Grace's Insect Medium

With L-Glutamine & Sodium Bicarbonate

Cat. No. CPG001 | Size: 500 ML / 1L

1. Product Description

Grace's Insect Medium was developed and modified to provide conditions similar to the hemolymph of moths (Antherea). By using this medium as a basal medium and mixing appropriate additives, cells of lepidopterans as well as dipterans can be cultured. Afterwards, it is widely used as a basal medium for large-scale culture of SF9 cells and others frequently used in biotechnology research and biopharmaceutical production.

2. Composition

Amino Acids	mg/L
L-Alanine	225.0
L-Arginine-HCl	700.0
L-Asparagine	350.0
L-Aspartic Acid	350.0
L-Cystine	22.0
L-Glutamic Acid	600.0
L-Glutamine	600.0
Glycine	650.0
L-Histidine	2500.0
L-Isoleucine	50.0
L-Leucine	75.0
L-Lysine-HCl	625.0
L-Methionine	50.0
L-Phenylalanine	150.0
L-Proline	350.0
L-Serine	550.0
L-Threonine	175.0
L-Tryptophan	100.0
L-Tyrosine	50.0
L-Valine	100.0

Vitamins & Salts	mg/L
Biotin	0.01
D-Ca Pantothenate	0.02
Choline Chloride	0.20
Folic Acid	0.02
i-Inositol	0.02
Niacin	0.02
p-Aminobenzoic Acid	0.02
Pyridoxine HCl	0.02
Riboflavin	0.02
Thiamine	0.02
Inorganic Salts	**mg/L**
$CaCl_2$	1000.0
KCl	3440.0
$MgCl_2$ (Anhydrous)	1070.0
$MgSO_4$ (Anhydrous)	1358.0
$NaHCO_3$	350.0
$NaH_2PO_4 \cdot H_2O$	1013.0

Others	mg/L
D(-) Fructose	400.0
Fumaric Acid	55.0
D-Glucose	700.0
α-Ketoglutaric Acid	370.0
Malic Acid	670.0
Succinic Acid	60.0
Sucrose	26680.0

3. Product Quality Specifications

Appearance	pH	Osmolality	Endotoxin	Sterility
Colorless clear liquid	pH 6.3 ± 0.3	342 ± 17 mOsm/kg H_2O	<1 EU/mL	Sterile

4. Storage Conditions and Precautions

Store at refrigerated temperatures (2~8°C) protected from direct light. The expiration date is indicated on the product label; do not use expired products. Product degradation may appear as precipitates, floating particles, turbidity, or color change; discard if any are observed. Storing against the inner walls of a refrigerator where temperatures may approach 0°C can cause degradation due to ice crystal formation. The addition of extra substances may also cause degradation.

5. Usage Instructions and Precautions

This product is a sterile solution. Open the cap only in a sterile environment (e.g., a clean bench) using aseptic technique. It is recommended to use the entire contents after opening; otherwise, aliquot into a suitable sterile container and store refrigerated (2~8°C).