

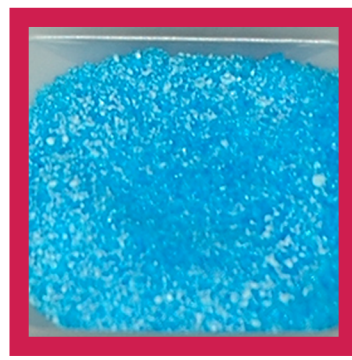
Prod No: A296 Pkg Size: 500 g Lot: 11K0296081A
AGAR, PLANT TC
Micropropagation Grade - Gelidium
Gel Strength: 900 g/cm2
Storage Temp: Room Temperature
Formula: N/A
CAS: 9002-18-0
UN: N/A
HG: 1302.31.0000

Prod No: A175 Pkg Size: 250 g
AGAR, TC
Purified Grade - Gelidium
Gel Strength: 1105 g/cm2
Storage Temp: Room Temperature

PhytoTechnology Laboratories®
PO Box 12205 • Shawnee Mission, KS • 66282-2205
Phone: 1-913-341-5343 or 1-888-749-8682 (USA and Canada Only)
Fax: 1-913-341-5442 or 1-888-449-8682 (USA and Canada Only)
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Helping to Build a Better Tomorrow Through Plant Science™

Plant tissue culture
For laboratory use only
IRRITANT
Irritating to eyes,
respiratory system and
skin. Wear suitable
protective clothing.
Consult MSDS for
use.

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B-I-O-C-H-E-M-I-C-A-L-S

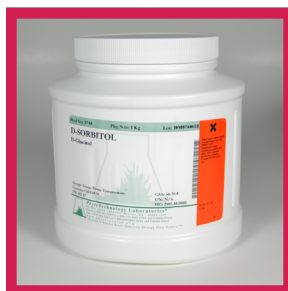
BIOCHEMICALS

*Phyto*Technology Laboratories® provides an extensive line of biochemicals for use in plant tissue culture, microbiology, and molecular biology research. This section outlines many of these products. Most of the products listed in this section have a wide variety of uses. Products that are intended for, or used most commonly with one specific field of plant sciences are included in those sections. Please refer to the following sections:

- Molecular Biology, page 131
- Microbiology, page 151
- Seed Testing, page 165
- Phycology, page 173

For assistance with locating products within the catalogue, please consult the indices at the back of this catalogue.

Be sure to check back at www.phytotechlab.com for new products often.



Featured in this section

- Agars
- Amino Acids
- Auxins
- Buffers
- Carbohydrates
- Carrageenans
- Cytokinins
- Enzymes
- Gellan Gums
- Gibberellins
- Macronutrients
- Micronutrients
- pH Adjustment
- Reagents
- Solvents
- Vitamins

Gelling Agents

*Phyto*Technology Laboratories® offers several different types of gelling agents for use in plant tissue culture, including agars, gellan gums, and carrageenans.

Agars:

- A111 - Agar, *Gracilaria*
- A296 - Agar, *Gelidium*
- A175 - Agar TC, Purified Grade

Gellan Gums:



- G434 - Gellan Gum
- G3251 - Gelzan™

Carrageenans:

- C257 - Carrageenan, Gelcarin
- C2000 - Carrageenan, High Clarity

Media Components

Most of the biochemical components used in the manufacture of *Phyto*Technology Laboratories® tissue culture media are available for purchase individually. This includes a wide variety of plant growth regulators, vitamins, amino acids, carbohydrates, and undefined organic supplements.

A102 - (+/-)-ABSCISIC ACID			
ABA; Dormin; Abscisin II; (2Z,4E)-5-[(1S)-Hydroxy-2,6,6-trimethyl-4-oxo-2-cyclohexen-1-yl]-3-methyl-2,4-pentadienoic Acid Abscission-accelerating plant hormone Plant Tissue Culture Tested			
<ul style="list-style-type: none"> • Powder • CAS Number: 14375-45-2 • Formula: C₁₅H₂₀O₄ • Molecular Weight: 264.32 • Soluble in KOH • Store at -20 to 0 °C • Merck 13, 9 			
AVAILABLE PACKAGE SIZES			
100mg	500mg	1g	5g
A256 - ACETIC ACID, GLACIAL			
Ethanoic Acid			
<ul style="list-style-type: none"> • Liquid • CAS Number: 64-19-7 • Formula: C₂H₄O₂ • Molecular Weight: 60.05 • Miscible with Water • Store at Room Temperature • Merck 13, 56 			
			
AVAILABLE PACKAGE SIZES			
10x1mL	10mL	25mL	
A104 - ACETOSYRINGONE			
See Molecular Biology Section for Complete Listing			
A110 - ACETOSYRINGONE 100MM SOLUTION			
See Molecular Biology Section for Complete Listing			
A118 - ACETYSALICYLIC ACID			
2-(Acetyloxy)benzoic Acid; Salicylic acid acetate; Aspirin Plant Tissue Culture Tested			
<ul style="list-style-type: none"> • Powder • CAS Number: 50-78-2 • Formula: C₉H₈O₄ • Molecular Weight: 180.16 • Soluble in Hot to Boiling Water or DMSO • Store at Room Temperature • Merck 13, 856 			
			
AVAILABLE PACKAGE SIZES			
100g			

A120 - ADENINE						
6-Aminopurine; Vitamin B ₄ Plant Tissue Culture Tested						
<ul style="list-style-type: none"> • Powder • CAS Number: 73-24-5 • Formula: C₅H₅N₅ • Molecular Weight: 135.13 • Soluble in KOH • Store at Room Temperature • Merck 13, 152 						
AVAILABLE PACKAGE SIZES						
25g	100g					
A545 - ADENINE HEMISULFATE						
6-Aminopurine Sulfate Plant Tissue Culture Tested						
<ul style="list-style-type: none"> • Powder • CAS Number: 321-30-2 • Formula: (C₅H₆N₅)₂SO₄ • Molecular Weight: 368.34 • Soluble in Warm Water • Store at Room Temperature • Merck 13, 152 						
AVAILABLE PACKAGE SIZES						
25g	100g					
A296 - AGAR, PLANT TC MICROPROPAGATION GRADE - GELIDIUM						
Agar-Agar; Gum Agar Gel Strength: minimum 700 g/cm ² Plant Tissue Culture Tested						
<ul style="list-style-type: none"> • Powder • CAS Number: 9002-18-0 • Soluble in Boiling Water • Store at Room Temperature • Merck 13, 184 						
AVAILABLE PACKAGE SIZES						
9g	100g	500g	1Kg	5Kg	10Kg	25Kg
A111 - AGAR, PLANT TC MICROPROPAGATION GRADE - GRACILARIA						
Agar-Agar; Gum Agar Gel Strength: minimum 900 g/cm ² Plant Tissue Culture Tested						
<ul style="list-style-type: none"> • Powder • CAS Number: 9002-18-0 • Soluble in Boiling Water • Store at Room Temperature • Merck 13, 184 						
AVAILABLE PACKAGE SIZES						
9g	100g	500g	1Kg	5Kg	10Kg	25Kg

GELLING AGENTS USAGE CHART

See "Figure 19. Usage Guide for Gelling Agents" on page 246 in the Technical Section.

