

Minimum Essential Medium (MEM) Formulation

Catalog no.	320-004 Liquid, 1X MEM	320-005 Liquid, 1X MEM	320-006 Liquid, 1X MEM	320-007 Liquid, 1X MEM	320-012 Liquid, 1X MEM	320-015 Liquid, 1X MEM
Inorganic Salts	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CaCl ₂ (anhydrous)	200.00	200.00	200.00	200.00	200.00	200.00
KCl	400.00	400.00	400.00	400.00	400.00	400.00
MgSO ₄ (anhydrous)	97.70	97.70	97.70	97.70	97.70	97.70
NaCl	6800.00	6800.00	6800.00	6800.00	6800.00	6800.00
NaH ₂ PO ₄ ·H ₂ O	140.00	140.00	140.00	140.00	140.00	140.00
NaHCO ₃	2200.00	2200.00	2200.00	2200.00	2200.00	2200.00
Amino Acids						
L-Alanine	8.90	----	8.90	8.90	----	----
L-Arginine·HCl	126.40	126.40	126.40	126.40	126.40	126.40
L-Asparagine·H ₂ O	15.00	----	15.00	15.00	----	----
L-Aspartic acid	13.30	----	13.30	13.30	----	----
L-Cystine·2HCl	31.20	31.20	31.20	31.20	31.20	31.20
L-Glutamic acid	14.70	----	14.70	14.70		
L-Glutamine	292.00	292.00	292.00	292.00	292.00	----
Glycine	7.50	----	7.50	7.50		
L-Histidine·HCl·H ₂ O	41.90	41.90	41.90	41.90	41.90	41.90
L-Isoleucine	52.50	52.50	52.50	52.50	52.50	52.50
L-Leucine	52.50	52.50	52.50	52.50	52.50	52.50
L-Lysine·HCl	72.50	72.50	72.50	72.50	72.50	72.50
L-Methionine	15.00	15.00	15.00	15.00	15.00	15.00
L-Phenylalanine	32.50	32.50	32.50	32.50	32.50	32.50
L-Proline	11.50	----	11.50	11.50	----	----
L-Serine	10.50	----	10.50	10.50	----	----
L-Threonine	47.60	47.60	47.60	47.60	47.60	47.60
L-Tryptophan	10.00	10.00	10.00	10.00	10.00	10.00
L-Tyrosine·2Na·H ₂ O	51.90	51.90	51.90	51.90	51.90	51.90
L-Valine	46.80	46.80	46.80	46.80	46.80	46.80
Vitamins						
D-Calcium pantothenate	1.00	1.00	1.00	1.00	1.00	1.00
Choline chloride	1.00	1.00	1.00	1.00	1.00	1.00
Folic acid	1.00	1.00	1.00	1.00	1.00	1.00
i-Inositol	2.00	2.00	2.00	2.00	2.00	2.00
Nicotinamide	1.00	1.00	1.00	1.00	1.00	1.00
Pyridoxine·HCl	1.00	1.00	1.00	1.00	1.00	1.00
Riboflavin	0.10	0.10	0.10	0.10	0.10	0.10
Thiamine·HCl	1.00	1.00	1.00	1.00	1.00	1.00
Other						
D-Glucose	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00
HEPES	----	----	----	----	4760.00	----
Pyruvic acid, Na	110.00	----	----	110.00	----	----
Phenol red, Na	----	10.00	10.00	10.00	10.00	10.00
Specifications						
pH (after buffer)	7.2 ± 0.2	7.2 ± 0.2	7.2 ± 0.2	7.2 ± 0.2	7.2 ± 0.2	7.2 ± 0.2
Osmolality (mOsm/kg)	I290 ± 30	290 ± 30	290 ± 30	290 ± 30	INFO	290 ± 30

