

# Amino Acid, Vitamin and Trace Element Solutions

PromoCell

## Instruction Manual

Product	Size	Catalog Number
L-Glutamine Solution	100 ml	C-42210
Stable Glutamine Solution	100 ml	C-42215
BME Amino Acids Solution	100 ml	C-42310
MEM Amino Acids Solution	100 ml	C-42320
MEM NEAA Solution	100 ml	C-42322
RPMI 1640 AA Mix (50x)	100 ml	C-42330
BME Vitamin Solution	100 ml	C-42312
MEM Vitamin Solution	100 ml	C-42328
Trace Element Mix (1000x)	100 ml	C-42331

### Description

Amino acids are obligatory ingredients of all known cell culture media. They are -partly essential- energy sources and the basic constituents of peptides, proteins and other organic macromolecules.

Vitamins are organic compounds essentially required as nutrients in tiny amounts by an organism. Vitamins cannot be synthesized in sufficient quantities by cells and are therefore important supplements required in tissue culture media.

Trace Elements are chemical elements that are needed in minute amounts for proper cell growth. These micronutrients are essential for many biological processes, e.g. the maintenance of the functionality of enzymes.

PromoCell high-quality amino acid and vitamin supplements represent expedient supplements for your cell culture needs and ensure maximal growth performance of your cells.

### Storage and Stability

Store L-Glutamine, stable Glutamine and Vitamin Solutions at -20°C for long term. Amino Acid and Trace Element Solutions are kept at 4°C. If stored properly, the product is stable until the expiry date stated on the label.

### Quality Control

All lots of PromoCell media supplements are subjected to comprehensive quality control tests. Each lot is routinely tested

for growth promotion, absence of cytotoxicity, and physical parameters such as osmolality and pH level. Approved in-house lots are used as a reference.

In addition, all lots have been tested for the absence of microbial contaminants (fungi, bacteria).

### Intended Use

The products are for *in vitro* research use only and not for diagnostic or therapeutic procedures. For safety precautions please see appropriate MSDS.

	L-Glutamine CC-Grade
	C-42210

### ■ Inorganic Salts

Unit Size	100 ml
Presentation	100x liquid
Concentration	200 mM (29.2 g/l)

	MEM Amino Acids Solution CC-Grade
Concentration [g/l]	C-42320

Unit Size	100 ml
Presentation	50x liquid

### ■ Amino Acids

L-Arginine HCl	6.32
L-Cystine	1.2
L-Histidine HCl x H <sub>2</sub> O	2.1
L-Isoleucine	2.625
L-Leucine	2.62
L-Lysine HCl	3.625
L-Methionine	0.755
L-Phenylalanine	1.65
L-Threonine	2.38
L-Tryptophan	0.51
L-Tyrosine	1.8
L-Valine	2.34

	MEM Vitamins Solution CC-Grade
Concentration [g/l]	C-42328

Unit Size	100 ml
Presentation	100x liquid

### ■ Amino Acids

Choline Chloride	0.1
D-Pantothenic Acid, Ca-Salt	0.1
Folic Acid	0.1
i-Inositol	0.2
Nicotinamide	0.1
Pyridoxal HCl	0.1
Riboflavin	0.01
Thiamine HCl	0.1

	Stable Glutamine CC-Grade
	C-42215

### ■ Inorganic Salts

Unit Size	100 ml
Presentation	100x liquid
Concentration	200 mM (51.8 g/l) N-Ac-L-Ala-L-Gln

	MEM NE Amino Acids Solution CC-Grade
Concentration [g/l]	C-42322

Unit Size	100 ml
Presentation	100x liquid

### ■ Amino Acids

L-Alanine	0.89
L-Asparagine x H <sub>2</sub> O	1.5
L-Aspartic Acid	1.33
L-Glutamic Acid	1.47
Glycine	0.75
L-Proline	1.15
L-Serine	1.05

	BME Amino Acids
Concentration [mg/l]	C-42310

Unit Size	100 ml
Presentation	50x liquid

#### ■ Amino Acids

L-Arginine HCl	1050
L-Cystine	600
L-Histidine HCl x H <sub>2</sub> O	540.4
L-Isoleucine	1300
L-Leucine	1300
L-Lysine HCl	1812
L-Methionine	375
L-Phenylalanine	825
L-Threonine	1200
L-Tryptophan	200
L-Tyrosine	900
L-Valine	1175

	RPMI Amino Acids
Concentration [mg/l]	C-42330

Unit Size	100 ml
Presentation	50x liquid

#### ■ Amino Acids

L-Arginine	10
L-Asparagine x H <sub>2</sub> O	2.84
L-Aspartic Acid	1
L-Cystine	2.5
L-Glutamic Acid	1
Glycine	500
L-Histidine	750
L-4-Hydroxyproline	1
L-Isoleucine	2.5
L-Leucine	2.5
L-Lysine	1.6
L-Methionine	750
L-Phenylalanine	750
L-Proline	1
L-Serine	1.5
L-Threonine	1
L-Tryptophan	250
L-Tyrosine	1.16
L-Valine	1

	BME Vitamins
Concentration [mg/l]	C-42312

Unit Size	100 ml
Presentation	100x liquid

#### ■ Amino Acids

Cholin Chloride	100
D-Biotin	100
Folic Acid	100
myo-Inositol	200
Nicotinamide	100
D-Pantothenic Acid, Ca-Salt	100
Pyridoxal HCl	100
Riboflavine	10
Sodium Chloride	8500
Thiamine HCl	100

	Trace Element Mix
Concentration [mg/l]	C-42331

Unit Size	100 ml
Presentation	1000x liquid

#### ■ Inorganic Salts

NiSO <sub>4</sub> x 6H <sub>2</sub> O	0.13
NH <sub>4</sub> VO <sub>3</sub> anhydrous	0.65
(NH <sub>4</sub> ) <sub>6</sub> Mo <sub>7</sub> O <sub>24</sub> x 4H <sub>2</sub> O	1.31
Na <sub>2</sub> SiO <sub>3</sub> x 5H <sub>2</sub> O	105
MnSO <sub>4</sub> x H <sub>2</sub> O	0.17
Citric Acid, Fe-Salt x H <sub>2</sub> O	1240
ZnSO <sub>4</sub> x 7H <sub>2</sub> O	863
CuSO <sub>4</sub> x 5H <sub>2</sub> O	1.6
SnCl <sub>2</sub> x 2H <sub>2</sub> O	0.14
Na <sub>2</sub> SeO <sub>3</sub> anhydrous	17.3