A175 - AGAR, TC; PURIFIED GRADE - GELIDIUM

Agar-Agar; Gum Agar
Gel Strength: minimum 700 g/cm²
Plant Tissue Culture Tested

- Powder
- CAS Number: 9002-18-0
- Soluble in Boiling Water
- Store at Room Temperature
- *Merck 13*, 184

AVAILABLE PACKAGE SIZES

8g 100g 250g 500g 1Kg 2.5Kg 5Kg

A133 - AGARGELLAN™

A proprietary blend of Gellan Gum and Micropropagation grade Agar.
Plant Tissue Culture Tested

- Powder
- Soluble in Boiling Water
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

100g 500g 1Kg 5Kg

A110 - AGAROSE

Gelling Temperature: >35°C
Plant Tissue Culture Tested

- Powder
- CAS Number: 9012-36-6
- Formula: (C₁₂H₁₄O₅(OH)₄)_n
- Low EEO
- Molecular Weight: Variable
- Soluble in Hot Water
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

100g

A1050 - LE AGAROSE

See Molecular Biology Section for Complete Listing

A105 - AGAROSE, LOW GELLING TEMPERATURE

Gelling Temperature: 26 to 29 °C
Plant Tissue Culture Tested

- Powder
- CAS Number: 9012-36-6
- Formula: (C₁₂H₁₄O₅(OH)₄)_n
- Molecular Weight: Variable
- Soluble in Hot Water
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

100g

A1315 - AGAROSE, LOW GELLING TEMP, SEA PLAQUE®

Gelling Temperature: 26 to 30 °C
Gelling Strength (1% concentration): ≥200 g/cm²
Plant Tissue Culture Tested

- Powder
- Low EEO
- CAS Number: 9012-36-6
- Formula: (C₁₂H₁₄O₅(OH)₄)_n
- Molecular Weight: Variable
- Soluble in Hot Water
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

25g

A121 - L-ALANINE

USP Grade
(S)-2-Aminopropanoic Acid
Plant Tissue Culture Tested

- Powder
- CAS Number: 56-41-7
- Formula: C₃H₇NO₂
- Molecular Weight: 89.09
- Soluble in Water
- Store at Room Temperature
- *Merck 13*, 203

AVAILABLE PACKAGE SIZES

100g 500g 1Kg

A1286 - ALCIAN BLUE

See Seed Testing Section for Complete Listing

A108 - ALGINIC ACID, SODIUM SALT

Sodium Alginate

- Powder
- CAS Number: 9005-38-3
- Molecular Weight: 240,000 avg.
- Partially Soluble in Water – Forms Viscous Colloidal Suspension
- Store at Room Temperature
- *Merck 13*, 238

AVAILABLE PACKAGE SIZES

100g 250g 500g

A127 - ALUMINUM CHLORIDE HEXAHYDRATE

Plant Tissue Culture Tested

- Powder
- CAS Number: 7784-13-6
- Formula: AlCl₃•6H₂O
- Molecular Weight: 241.43
- Soluble in Water
- Store at Room Temperature
- *Merck 13*, 335



AVAILABLE PACKAGE SIZES

100g

A103 - p-AMINO BENZOIC ACID		
4-Aminobenzoic Acid; PABA; Vitamin B _x ; Vitamin H ₁ Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 150-13-0 • Formula: C₇H₇NO₂ • Molecular Weight: 137.14 • Soluble in KOH/NaOH • Slightly soluble in water at low concentrations • Store at 2 to 6 °C • Merck 13, 422 		
AVAILABLE PACKAGE SIZES		
5g	25g	100g

A109 - AMMONIUM CHLORIDE		
Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 12125-02-9 • Formula: NH₄Cl • Molecular Weight: 53.49 • Soluble in Water • Store at Room Temperature • Merck 13, 510 		
AVAILABLE PACKAGE SIZES		
100g	1Kg	

A114 - AMMONIUM CITRATE, DIBASIC		
Diammonium Citrate; Citric Acid Diammonium Salt Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 3012-65-5 • Formula: (NH₄)₂HC₆H₅O₇ • Molecular Weight: 226.19 • Soluble in Water • Store at Room Temperature • Merck 13, 513 		
AVAILABLE PACKAGE SIZES		
500g	1Kg	

NEW PRODUCT		
A1180 - 1-AMINOCYCLOPROPANECARBOXYLIC ACID		
ACC, ACPC, 1-Aminocyclopropane-1-carboxylic Acid		
ACC is a cyclic α-amino acid that is a precursor of the plant hormone ethylene. Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 22059-21-8 • Formula: C₄H₇NO₂ • Molecular Weight: 101.10 • Soluble in Water/DMSO • Store at Room Temperature 		
AVAILABLE PACKAGE SIZES		
100mg	500mg	1g

A112 - AMMONIUM MOLYBDATE (VI) TETRAHYDRATE		
Molybdic Acid, Ammonium Salt Tetrahydrate Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 12027-67-7 • Formula: (NH₄)₆Mo₇O₂₄•4H₂O • Molecular Weight: 1235.9 • Soluble in Water • Store at Room Temperature • Merck 13, 536 		
AVAILABLE PACKAGE SIZES		
25g	100g	500g 100g

MACRONUTRIENS SOURCES CHART
See "Figure 9. List of Macronutrient Sources & PhytoTech™ Product Numbers" on page 236 in the Technical Section.