To order: (888)-947-3681 Fax: (450) 446-7038

Visit us: www.wisentbioproducts.com

info@wisent.ca

Minimum Essential Medium (MEM) Formulation

Catalog no.	320-016 Liquid, 1X MEM	320-020 Liquid, 1X MEM	320-021 Liquid, 1X MEM	320-026 Liquid, 1X MEM	320-030 Liquid, 1X MEM	320-036 Liquid, 1X MEM
Inorganic Salts	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CaCl ₂ (anhydrous)	200.00	----	140.00	200.00	200.00	200.00
KCl	400.00	400.00	400.00	400.00	400.00	400.00
KH ₂ PO ₄	----	----	60.00	----	----	----
MgSO ₄ (anhydrous)	97.70	----	97.67	97.70	97.70	97.70
NaCl	6800.00	6800.00	8000.00	6800.00	6800.00	6800.00
NaH ₂ PO ₄ ·H ₂ O	140.00	140.00	----	140.00	140.00	140.00
Na ₂ HPO ₄	----	----	47.88	----	----	----
NaHCO ₃	1500.00	2200.00	350.00	1500.00	2200.00	1500.00
Amino Acids						
L-Alanine	----	----	----	8.90	----	8.90
L-Arginine·HCl	126.40	126.40	126.40	126.40	126.40	126.40
L-Asparagine·H ₂ O	----	----	----	15.00	----	15.00
L-Aspartic acid	----	----	----	13.30	----	13.30
L-Cystine·2HCl	31.20	31.20	31.29	31.20	31.20	31.20
L-Glutamic acid	----	----	----	14.70	----	14.70
L-Glutamine	----	----	292.00	292.00	----	292.00
Glycine	----	----	----	7.50	----	7.50
L-Histidine·HCl·H ₂ O	41.90	41.90	42.00	41.90	41.90	41.90
L-Isoleucine	52.50	52.50	52.00	52.50	52.50	52.50
L-Leucine	52.50	52.50	52.00	52.50	52.50	52.50
L-Lysine·HCl	72.50	72.50	72.50	72.50	72.50	72.50
L-Methionine	15.00	15.00	15.00	15.00	15.00	15.00
L-Phenylalanine	32.50	32.50	32.00	32.50	32.50	32.50
L-Proline	----	----	----	11.50	----	11.50
L-Serine	----	----	----	10.50	----	10.50
L-Threonine	47.60	47.60	48.00	47.60	47.60	47.60
L-Tryptophan	10.00	10.00	10.00	10.00	10.00	10.00
L-Tyrosine·2Na·H ₂ O	51.90	51.90	51.90	51.90	51.90	51.90
L-Valine	46.80	46.80	46.00	46.80	46.80	46.80
Vitamins						
D-Calcium pantothenate	1.00	1.00	1.00	1.00	1.00	1.00
Choline chloride	1.00	1.00	1.00	1.00	1.00	1.00
Folic acid	1.00	1.00	1.00	1.00	1.00	1.00
i-Inositol	2.00	2.00	2.00	2.00	2.00	2.00
Nicotinamide	1.00	1.00	1.00	1.00	1.00	1.00
Pyridoxine·HCl	1.00	1.00	1.00	1.00	1.00	1.00
Riboflavin	0.10	0.10	0.10	0.10	0.10	0.10
Thiamine·HCl	1.00	1.00	1.00	1.00	1.00	1.00
Other						
D-Glucose	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00
Phenol red, Na	10.00	10.00	11.00	10.00	----	10.00
Sodium pyruvate	----	---	----	110.00	----	----
Hepes	5958.00	----	----	----	----	----
Specifications						
pH (after buffer)	7.2 ± 0.2	7.2 ± 0.2	7.2 ± 0.2	7.2 ± 0.2	7.2 ± 0.2	7.2 ± 0.2
Osmolality (mOsm/kg)	290 ± 30	290 ± 30	285±15	290 ± 30	290 ± 30	290 ± 30

To order: (888)-947-3681 Fax: (450) 446-7038

Visit us: www.wisentbioproducts.com

info@wisent.ca

Minimum Essential Medium (MEM) Formulation

Catalog no.	220-005 Powder MEM	220-006 Powder MEM	220-010 Powder MEM	220-020 Powder MEM
Inorganic Salts	mg/L	mg/L	mg/L	mg/L
CaCl ₂ (anhydrous)	200.00	200.00	140.00	200.00
KCl	400.00	400.00	400.00	400.00
KH ₂ PO ₄	----	----	60.00	----
MgSO ₄ (anhydrous)	97.70	97.70	97.67	97.67
NaCl	6800.00	6800.00	8000.00	6800.00
NaH ₂ PO ₄ ·H ₂ O	140.00	140.00	----	140.00
Na ₂ HPO ₄	----	----	47.88	----
Na succinate·6H ₂ O	----	----	----	----
Amino Acids				
L-Alanine	----	8.90	----	----
L-Arginine·HCl	126.40	126.40	126.40	126.40
L-Asparagine·H ₂ O	----	15.00	----	----
L-Aspartic acid	----	13.30	----	----
L-Cystine·2HCl	31.20	31.20	31.29	31.20
L-Glutamic acid	----	14.70	----	----
L-Glutamine	292.00	292.00	292.00	----
Glycine	----	7.50	----	----
L-Histidine·HCl·H ₂ O	41.90	41.90	42.00	41.90
L-Isoleucine	52.50	52.50	52.00	52.50
L-Leucine	52.50	52.50	52.00	52.50
L-Lysine·HCl	72.50	72.50	72.50	72.50
L-Methionine	15.00	15.00	15.00	15.00
L-Phenylalanine	32.50	32.50	32.00	32.50
L-Proline	----	11.50	----	----
L-Serine	----	10.50	----	----
L-Threonine	47.60	47.60	48.00	47.60
L-Tryptophan	10.00	10.00	10.00	10.00
L-Tyrosine·2Na·H ₂ O	51.90	51.90	51.90	51.90
L-Tyrosine, free base	----	----	----	----
L-Valine	46.80	46.80	46.00	46.80
Vitamins				
Choline bitartrate	----	----	----	----
D-Calcium pantothenate	1.00	1.00	1.00	1.00
Choline chloride	1.00	1.00	1.00	1.00
Folic acid	1.00	1.00	1.00	1.00
i-Inositol	2.00	2.00	2.00	2.00
Nicotinamide	1.00	1.00	1.00	1.00
Pyridoxine·HCl	1.00	1.00	1.00	1.00
Riboflavin	0.10	0.10	0.10	0.10
Thiamine·HCl	1.00	1.00	1.00	1.00
Other				
D-Glucose	1000.00	1000.00	1000.00	1000.00
Phenol red, Na	10.00	10.00	10.00	----
Succinic acid	----	----	----	----
Specifications				
pH (after buffer)	290 ± 30	290 ± 30	285 ± 15	7.2 ± 0.2
Grams of powder required to prepare 1L (1X Solution)	10.00	9.61	10.63	9.23

To order: (888)-947-3681 Fax: (450) 446-7038

Visit us: www.wisentbioproducts.com

info@wisent.ca