

# Product Information

## Grace's Insect Medium

Vaughn's Modified, with 4.1 mM L-glutamine

CATALOG NO. 51902C

### Description

Grace's Insect Medium was developed in 1962 and has been shown, with the addition of serum, to support the growth of insect cells, including *Spodoptera frugiperda*. Vaughn's modification includes an increase in the potassium chloride concentration and a corresponding decrease in calcium chloride concentration. This modification increases the solubility of the medium while maintaining the proper osmolality for insect cell culture.

### Precautions

Use aseptic technique when handling or supplementing this medium. This product is for research or for further manufacturing use. THIS PRODUCT IS NOT INTENDED FOR HUMAN OR THERAPEUTIC USE.

### Storage

Store medium protected from light at 2 to 8 C. Do not freeze. Do not use after the expiration date.

### Indications of Deterioration

Medium should be clear of particulates and flocculent material. Do not use if liquid medium is cloudy or contains precipitate. Other evidence of deterioration may include color change, pH shift or degradation of physical or performance characteristics.

### Preparation Instructions

Supplements, such as antibiotics, can be added to the sterilized solution using aseptic technique. Storage conditions and shelf life of the supplemented product may be affected by the nature of the supplements. Sterile serum should not be refiltered before or after being added to sterile medium because growth promoting capacity may be reduced upon refiltration.

### Formulation

Component (all components measured in mg/L)	
<b>INORGANIC SALTS</b>	
Calcium chloride anhydrous	750.000
Magnesium chloride hexahydrate	2280.000
Magnesium sulfate anhydrous	1357.670
Potassium chloride	4100.000
Sodium bicarbonate	350.000
Sodium phosphate monobasic monohydrate	1013.000
<b>VITAMINS</b>	
Biotin	0.010
D-calcium pantothenate	0.020
Choline chloride	0.200
Folic acid	0.020
i-inositol	0.020
Niacin	0.020
PABA	0.020
Pyridoxine HCl	0.020
Riboflavin	0.020
Thiamine HCl	0.020
<b>AMINO ACIDS</b>	
β-alanine	200.000
L-alanine	225.000
L-arginine HCl	700.000
L-asparagine monohydrate	397.730
L-aspartic acid	350.000
L-cystine 2HCl	28.680
L-glutamic acid	600.000
L-glutamine	600.000
Glycine	650.000
L-histidine free base	2500.000
L-isoleucine	50.000
L-leucine	75.000
L-lysine HCl	625.000
L-methionine	50.000
L-phenylalanine	150.000
L-proline	350.000
DL-serine	1100.000
L-threonine	175.000
L-tryptophan	100.000
L-tyrosine 2Na dihydrate	72.630
L-valine	100.000
<b>OTHER</b>	
Dextrose anhydrous	700.000
D-fructose	400.000
Fumaric acid	55.000
α-Ketoglutaric acid	370.000
L-malic acid	670.000
Succinic acid free acid	60.000
D+Sucrose	26680.000

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