A300 - AMMONIUM NITRATE		
Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 6484-52-2 • Formula: NH₄NO₃ • Molecular Weight: 80.04 • Soluble in Water • Store at Room Temperature • Merck 13, 538 		
AVAILABLE PACKAGE SIZES		
500g	1Kg	5Kg 10Kg 15Kg




A107 - L-ASPARAGINE			
(S)-2,4-Diamino-4-oxobutanoic Acid Monohydrate; α -Aminosuccinamic Acid Monohydrate Plant Tissue Culture Tested			
<ul style="list-style-type: none"> • Powder • CAS Number: 5794-13-8 • Formula: $C_4H_8N_2O_3 \cdot H_2O$ • Molecular Weight: 150.1 • Soluble in Water • Store at Room Temperature • Merck 13, 842 			
AVAILABLE PACKAGE SIZES			
25g	100g	500g	1Kg
A117 - L-ASPARTIC ACID, FREE ACID			
(S)-Aminobutanedioic Acid; Aminosuccinic Acid Plant Tissue Culture Tested			
<ul style="list-style-type: none"> • Powder • CAS Number: 56-84-8 • Formula: $C_4H_7NO_4$ • Molecular Weight: 133.1 • Soluble in Water • Store at Room Temperature • Merck 13, 845 			
AVAILABLE PACKAGE SIZES			
100g	500g	1Kg	
A147 - AUXINDOLE™			
3-Bromooxindole-3-acetic Acid Plant Tissue Culture Tested			
<p>Auxindole™ is the trade name of 3-bromooxindole-3-acetic acid, which is instantaneously and quantitatively converted to 3-methyleneoxindole [(MO);(FW = 145)] in aqueous solutions. MO polymerizes readily at concentrations ≥ 1 mM; stock solutions should be diluted as soon as possible.</p> <p>MO is a potent sulfhydryl reagent that forms adducts with sulfhydryl (-SH) compounds and sulfur-containing nucleophiles; therefore, such compounds should not be used as solvents or buffer components. The use of dimethyl sulfoxide (DMSO) as a solvent is particularly discouraged.</p> <p>MO is sensitive to pH extremes. The biological activity of MO is best demonstrated between pH 5.7 and 6.8.</p> <p>For instructions on how to use this product, review the product information available on our website.</p>			
<ul style="list-style-type: none"> • Powder • Formula: $C_{10}H_8BrNO_3$ • Molecular Weight: 269.9 • Soluble in EtOH • Store at -20 to 0 °C 			
AVAILABLE PACKAGE SIZES			
10mg	100mg		


B852 - BANANA POWDER			
A mixture of natural banana puree and maltodextrin. Plant Tissue Culture Tested			
<ul style="list-style-type: none"> • Powder • Suspension in Water • Store at Room Temperature 			
AVAILABLE PACKAGE SIZES			
30g	100g	500g	1Kg
B151 - N6-BENZOYLADENINE			
Plant Tissue Culture Tested			
<ul style="list-style-type: none"> • Powder • CAS Number: 4005-49-6 • Formula: $C_{12}H_9N_5O$ • Molecular Weight: 239.2 • Soluble in DMSO • Store at 2 to 6 °C 			
AVAILABLE PACKAGE SIZES			
1g	25g		
MAKING STOCK SOLUTIONS OF PLANT GROWTH REGULATORS			
See "Figure 16. Stock Solution Dilution Chart" on page 242 in the Technical Section.			
B800 - 6-BENZYLAMINOPURINE			
BA; N6-Benzyladenine N-(phenylmethyl)-1H-purin-6-amine Plant Tissue Culture Tested			
<ul style="list-style-type: none"> • Powder • CAS Number: 1214-39-7 • Formula: $C_{12}H_{11}N_5$ • Molecular Weight: 225.3 • Soluble in KOH • Store at Room Temperature 			
AVAILABLE PACKAGE SIZES			
1g	5g	25g	100g
B130 - 6-BENZYLAMINOPURINE SOLUTION (1 MG/ML)			
BA; N6-Benzyladenine N-(phenylmethyl)-1H-purin-6-amine Sterile Filtered Plant Tissue Culture Tested			
<ul style="list-style-type: none"> • Liquid • CAS Number: 1214-39-7 • Formula: $C_{12}H_{11}N_5$ • Molecular Weight: 225.3 • Miscible with Water • Store at 2 to 6 °C 			
AVAILABLE PACKAGE SIZES			
100mL	500mL	1L	
X884 - BLUE-GAL			
See Molecular Biology Section for Complete Listing			



B140 - D-BIOTIN	
Hexahydro-2-oxo-1H-thieno[3,4-d]imidazole-4-pentanoic Acid; Vitamin H; Coenzyme R Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 58-85-5 • Formula: C₁₀H₁₆N₂O₃S • Molecular Weight: 244.31 • Soluble in Warm Water or KOH • Store at Room Temperature • <i>Merck 13</i>, 1231 	
AVAILABLE PACKAGE SIZES	
1g	5g
B210 - BORIC ACID	
Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 10043-35-3 • Formula: H₃BO₃ • Molecular Weight: 61.83 • Soluble in Water • Store at Room Temperature • <i>Merck 13</i>, 1326 	
AVAILABLE PACKAGE SIZES	
500g	1Kg
B619 - BORIC ACID, USP GRADE	
Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 10043-35-3 • Formula: H₃BO₃ • Molecular Weight: 61.83 • Soluble in Water • Store at Room Temperature • <i>Merck 13</i>, 1326 	
AVAILABLE PACKAGE SIZES	
500g	1Kg
B131 - BIALAPHOS	
See Molecular Biology Section for Complete Listing	
B1730 - BIALAPHOS SOLUTION (1MG/ML)	
See Molecular Biology Section for Complete Listing	
B162 - BIS-TRIS	
See Molecular Biology Section for Complete Listing	
B441 - BRADFORD REAGENT	
See Molecular Biology Section for Complete Listing	

NEW PRODUCT	
B1376 - BROMOCRESOL PURPLE, SODIUM SALT	
5',5''-Dibromo-o-cresolsulfonephthalein; BCP	
A pH indicator that is yellow below pH 5.2 and purple above pH 6.8. It can be used as a fluorescent stain to detect yeast cells with plasma membrane damage for dead cell counts.	
<ul style="list-style-type: none"> • Powder • CAS Number: 62625-30-3 • Formula: C₂₁H₁₅Br₂NaO₃S • Molecular Weight: 562.20 • Soluble in Water • Store at Room Temperature • <i>Merck 13</i>, 1371 	
AVAILABLE PACKAGE SIZES	
5g	25g
B1714 - BROMOXYMOL BLUE	
See Seed Testing Section for Complete Listing	
B148 - 4-BROMOPHENOXYACETIC ACID	
Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 1878-91-7 • Formula: C₈H₇BrO₃ • Molecular Weight: 231.05 • Soluble in KOH • Store at Room Temperature 	
AVAILABLE PACKAGE SIZES	
25g	
B155 - BROMOXYNIL	
3,5-Dibromo-4-hydroxybenzonitrile	
<ul style="list-style-type: none"> • Powder • CAS Number: 1689-84-5 • Formula: C₇H₃Br₂NO • Molecular Weight: 276.92 • Soluble in DMSO • Store at Room Temperature • <i>Merck 13</i>, 1426 	
AVAILABLE PACKAGE SIZES	
100mg	250mg
B235 - BUFFER SOLUTION, pH REFERENCE STANDARD, pH 4.0 ± 0.02 AT 25 °C	
Color Coded Red	
Used for pH meter calibration	
<ul style="list-style-type: none"> • Liquid • Store at Room Temperature 	
AVAILABLE PACKAGE SIZES	
500mL	4L

