

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
CELL CULTURE FACILITY
Media Production Formulations

**Dulbecco's Modified Eagle's Medium, DMEM
Low Glucose**

(DME H-16, 1g/L Glucose)

CCF Product Code Number: CCFAA001 (Old code AA100)

Compound	Formula	mg/L
Part A: Inorganic Salts		
Calcium chloride (anhydrous)	CaCl ₂	200.00
Ferric nitrate 9H ₂ O	Fe(NO ₃) ₃ 9H ₂ O	0.10
Magnesium sulfate·7 H ₂ O	MgSO ₄ ·7 H ₂ O	200.00
Potassium chloride	KCl	400.00
Sodium bicarbonate	NaHCO ₃	3700.00
Sodium chloride	NaCl	6400.00
Sodium phosphate, H ₂ O	NaH ₂ PO ₄ ·H ₂ O	125.00
Part B: Other components		
D-Glucose	C ₆ H ₁₂ O ₆	1000.00
Phenol Red, Na	C ₁₉ H ₁₃ NaO ₅ S	15.00
Sodium pyruvate	C ₃ H ₃ O ₃ ·Na	110.00
Part C: Amino Acids		
L-Arginine hydrochloride	C ₆ H ₁₄ N ₄ O ₂ HCl	84.00
L-Cystine	C ₆ H ₁₂ N ₂ O ₄ S ₂	48.00
L-Glutamine	C ₅ H ₁₀ N ₂ O ₃	584.00
Glycine	C ₂ H ₅ NO ₂	30.00
L-Histidine hydrochloride H ₂ O	C ₆ H ₉ N ₃ O ₂ HCl H ₂ O	42.00
L-Isoleucine	C ₆ H ₁₃ NO ₂	105.00
L-Leucine	C ₆ H ₁₃ NO ₂	105.00

L-Lysine HCl	$C_6H_{14}N_2O_2 \cdot HCl$	146.00
L-Methionine	$C_5H_{11}NO_2S$	30.00
L-Phenylalanine	$C_9H_{11}NO_2$	66.00
L-Serine	$C_3H_7NO_3$	42.00
L-Threonine	$C_4H_9NO_3$	95.00
L-Tryptophan	$C_{11}H_{12}N_2O_2$	16.00
L-Tyrosine	$C_9H_{11}NO_3$	72.00
L-Valine	$C_5H_{11}NO_2$	94.00

Part D: Vitamins

D-Calcium pantothenate	$C_{18}H_{32}CaN_2O_{10}$	4.00
Choline chloride	$C_5H_{14}ClNO$	4.00
i-Inositol	$C_6H_{12}O_6$	7.20
Nicotinamide	$C_6H_6N_2O$	4.00
Pyridoxine hydrochloride	$C_8H_{11}NO_3 \cdot HCl$	4.00
Thiamine hydrochloride	$C_{12}H_{17}ClN_4OS \cdot HCl$	4.00
Folic acid	$C_{19}H_{19}N_7O_6$	4.00
Riboflavin	$C_{17}H_{20}N_4O_6$	0.40

pH 7.0 Osmolarity: 324-333 mOsm