



# Comparative Formulation

## IPL-41 Insect Media

▲	Powdered Media	IPP02	IPP03
Amino Acids		mg/L	mg/L
	beta-Alanine	300.0000	300.0000
	Glycine	200.0000	200.0000
	L-Arginine, Hydrochloride	800.0000	
	L-Asparagine, Anhydrous	1300.0000	1300.0000
	L-Aspartic Acid	1300.0000	1300.0000
	L-Cystine, Dihydrochloride	130.4700	130.4700
	L-Glutamine	1000.0000	1000.0000
	L-Histidine, Anhydrous	200.0000	200.0000
	L-Hydroxyproline	800.0000	800.0000
	L-Isoleucine	750.0000	750.0000
	L-Leucine	250.0000	250.0000
	L-Lysine, Hydrochloride	700.0000	
	L-Methionine	1000.0000	1000.0000
	L-Phenylalanine	1000.0000	1000.0000
	L-Proline	500.0000	500.0000
	L-Serine	200.0000	200.0000
	L-Threonine	200.0000	200.0000
	L-Tryptophan	100.0000	100.0000
	L-Tyrosine, Disodium, Dihydrate	360.4000	360.4000
	L-Valine	500.0000	500.0000



## Powdered Media

IPP02

IPP03

### Inorganic Salts

mg/L

mg/L

Calcium Chloride, Anhydrous	500.0000	500.0000
Cobalt Chloride, Hexahydrate	0.0500	0.0500
Cupric Chloride, Dihydrate	0.2000	0.2000
Ferrous Sulfate, Heptahydrate	0.5500	0.5500
Magnesium Sulfate, Anhydrous	918.0000	918.0000
Molybdic acid hexaammonium salt tetrahydrate	0.0400	0.0400
Potassium Chloride	1200.0000	1200.0000
Sodium Chloride	2850.0000	2850.0000
Sodium Phosphate, Monobasic, Monohydrate	1160.0000	1160.0000
Zinc Chloride, Anhydrous	0.0400	0.0400

### Other Components

mg/L

mg/L

alpha-Ketoglutaric Acid	29.6000	29.6000
D-Glucose, Anhydrous	2500.0000	2500.0000
Fumaric Acid	4.4000	4.4000
L-Malic Acid	53.6000	53.6000
Maltose Monohydrate	1000.0000	1000.0000
Succinic Acid	4.8000	4.8000
Sucrose	1650.0000	1650.0000



## Powdered Media

IPP02

IPP03

### Vitamins

mg/L

mg/L

Biotin	0.1600	0.1600
Choline Chloride	20.0000	20.0000
D-Calcium Pantothenate	0.0080	0.0080
Folic Acid	0.0800	0.0800
Myo-Inositol	0.4000	0.4000
Nicotinic Acid	0.1600	0.1600
para-Aminobenzoic Acid	0.3200	0.3200
Pyridoxine, Hydrochloride	0.4000	0.4000
Riboflavin	0.0800	0.0800
Thiamine, Hydrochloride	0.0800	0.0800
Vitamin B12	0.2400	0.2400



## Liquid Media

IPL01

### Amino Acids

mg/L

beta-Alanine	300.0000
Glycine	200.0000
L-Arginine, Hydrochloride	800.0000
L-Asparagine, Anhydrous	1300.0000
L-Aspartic Acid	1300.0000
L-Cystine, Dihydrochloride	130.4700
L-Glutamine	1000.0000
L-Histidine, Anhydrous	200.0000
L-Hydroxyproline	800.0000
L-Isoleucine	750.0000
L-Leucine	250.0000
L-Lysine, Hydrochloride	700.0000
L-Methionine	1000.0000
L-Phenylalanine	1000.0000
L-Proline	500.0000
L-Serine	200.0000
L-Threonine	200.0000
L-Tryptophan	100.0000
L-Tyrosine, Disodium, Dihydrate	360.4000
L-Valine	500.0000



## Liquid Media

IPL01

### Inorganic Salts

mg/L

Calcium Chloride, Anhydrous	500.0000
Cobalt Chloride, Hexahydrate	0.0500
Cupric Chloride, Dihydrate	0.2000
Ferrous Sulfate, Heptahydrate	0.5500
Magnesium Sulfate, Anhydrous	918.0000
Molybdic acid hexaammonium salt tetrahydrate	0.0400
Potassium Chloride	1200.0000
Sodium Bicarbonate	350.0000
Sodium Chloride	2850.0000
Sodium Phosphate, Monobasic, Monohydrate	1160.0000
Zinc Chloride, Anhydrous	0.0400

### Other Components

mg/L

alpha-Ketoglutaric Acid	29.6000
D-Glucose, Anhydrous	2500.0000
Fumaric Acid	4.4000
L-Malic Acid	53.6000
Maltose Monohydrate	1000.0000
Succinic Acid	4.8000
Sucrose	1650.0000



## Liquid Media

IPL01

### Vitamins

mg/L

Biotin	0.1600
Choline Chloride	20.0000
D-Calcium Pantothenate	0.0080
Folic Acid	0.0800
Myo-Inositol	0.4000
Nicotinic Acid	0.1600
para-Aminobenzoic Acid	0.3200
Pyridoxine, Hydrochloride	0.4000
Riboflavin	0.0800
Thiamine, Hydrochloride	0.0800
Vitamin B12	0.2400