B236 - BUFFER SOLUTION, pH REFERENCE STANDARD, pH 7.0 ± 0.02 AT 25 °C	
Color Coded Yellow	
Used for pH meter calibration	
<ul style="list-style-type: none"> Liquid Store at Room Temperature 	
AVAILABLE PACKAGE SIZES	
500mL	4L


B237 - BUFFER SOLUTION, pH REFERENCE STANDARD, pH 10.0 ± 0.02 AT 25 °C	
Color Coded Blue	
Used for pH meter calibration	
<ul style="list-style-type: none"> Liquid Store at Room Temperature 	
AVAILABLE PACKAGE SIZES	
500mL	4L

C135 - CALCIUM CHLORIDE DIHYDRATE		
Plant Tissue Culture Tested		
<ul style="list-style-type: none"> Powder CAS Number: 10035-04-8 Formula: $\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$ Molecular Weight: 147.02 Soluble in Water Store at Room Temperature Merck 13, 1660 		
AVAILABLE PACKAGE SIZES		
500g	1Kg	5Kg

C266 - CALCIUM CHLORIDE ANHYDROUS		
FCC Grade		
Plant Tissue Culture Tested		
<ul style="list-style-type: none"> Powder CAS Number: 10043-52-4 Formula: CaCl_2 Molecular Weight: 110.98 Soluble in Water Store at Room Temperature Merck 13, 1660 		
AVAILABLE PACKAGE SIZES		
500g	1Kg	5Kg

C625 - CALCIUM CHLORIDE ANHYDROUS, USP GRADE	
USP Grade	
Plant Tissue Culture Tested	
<ul style="list-style-type: none"> Powder CAS Number: 10043-52-4 Formula: CaCl_2 Molecular Weight: 110.98 Soluble in Water Store at Room Temperature Merck 13, 1660 	
AVAILABLE PACKAGE SIZES	
500g	1Kg

C231 - CALCIUM GLUCONATE MONOHYDRATE	
D-Gluconic Acid Calcium Salt Monohydrate	
Plant Tissue Culture Tested	
<ul style="list-style-type: none"> Powder CAS Number: 299-28-5 Formula: $\text{C}_{12}\text{H}_{22}\text{O}_{14}\text{Ca} \cdot \text{H}_2\text{O}$ Molecular Weight: 448.39 Soluble in Hot Water Store at Room Temperature Merck 13, 1671 	
AVAILABLE PACKAGE SIZES	
500g	1Kg

C180 - CALCIUM NITRATE		
Plant Tissue Culture Tested		
<ul style="list-style-type: none"> Powder CAS Number: 13477-34-4 Formula: $\text{Ca}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O}$ Molecular Weight: 236.15 Soluble in Water Store at Room Temperature Merck 13, 1687 		
AVAILABLE PACKAGE SIZES		
500g	1Kg	5Kg

C186 - CALCIUM PANTOTHENATE		
USP Grade		
N-[(2R)-2,4-Dihydroxy-3,3-dimethyl-1-oxobutyl]-β-alanine, Calcium Salt; D-Pantothenic Acid, Calcium Salt; Vitamin B ₅		
Plant Tissue Culture Tested		
<ul style="list-style-type: none"> Powder CAS Number: 137-08-6 Formula: $\text{C}_{18}\text{H}_{32}\text{O}_{10}\text{N}_2\text{Ca}$ Molecular Weight: 476.54 Soluble in Water Store at 2 to 6 °C Merck 13, 7085 		
AVAILABLE PACKAGE SIZES		
100g	500g	1Kg

C274 - CALCIUM PHOSPHATE, TRIBASIC	
Calcium Hydroxyphosphate Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 12167-74-7 • Formula: $\text{Ca}_3(\text{OH})(\text{PO}_4)_3$ • Molecular Weight: 502.31 • Soluble in HCl • Store at Room Temperature 	
AVAILABLE PACKAGE SIZES	
100g	500g

C134 - CALCIUM SILICATE	
Calcium Metasilicate; Calcium Silicon oxide Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 1344-95-2 • Formula: CaSiO_3 • Molecular Weight: 116.16 • Suspension in Water • Store at Room Temperature • <i>Merck 13</i>, 1707 	
AVAILABLE PACKAGE SIZES	
25g	1Kg

C1933 - CALCOFLUOR WHITE M2R	
Calcofluor White ST; Fluorescent Brightner 28 disodium salt Calcofluor is a fluorescent stain used to indicate cell wall biosynthesis in both plant and fungal species. It can also be used as a viability stain.	
<ul style="list-style-type: none"> • Powder • CAS Number: 4193-55-9 • Formula: $\text{C}_{40}\text{H}_{42}\text{N}_{12}\text{O}_{10}\text{S}_2\text{Na}_2$ • Molecular Weight: 960.95 • Soluble in Water • Store at Room Temperature 	
AVAILABLE PACKAGE SIZES	
1g	5g 25g

C346 - CARBENICILLIN, DISODIUM SALT	
See Molecular Biology Section for Complete Listing	

C540 - CARBENICILLIN SOLUTION (100 MG/ML)	
See Molecular Biology Section for Complete Listing	

C2046 - CARBENICILLIN SOLUTION (250 MG/ML)	
See Molecular Biology Section for Complete Listing	

C257 - CARRAGEENAN			
Gelcarin GP 812 [®] ; Irish Moss; Kappa-Type Carrageenan Plant Tissue Culture Tested Gelcarin GP 812 [®] is a registered trademark of FMC BioPolymer.			
<ul style="list-style-type: none"> • Powder • CAS Number: 9000-07-1 • Soluble in Boiling Water • Store at Room Temperature • <i>Merck 13</i>, 1878 			
AVAILABLE PACKAGE SIZES			
250g	1Kg	5Kg	25Kg

