## TECHNICAL INFORMATION

## Catalog Number: 1601149

## MEM Amino Acids (50X Solution) without L-glutamine

In many cell culture applications using defined media for the in vitro cultivation of cells, the addition of supplemental nutrients and reagents is required. Additives such as antibiotics, buffers, and stains are frequently used to prevent bacterial contamination, control pH , and visibly monitor media conditions. Other supplements such as amino acids and vitamins are useful for enriched media beyond their normal concentrations. Attachment factors and transport factors are added to growth media to facilitate rapid cell propagation and enhance proper cell metabolism. Still other media supplements may be added to create conditions which will elicit specific cellular responses and effects, such as altered protein biosynthesis, accelerated antibody production and secretion, toxic response mechanisms, etc. As a result, the availability of a wide variety of media supplements is desirable when designing cell culture experiments. Besides the listed amino acid and vitamin concentrates, MP can also provide the following media supplements (see catalog for complete listing):

- Buffers
- Attachment factors
- Miscellaneous Reagents

Formulation (as 50X):

| Components | $\mathrm{mg} / \mathrm{L}$ | Mol. Wt. | Mol. (mM) |
| :--- | :---: | :---: | :---: |

Amino Acids

| L-Arginine HCl | 6320.00000 | 174.2 | 36.28 |
| :--- | :---: | :---: | :---: |
| L-Cystine | 1201.00000 | 240.3 | 5.00 |
| L-Histidine HCl H2O | 2095.00000 | 209.6 | 10.00 |
| L-Isoleucine | 2625.00000 | 131.2 | 20.01 |
| L-Leucine | 2625.00000 | 131.2 | 20.01 |
| L-Lysine HCl | 3653.00000 | 182.6 | 20.01 |
| L-Methionine | 745.00000 | 149.2 | 4.99 |
| L-Phenylalanine | 1651.00000 | 165.2 | 9.99 |
| L-Threonine | 2382.00000 | 119.1 | 20.00 |
| L-Tryptophan | 510.00000 | 204.2 | 2.50 |
| L-Tyrosine | 1811.00000 | 181.2 | 9.99 |
| L-Valine | 2345.00000 | 117.1 | 20.03 |

## Availability:

## Amino Acid Concentrates:

| Catalog Number | Description | Size |
| :--- | :--- | :--- |
| 1600149 | BME 100X (Modified) Amino Acids without L-glutamine | 100 ml |
| 1600154 |  | 500 ml |
| 1601149 | MEM 50X (Modified) Amino Acids without L-glutamine | 100 ml |

Non-Essential Amino Acid Concentrate:

| Catalog Number | Description | Size |
| :--- | :--- | :--- |
| 1681049 | MEM 100X Non-Essential Amino Acids | 100 ml |

## Vitamin Concentrates:

| Catalog Number | Description | Size |
| :--- | :--- | :--- |
| 1600449 | BME 100X (Modified) Vitamins | 100 ml |
| 1601449 | MEM 100X (Modified) Vitamins | 100 ml |

