
Pyruvic Acid, Sodium Salt (C ₃ H ₃ NaO ₃)	55.000
AMINO ACIDS	
L-Alanine (C ₃ H ₇ NO ₂)	4.45000

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MEDIA FORMULATION (CONTINUED)

AMINO ACIDS (CONTINUED)

L-Arginine, Hydrochloride (C ₆ H ₁₄ N ₄ O ₂ · HCl)	147.500
L-Asparagine, Monohydrate (C ₄ H ₈ N ₂ O ₃ · H ₂ O)	7.5000
L-Aspartic Acid (C ₄ H ₇ NO ₄)	6.6500
L-Cysteine, Hydrochloride, Monohydrate (C ₆ H ₁₂ N ₂ O ₄ S ₂ · 2HCl · H ₂ O)	17.5600
L-Cystine, Dihydrochloride (C ₆ H ₁₂ N ₂ O ₄ S ₂ · 2HCl)	31.2900
L-Glutamic Acid (C ₅ H ₉ NO ₄)	7.3500
L-Glutamine (C ₅ H ₁₀ N ₂ O ₃)	365.000
Glycine (C ₂ H ₅ NO ₂)	18.75000
L-Histidine, Hydrochloride, Monohydrate (C ₆ H ₉ N ₃ O ₂ · HCl · H ₂ O)	31.4800
L-Isoleucine (C ₆ H ₁₃ NO ₂)	54.47000
L-Leucine (C ₆ H ₁₃ NO ₂)	59.0500
L-Lysine, Hydrochloride (C ₆ H ₁₄ N ₂ O ₂ · HCl)	91.2500
L-Methionine (C ₅ H ₁₁ NO ₂ S)	17.24000
L-Phenylalanine (C ₉ H ₁₁ NO ₂)	35.48000
L-Proline (C ₅ H ₉ NO ₂)	17.2500
L-Serine (C ₃ H ₇ NO ₃)	26.2500
L-Threonine (C ₄ H ₉ NO ₃)	53.4500
L-Tryptophan (C ₁₁ H ₁₂ N ₂ O ₂)	9.02000
L-Tyrosine, Disodium, Dihydrate (C ₉ H ₉ NO ₃ Na ₂ · 2H ₂ O)	55.79000
L-Valine (C ₅ H ₁₁ NO ₂)	52.8500

VITAMINS

Biotin (C ₁₀ H ₁₆ N ₂ O ₃ S)	0.00350
D-Calcium Pantothenate (C ₁₈ H ₃₂ CaN ₂ O ₁₀)	2.24000
Choline Chloride (C ₅ H ₁₄ ONCl)	8.9800
Folic Acid (C ₁₉ H ₁₉ N ₇ O ₆)	2.65000
Myo-Inositol (C ₆ H ₁₂ O ₆)	12.6000
Niacinamide (C ₆ H ₆ N ₂ O)	2.02000

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MEDIA FORMULATION (CONTINUED)

VITAMINS (CONTINUED)

Table with 2 columns: Vitamin Name and Quantity. Includes Pyridoxine, Riboflavin, Thiamine, Thymidine, and Vitamin B12.

ASSAY:

Appearance

pH

Osmolality

Sterility per 9 CFR 113.26

Fungal

Bacterial

SPECIFICATION:

Clear, Red Solution

7.0 - 7.4

260 - 360 mOsm/KgH2O

NEGATIVE

NEGATIVE

Minimum Recommended Expiration Date: [18 Months from Date of Manufacturing]

Storage 2° - 8°C

Approved by:

Signature of Quality and Compliance Manager

1/21/2019

Quality and Compliance Manager

Date

Customer Representative

Date

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