C2000 - CARRAGEENAN, HIGH CLARITY					
Irish Moss; Kappa-Type Carrageenan Plant Tissue Culture Tested					
<ul style="list-style-type: none"> • Powder • CAS Number: 9000-07-1 • Soluble in Boiling Water • Store at Room Temperature • <i>Merck 13</i>, 1878 					
AVAILABLE PACKAGE SIZES					
10g	100g	500g	1Kg	5Kg	10Kg

C184 - CASEIN, ENZYMATIC HYDROLYSATE	
Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 9000-71-9 • Soluble in Water • Store at Room Temperature 	
AVAILABLE PACKAGE SIZES	
100g	500g 1Kg

C380 - CEFOTAXIME, SODIUM SALT	
See Molecular Biology Section for Complete Listing	



C537 - CEFOTAXIME SOLUTION (100 MG/ML)	
See Molecular Biology Section for Complete Listing	


C1880 - CEFOTAXIME SOLUTION (250 MG/ML)	
See Molecular Biology Section for Complete Listing	

C1842 - CELLOBIOSE	
See Seed Testing Section for Complete Listing	

C1970 - CEPHALEXIN	
See Seed Testing Section for Complete Listing	

C2112 - CEPHALEXIN SOLUTION (100MG/ML)	
See Seed Testing Section for Complete Listing	

UNDEFINED ORGANIC SUPPLEMENTS USED IN PLANT TISSUE CULTURE	
See "Figure 15. List of Common Undefined Organic Supplements & <i>PhytoTech</i> ™ Product Numbers" on page 240 in the Technical Section.	
C325 - CHARCOAL, ACTIVATED	
Carbon Black; Activated Carbon; Acid Washed Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 7440-44-0 • Formula: C • Molecular Weight: 12.01 • Suspension in Water • Store at Room Temperature • <i>Merck 13</i>, 1818 	
AVAILABLE PACKAGE SIZES	
1Kg	
C526 - CHAPS	
See Molecular Biology Section for Complete Listing	
C207 - CHLORMEQUAT CHLORIDE	
CCC; Chlorocholine Chloride; [2-Chloroethyl]trimethylammonium Chloride Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 999-81-5 • Formula: C₅H₁₃Cl₂N • Molecular Weight: 158.07 • Soluble in Water • Store at Room Temperature • <i>Merck 13</i>, 2120 	
AVAILABLE PACKAGE SIZES	
100mg	1g
C213 - p-CHLOROPHOXYACETIC ACID	
CPA; 4-Chlorophenoxyacetic Acid Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 122-88-3 • Formula: C₈H₇ClO₃ • Molecular Weight: 186.59 • Soluble in KOH • Store at Room Temperature 	
AVAILABLE PACKAGE SIZES	
25g	100g

V883 - CHOLECALCIFEROL		
(3β,5Z,7E)-9,10-Secocholesta-5,7,10(19)-trien-3-ol; Vitamin D ₃ Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 67-97-0 • Formula: C₂₇H₄₄O • Molecular Weight: 384.65 • Soluble in DMSO • Store at 2 to 6 °C • <i>Merck 13</i>, 10079 		
AVAILABLE PACKAGE SIZES		
1g		
C232 - CHOLINE CHLORIDE		
2-Hydroxy- <i>N,N,N</i> -trimethylethanaminium Chloride; Vitamin B ₄ Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 67-48-1 • Formula: C₅H₁₄ClNO • Molecular Weight: 139.63 • Soluble in Water • Store at Room Temperature • <i>Merck 13</i>, 2226 		
AVAILABLE PACKAGE SIZES		
100g	500g	
C283 - TRANS-CINNAMIC ACID		
(E)-3-Phenyl-2-propenoic Acid Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 140-10-3 • Formula: C₉H₈O₂ • Molecular Weight: 148.16 • Soluble in KOH • Store at Room Temperature • <i>Merck 13</i>, 2321 		
AVAILABLE PACKAGE SIZES		
25g		
C277 - CITRIC ACID ANHYDROUS		
2-Hydroxy-1,2,3-propanetricarboxylic Acid Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 77-92-9 • Formula: C₆H₈O₇ • Molecular Weight: 192.14 • Soluble in Water • Store at Room Temperature • <i>Merck 13</i>, 2350 		
AVAILABLE PACKAGE SIZES		
25g	500g	1Kg

C350 - COBALT CHLORIDE HEXAHYDRATE

Cobalt(II) Chloride Hexahydrate; Cobaltous Chloride Hexahydrate
Plant Tissue Culture Tested

- Powder
- CAS Number: 7791-13-1
- Formula: $\text{CoCl}_2 \cdot 6\text{H}_2\text{O}$
- Molecular Weight: 237.84
- Soluble in Water
- Store at Room Temperature
- *Merck 13, 2462*



AVAILABLE PACKAGE SIZES

25g 100g

C193 - COBALT NITRATE HEXAHYDRATE

Cobalt(II) Nitrate Hexahydrate; Cobaltous Nitrate Hexahydrate
Plant Tissue Culture Tested

- Powder
- CAS Number: 10026-22-9
- Formula: $\text{Co}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$
- Molecular Weight: 291.04
- Soluble in Water
- Tariff Code: 2834.29.6050
- Store at Room Temperature
- *Merck 13, 2469*



AVAILABLE PACKAGE SIZES

25g 100g

UNDEFINED ORGANIC SUPPLEMENTS CHART

See "Figure 15. List of Common Undefined Organic Supplements & *PhytoTech*™ Product Numbers" on page 240 in the Technical Section.

C187 - COCONUT POWDER

A mixture of natural coconut puree and maltodextrin.
Plant Tissue Culture Tested

- Powder
- Suspension in Water
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

100g 500g 1Kg

C195 - COCONUT WATER

Natural
Sterile Filtered
Plant Tissue Culture Tested

- Liquid
- Miscible with Water
- Store at 2 to 6 °C



AVAILABLE PACKAGE SIZES

100mL 500mL 1L

C226 - COLCHICINE

N-[(7*S*)-5,6,7,9-Tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[*a*]heptalen-7-yl]acetamide
Plant Tissue Culture Tested

Antimitotic commonly used for doubling chromosomes.

- Powder
- CAS Number: 64-86-8
- Formula: $\text{C}_{22}\text{H}_{25}\text{NO}_6$
- Molecular Weight: 399.44
- Soluble in Water
- Store at Room Temperature
- *Merck 13, 2496*



AVAILABLE PACKAGE SIZES

500mg 1g 25g

NEW PRODUCT

C2026 - COLCHICINE SOLUTION (2.5 MG/ML)

N-[(7*S*)-5,6,7,9-Tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[*a*]heptalen-7-yl]acetamide
Plant Tissue Culture Tested

Antimitotic commonly used for doubling chromosomes.

