



ISO 13485:2016 Certified | GMP Certified

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

## SPECIFICATION SHEET

**PRODUCT: Minimum Essential Medium (MEM) (1X)**  
**With Hank's Salts & L-Glutamine, w/o Sodium Pyruvate**  
**Sterile Filtered 0.2μ**

**Catalog Number: LMH0010**

### MEDIA FORMULATION

#### LMH0010

*Minimum Essential Medium (MEM) (1X)*

*With Hank's Salts & L-Glutamine, w/o Sodium Pyruvate*

<i>Components</i>	<i>mg/L</i>
<b>INORGANIC SALTS</b>	
Calcium Chloride, dihydrate (CaCl <sub>2</sub> ·2H <sub>2</sub> O)	140.0000
Magnesium Sulfate (MgSO <sub>4</sub> ), anhydrous	97.70000
Potassium Chloride (KCl)	400.0000
Potassium Phosphate monobasic, anhydrous (KH <sub>2</sub> PO <sub>4</sub> )	60.00000
Sodium Bicarbonate (NaHCO <sub>3</sub> )	2200.000
Sodium Chloride (NaCl)	8000.000
Sodium Phosphate dibasic, Anhydrous (NaH <sub>2</sub> PO <sub>4</sub> )	47.50000
<b>OTHER COMPONENTS</b>	
D-Glucose, Anhydrous (C <sub>6</sub> H <sub>12</sub> O <sub>6</sub> )	1000.000
Phenol Red, Sodium Salt (C <sub>19</sub> H <sub>13</sub> NaO <sub>5</sub> S)	10.00000
<b>AMINO ACIDS</b>	
L-Arginine, Hydrochloride (C <sub>6</sub> H <sub>15</sub> ClN <sub>4</sub> O <sub>2</sub> ·HCl)	126.0000
L-Cystine, dihydrochloride (C <sub>6</sub> H <sub>12</sub> N <sub>2</sub> O <sub>4</sub> S <sub>2</sub> ·2HCl)	31.30000
L-Glutamine (C <sub>5</sub> H <sub>10</sub> N <sub>2</sub> O <sub>3</sub> )	292.0000
L-Histidine, Hydrochloride, Monohydrate (C <sub>6</sub> H <sub>9</sub> N <sub>3</sub> O <sub>2</sub> ·HCl·H <sub>2</sub> O)	42.00000
L-Isoleucine (C <sub>6</sub> H <sub>13</sub> NO <sub>2</sub> )	52.00000
L-Leucine (C <sub>6</sub> H <sub>13</sub> NO <sub>2</sub> )	52.00000
L-Lysine, Hydrochloride (C <sub>6</sub> H <sub>14</sub> N <sub>2</sub> O <sub>2</sub> ·HCl)	72.50000
L-Methionine (C <sub>5</sub> H <sub>11</sub> NO <sub>2</sub> S)	15.00000
L-Phenylalanine (C <sub>9</sub> H <sub>11</sub> NO <sub>2</sub> )	32.00000
L-Threonine (C <sub>4</sub> H <sub>9</sub> NO <sub>3</sub> )	48.00000
L-Tryptophan (C <sub>11</sub> H <sub>12</sub> N <sub>2</sub> O <sub>2</sub> )	10.00000
L-Tyrosine, Disodium, Dihydrate (C <sub>9</sub> H <sub>9</sub> NO <sub>3</sub> Na <sub>2</sub> ·2H <sub>2</sub> O)	52.00000
L-Valine (C <sub>5</sub> H <sub>11</sub> NO <sub>2</sub> )	46.00000

**Not for Human or Animal Consumption.**  
**For Further Manufacturing Use Only.**



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**MEDIA FORMULATION (CONTINUED)**

**VITAMINS**

Choline Chloride (C <sub>5</sub> H <sub>14</sub> ClNO)	1.000000
D-Calcium Pantothenate (C <sub>18</sub> H <sub>32</sub> CaN <sub>2</sub> O <sub>10</sub> )	1.000000
Folic Acid (C <sub>19</sub> H <sub>19</sub> N <sub>7</sub> O <sub>6</sub> )	1.000000
Myo-Inositol (C <sub>6</sub> H <sub>12</sub> O <sub>6</sub> )	2.000000
Niacinamide (C <sub>6</sub> H <sub>6</sub> N <sub>2</sub> O)	1.000000
Pyridoxal HCl (C <sub>8</sub> H <sub>9</sub> NO <sub>3</sub> ·HCl)	1.000000
Riboflavin (C <sub>17</sub> H <sub>20</sub> N <sub>4</sub> O <sub>6</sub> )	0.100000
Thimaine HCl (C <sub>12</sub> H <sub>17</sub> ClN <sub>4</sub> OS·HCl)	1.000000

**ASSAY:**

Appearance

pH

Osmolality

Sterility per 9 CFR 113.26

Bacterial

Fungal

**SPECIFICATION:**

Clear, Red Solution

7.0 - 7.4

Measure & Record

NEGATIVE

NEGATIVE

Storage: Refrigerate at 2°C - 8°C

**Minimum Recommended Expiration Date:** [18 months from date of manufacturing]

Approved by:

3/15/2019

Quality and Compliance Manager

Date

Customer Representative

Date

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