University of California, San Francisco
Cell Culture Facility

Media Production Formulations

Minimum Essential Medium (MEM Eagles with Earle's Balanced Salts) (MEM EBSS)

CCF Product Code Number: CCFAC001 (Old Code AE100)

Compound	Formula	mg/L
Part A: Inorganic Salts		
Calcium chloride (anhydrous)	$CaCl_2$	200.00
Magnesium sulfate · $7H_2O$	$MgS0_4 \cdot 7H_2O$	200.00
Potassium chloride	KCl	400.00
Sodium bicarbonate	$NaHCO_3$	2200.00
Sodium chloride	NaCl	6800.00
Sodium phosphate·H_20	$NaH_2P0_4 \cdot H_20$	140.00
Part B: Other components		
D-Glucose	$C_6H_{12}O_6$	1000.00
Phenol Red Na	$C_{19}H_{13}O_5S$ Na	10.00

University of California, San Francisco
Cell Culture Facility

Minimum Essential Medium
(MEM Eagles with Earle's Balanced Salts)
(MEM EBSS)

CCF Product Code Number: CCAAC001 (Old Code AE100)

Compound	Formula	mg/L
Part C: Amino Acids		
L-Arginine hydrochloride	$C_6H_{14}N_4O_2$ HCl	126.00
L-Cystine	$C_6H_{12}N_2O_4S_2$	24.00
L-Glutamine	$C_5H_{10}N_2O_3$	292.00
L-Histidine hydrochloride H_20	$C_6H_9N_3O_2$ HCl H_20	42.00
L-Isoleucine	$C_6H_{13}NO_2$	52.00
L-Leucine	$C_6H_{13}NO_2$	52.00
L-Lysine HCl	$C_6H_{14}N_2O_2 \cdot HCl$	72.50
L-Methionine	$C_5H_{11}NO_2S$	15.00
L-Phenylalanine	$C_9H_{11}NO_2$	32.00
L-Threonine	$C_4H_9NO_3$	48.00
L-Tryptophan	$C_{11}H_{12}N_2O_2$	10.00
L-Tyrosine	$C_9H_{11}NO_3$	36.00
L-Valine	$C_5H_{11}NO_2$	46.00

Minimum Essential Medium
(MEM Eagles with Earle's Balanced Salts)
(MEM EBSS)

CCF Product Code Number: CCAAC001 (Old Code AE100)

Compound	Formula	mg/L
Part D: Vitamins		
D-Calcium pantothenate	$C_{18}H_{32}CaN_2O_{10}$	1.00
Choline chloride	$C_5H_{14}ClNO$	1.00
Folic acid	$C_{19}H_{19}N_7O_6$	1.00
i-Inositol	$C_6H_{12}O_6$	2.00
Nicotinamide	$C_6H_6N_2O$	1.00
Pyridoxine hydrochloride	$C_8H_9NO_3 \cdot HCl$	1.00
Riboflavin	$C_{17}H_{20}N_4O_6$	0.10
Thiamine hydrochloride	$C_{12}H_{17}ClN_4OS \cdot HCl$	1.00

pH 7.0 Osmolarity: 290-305 mOsm