- Liquid
- CAS Number: 64-86-8
- Formula: $\text{C}_{22}\text{H}_{25}\text{NO}_6$
- Molecular Weight: 399.44
- Miscible with Water
- Store at 2 to 6 °C
- Light Sensitive
- *Merck 13, 2496*



AVAILABLE PACKAGE SIZES

25mL 100mL

C466 - COPPER(II) SULFATE SOLUTION (4%)		
See Molecular Biology Section for Complete Listing		
C279 - 4-CPPU		
N-(2-Chloro-4-pyridyl)-N-phenylurea Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 68157-60-8 • Formula: C₁₂H₁₀ClN₃O • Molecular Weight: 247.7 • Soluble in DMSO • Store at -20 to 0 °C 		
AVAILABLE PACKAGE SIZES		
100mg		1g
C375 - CUPRIC SULFATE		
ACS Grade Copper(II) Sulfate Pentahydrate Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 7758-99-8 • Formula: CuSO₄•5H₂O • Molecular Weight: 249.68 • Soluble in Water • Store at Room Temperature • Merck 13, 2682 		
AVAILABLE PACKAGE SIZES		
250g		500g
C628 - CUPRIC SULFATE PENTAHYDRATE, USP GRADE		
Copper(II) Sulfate Pentahydrate Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 7758-99-8 • Formula: CuSO₄•5H₂O • Molecular Weight: 249.68 • Soluble in Water • Store at Room Temperature • Merck 13, 2682 		
AVAILABLE PACKAGE SIZES		
100g	500g	1Kg
C1830 - CRYSTAL VIOLET		
See Seed Testing Section for Complete Listing		
H276 - CTAB		
See Molecular Biology Section for Complete Listing		
H3818 - CTAB SOLUTION (100MG/ML)		
See Molecular Biology Section for Complete Listing		

C242 - CYANOCOBALAMIN		
USP Grade 5,6-Dimethylbenzimidazolyl Cyanocobalamide; Vitamin B ₁₂ Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 68-19-9 • Formula: C₆₃H₈₈CoN₁₄O₁₄P • Molecular Weight: 1355.36 • Soluble in Water • Store at 2 to 6 °C • Merck 13, 10074 		
AVAILABLE PACKAGE SIZES		
500mg	1g	5g
C204 - L-CYSTEINE, FREE BASE		
(R)-2-Amino-3-mercaptopropanoic Acid Plant Tissue Culture Tested		
Cysteine is readily oxidized to Cystine in neutral to slightly alkaline solutions or upon exposure to air in as little as 1 week at 2 to 6 °C. Cystine may precipitate at higher concentrations and a sulfur odor may be present. For short to long-term storage, Cysteine stocks are more stable in acidic conditions and should be stored at 2 to 6 °C.		
<ul style="list-style-type: none"> • Powder • CAS Number: 52-90-4 • Formula: C₃H₇NO₂S • Molecular Weight: 121.16 • Soluble in Water • Store at Room Temperature • Merck 13, 2810 		
AVAILABLE PACKAGE SIZES		
100g	500g	1Kg
C248 - L-CYSTINE, FREE BASE		
[R-(R*,R*)]-3,3'-Dithiobis[2-aminopropanoic Acid] Plant Tissue Culture Tested		
Cystine is readily soluble in aqueous solutions with pH above 8 or below 2. It may precipitate out of neutral solutions at higher concentrations. Stocks are more stable in the acidic or alkaline conditions and should be stored at 2 to 6 °C.		
<ul style="list-style-type: none"> • Powder • CAS Number: 56-89-3 • Formula: C₆H₁₂N₂O₄S₂ • Molecular Weight: 240.3 • Soluble in KOH or HCl; Slightly Soluble in Water • Store at Room Temperature • Merck 13, 2811 		
AVAILABLE PACKAGE SIZES		
25g		100g

PRODUCT CATALOGUE & LABORATORY GUIDE

BIOCHEMICALS

D308 - DEXTRAN SULFATE, SODIUM SALT

- Powder
- CAS Number: 9011-18-1
- Molecular Weight: 500,000 Avg.
- Soluble in Water
- Store at Room Temperature
- *Merck 13*, 2969

AVAILABLE PACKAGE SIZES

25g 100g 500g

D159 - DICAMBA

3,6-Dichloro-*o*-anisic Acid
Plant Tissue Culture Tested

- Powder
- CAS Number: 1918-00-9
- Formula: $C_8H_6Cl_2O_3$
- Molecular Weight: 221.04
- Soluble in KOH
- Store at 2 to 6 °C
- *Merck 13*, 3065

AVAILABLE PACKAGE SIZES

100mg 500mg 1g

D165 - DICAMBA SOLUTION (1 MG/ML)

3,6-Dichloro-*o*-anisic Acid
Sterile Filtered
Plant Tissue Culture Tested

- Liquid
- CAS Number: 1918-00-9
- Formula: $C_8H_6Cl_2O_3$
- Molecular Weight: 221.04
- Miscible with Water
- Store at 2 to 6 °C

AVAILABLE PACKAGE SIZES

100mL 25mL

D253 - DICHLOROISOCYANURIC ACID, SODIUM SALT

NaDCC
Plant Tissue Culture Tested
A disinfectant commonly used to surface-sterilize plant tissue.

- Powder
- CAS Number: 2893-78-9
- Formula: $C_3Cl_2N_3O_3Na$
- Molecular Weight: 219.9
- Soluble in Water
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

100g 500g 1Kg

NEW PRODUCT

D2181 - 2,6-DICHLOROISONICOTINIC ACID (INA)

INA; 2,6-Dichloropyridine-4-carboxylic Acid

INA is employed in the biological study of plant pathogen resistance. It can induce a systemic acquired resistance (SAR) response in plants.
Plant Tissue Culture Tested

- Powder
- CAS Number: 5398-44-7
- Formula: $C_6H_3Cl_2NO_2$
- Molecular Weight: 192.00
- Soluble in Methanol; 1% Ethanol
- Store at -20°C
- *Merck 13*, 5206

AVAILABLE PACKAGE SIZES

1g 5g

D295 - 2,4-DICHLOROPHOXYACETIC ACID SOLUTION (1 MG/ML)

2,4-D
Sterile Filtered
Plant Tissue Culture Tested

- Liquid
- CAS Number: 94-75-7
- Formula: $C_8H_6Cl_2O_3$
- Molecular Weight: 221.04
- Miscible with Water
- Store at 2 to 6 °C

AVAILABLE PACKAGE SIZES

100mL 500mL 1L

D309 - 2,4-DICHLOROPHOXYACETIC ACID SOLUTION (10 MG/ML)

2,4-D
Sterile Filtered
Plant Tissue Culture Tested

- Liquid
- CAS Number: 94-75-7
- Formula: $C_8H_6Cl_2O_3$
- Molecular Weight: 221.04
- Miscible with Water
- Store at 2 to 6 °C



AVAILABLE PACKAGE SIZES

100mL 500mL 1L

D297 - DIKEGULAC					
2,3:4,6-Bis- <i>O</i> -(methylenehydride)- α -L-xylo-2-hexulofuranosonic Acid Plant Tissue Culture Tested					
<ul style="list-style-type: none"> • Powder • CAS Number: 18467-77-1 • Formula: C₁₂H₁₈O₇ • Molecular Weight: 274.27 • Soluble in DMSO • Store at 2 to 6 °C • Merck 13, 3222 					
AVAILABLE PACKAGE SIZES					
1g					
D525 - 6-(γ,γ-DIMETHYLALLYLAMINO)PURINE					
2iP; N6-[2-Isopentyl]adenine Plant Tissue Culture Tested					
<ul style="list-style-type: none"> • Powder • CAS Number: 2365-40-4 • Formula: C₁₀H₁₃N₅ • Molecular Weight: 203.3 • Soluble in KOH • Store at -20 to 0 °C 					
AVAILABLE PACKAGE SIZES					
100mg	500mg	1g	5g	10g	25g
D217 - 6-(γ,γ-DIMETHYLALLYLAMINO)PURINE SOLUTION (1 MG/ML)					
2iP; N6-[2-Isopentyl]adenine Sterile Filtered Plant Tissue Culture Tested					
<ul style="list-style-type: none"> • Liquid • CAS Number: 2365-40-4 • Formula: C₁₀H₁₃N₅ • Molecular Weight: 203.3 • Miscible with Water • Store at -20 to 0 °C 					
AVAILABLE PACKAGE SIZES					
100mL					
D259 - DITHIOHREITOL					
1,4-Dithiothreitol; DTT; Cleland's Reagent					
<ul style="list-style-type: none"> • Powder • CAS Number: 3483-12-3 • Formula: C₄H₁₀O₂S₂ • Molecular Weight: 154.2 • Soluble in Water • Store at 2 to 6 °C • Merck 13, 3412 					
AVAILABLE PACKAGE SIZES					
1g		5g		25g	
D548 - DNA DENATURING SOLUTION					
See Molecular Biology Section for Complete Listing					

D544 - DNA NEUTRALIZING SOLUTION, pH 7.4		
See Molecular Biology Section for Complete Listing		
E244 - 2,4-EPIBRASSINOLIDE		
(22 <i>R/S</i> , 23 <i>R/S</i> , 24 <i>R</i>)-2 α ,3 α ,22,23-Tetrahydroxy- <i>B</i> -homo-7-oxa-5 α -ergostan-6-one Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 78821-43-9 • Formula: C₂₈H₄₈O₆ • Molecular Weight: 480.68 • Slightly soluble in Water, DMSO • Store at -20 to 0 °C 		
AVAILABLE PACKAGE SIZES		
10mg		100mg
E410 - ETHYLENEDIAMINETETRAACETIC ACID, DISODIUM SALT		
Na ₂ -EDTA Dihydrate; Disodium Edetate Dihydrate Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 6381-92-6 • Formula: C₁₀H₁₄N₂O₈Na₂•2H₂O • Molecular Weight: 372.24 • Soluble in Water • Store at Room Temperature • Merck 13, 3543 		
AVAILABLE PACKAGE SIZES		
100g	500g	1Kg
E349 - ETHYLENEDIAMINE BIS(2-HYDROXYPHENYLACETIC ACID), FERRIC-SODIUM SALT		
FeNa-EDDHA; Ethylenediamine Bis(2-hydroxyphenylacetic Acid), Iron(III)-Sodium Salt Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 16455-61-1 • Formula: C₁₈H₁₆O₆N₂NaFe • Molecular Weight: 434.8 • Soluble in Water • Store at Room Temperature 		
AVAILABLE PACKAGE SIZES		
100g	500g	1Kg

F388 - FERRIC SULFATE HYDRATE	
Iron(III) Sulfate Hydrate Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 10028-22-5 • Formula: $Fe_2(SO_4)_3 \cdot xH_2O$ • Molecular Weight: $399.89+x(18.01)$ • Soluble in Water • Store at Room Temperature • Merck 13, 4065 	
AVAILABLE PACKAGE SIZES	
250g	
F263 - FERROUS SULFATE HEPTAHYDRATE	
Iron(II) Sulfate Heptahydrate Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 7782-63-0 • Formula: $FeSO_4 \cdot 7H_2O$ • Molecular Weight: 278.02 • Soluble in Water • Store at Room Temperature • Merck 13, 4091 	
AVAILABLE PACKAGE SIZES	
100g	500g
	1Kg
F629 - FERROUS SULFATE HEPTAHYDRATE	
Iron(II) Sulfate Heptahydrate USP Grade Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 7782-63-0 • Formula: $FeSO_4 \cdot 7H_2O$ • Molecular Weight: 278.02 • Soluble in Water • Store at Room Temperature • Merck 13, 4091 	
AVAILABLE PACKAGE SIZES	
100g	500g
STAINS & DYES USAGE TABLE	
See "Figure 35. Stains & Dyes Usage Table" on page 264 in the Technical Section.	

NEW PRODUCT	
P6622 - FLG22 PEPTIDE	
flg22 Peptide is a peptide with its sequence derived from the flagellin N-terminus of <i>Pseudomonas aeruginosa</i> and is known to elicit specific innate immune response in plants as well as animals. Amino acid sequence: QRLSTGSRINSAKDDAAGLQIA	
<ul style="list-style-type: none"> • Powder • Formula: $C_{93}H_{162}N_{32}O_{34}$ • Molecular Weight: 2272.5 Avg. • Soluble in Water/DMF • Store at -20°C 	
AVAILABLE PACKAGE SIZES	
1mg	5mg
F357 - FLURIDONE	
1-Methyl-3-phenyl-5-[3-(trifluoromethyl)phenyl]-4(1H)-pyridinone Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 59756-60-4 • Formula: $C_{19}H_{14}F_3NO$ • Molecular Weight: 329.32 • Soluble in DMSO • Store at 2 to 6 °C 	
AVAILABLE PACKAGE SIZES	
100mg	
F376 - FLURPRIMIDOL	
α -(1-Methylethyl)- α -[4-(trifluoromethoxy)phenyl]-5-pyrimidinemethanol Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 56425-91-3 • Formula: $C_{15}H_{15}F_3N_2O_2$ • Molecular Weight: 312.29 • Soluble in DMSO • Store at 2 to 6 °C • Merck 13, 4230 	
AVAILABLE PACKAGE SIZES	
10mg	100mg

G500 - GIBBERELIC ACID

GA₃; Gibberellin A₃
Plant Tissue Culture Tested

- Powder
- CAS Number: 77-06-5
- Formula: C₁₉H₂₂O₆
- Molecular Weight: 346.41
- Soluble in KOH and Ethanol
- Store at 2 to 6 °C
- Merck 13, 4430


AVAILABLE PACKAGE SIZES

1g	5g
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G198 - GIBBERELIC ACID SOLUTION (1 MG/ML)

GA₃; Gibberellin A₃
Plant Tissue Culture Tested

- Liquid
- CAS Number: 77-06-5
- Formula: C₁₉H₂₂O₆
- Molecular Weight: 346.41
- Miscible with Water
- Store at 2 to 6 °C




AVAILABLE PACKAGE SIZES

100mL

G362 - GIBBERELIC ACID SOLUTION (13 MG/ML) (13,000 PPM)

GA₃; Gibberellin A₃
Sterile Filtered
Plant Tissue Culture Tested

- Liquid
- CAS Number: 77-06-5
- Formula: C₁₉H₂₂O₆
- Molecular Weight: 346.41
- Miscible with Water
- Store at 2 to 6 °C
- Merck 13, 4430



AVAILABLE PACKAGE SIZES

15mL	100mL
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G358 - GIBBERELLINS A₄ + A₇

Plant Tissue Culture Tested

- Powder
- Soluble in KOH
- Store at 2 to 6 °C
- Merck 13, 4431

AVAILABLE PACKAGE SIZES

1g

CARBOHYDRATE SELECTION GUIDE

See "Figure 12. Choosing a Carbohydrate" on page 238 in the Technical Section.

G386 - D-(+)-GLUCOSE ANHYDROUS

Dextrose; Corn Sugar
USP Grade
Plant Tissue Culture Tested

- Powder
- CAS Number: 50-99-7
- Formula: C₆H₁₂O₆
- Molecular Weight: 180.16
- Soluble in Water
- Store at Room Temperature
- Merck 13, 4472

AVAILABLE PACKAGE SIZES

500g	1Kg	5Kg	25Kg
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G360 - D-(+)-GLUCOSE MONOHYDRATE

Dextrose Monohydrate; Corn Sugar
Plant Tissue Culture Tested

- Powder
- CAS Number: 77938-63-7
- Formula: C₆H₁₂O₆•H₂O
- Molecular Weight: 198.2
- Soluble in Water
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

1Kg	5Kg	25Kg
-----	-----	------

G399 - L-GLUTAMIC ACID

(S)-2-Aminopentanedioic Acid
Plant Tissue Culture Tested

- Powder
- CAS Number: 56-86-0
- Formula: C₅H₉NO₄
- Molecular Weight: 147.13
- Soluble in Water
- Store at Room Temperature
- Merck 13, 4482

AVAILABLE PACKAGE SIZES

100g	1Kg
------	-----

G229 - L-GLUTAMINE

(S)-2,5-Diamino-5-oxopentanoic Acid
Plant Tissue Culture Tested

- Powder
- CAS Number: 56-85-9
- Formula: C₅H₁₀N₂O₃
- Molecular Weight: 146.14
- Soluble in Water
- Store at Room Temperature
- Merck 13, 4484

AVAILABLE PACKAGE SIZES

100g	500g	1Kg	5Kg
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G3399 - GLUTATHIONE (REDUCED), FREE ACID

γ -L-Glutamyl-L-cysteinyl-glycine
Plant Tissue Culture Tested

- Powder
- CAS Number: 70-80-8
- Formula: $C_{10}H_{17}N_3O_6S$
- Molecular Weight: 307.33
- Soluble in Water
- Store at 2 to 6 °C

AVAILABLE PACKAGE SIZES

1g 10g

G381 - GLYCEROL

Glycerin; 1,2,3-Propanetriol
Plant Tissue Culture Tested

- Liquid
- CAS Number: 56-81-5
- Formula: $C_3H_8O_3$
- Molecular Weight: 92.09
- Miscible with Water
- Store at Room Temperature
- Merck 13, 4497



AVAILABLE PACKAGE SIZES

100mL 500mL 1L

AMINO ACIDS USED IN PLANT TISSUE CULTURE

See "Figure 14. List of Amino Acids by Type & *PhytoTech*™ Product Numbers" on page 240 in the Technical Section.

G503 - GLYCINE

Aminoacetic Acid
Plant Tissue Culture Tested

- Powder
- CAS Number: 56-40-6
- Formula: $C_2H_5NO_2$
- Molecular Weight: 75.08
- Soluble in Water
- Store at Room Temperature
- Merck 13, 4504

AVAILABLE PACKAGE SIZES

100g 500g 1Kg

G345 - GLYPHOSATE

N-(Phosphonomethyl)glycine
Plant Tissue Culture Tested

- Powder
- CAS Number: 1071-83-6
- Formula: $C_3H_8NO_5P$
- Molecular Weight: 169.07
- Soluble in Water
- Store at 2 to 6 °C
- Merck 13, 4525



AVAILABLE PACKAGE SIZES

1g 5g

G3574 - GUAIACOL

See Seed Testing Section for Complete Listing

G3300 - GUANIDINE THIOCYANATE

See Molecular Biology Section for Complete Listing

H326 - HEPES, FREE ACID

See Molecular Biology Section for Complete Listing

NEW PRODUCT

H4000 - (Z)-3-HEXENOL

cis-3-Hexen-1-ol; leaf alcohol

Plant Defense chemical that when airborne can increase levels of HexVic ((Z)-3-hexenyl-vicianoside) in un-assaulted tomato leaves, a chemical that reduces growth of larvae.
Plant Tissue Culture Tested

- Liquid
- CAS Number: 928-96-1
- Formula: $C_6H_{12}O$
- Molecular Weight: 100.16
- Miscible with Water
- Store at Room Temperature
- Merck 13, 4719



AVAILABLE PACKAGE SIZES

100mL 250mL

H397 - HYGROMYCIN B

See Molecular Biology Section for Complete Listing

H370 - HYGROMYCIN B SOLUTION, 50 MG/ML IN PBS BUFFER

See Molecular Biology Section for Complete Listing

H385 - HYGROMYCIN B SOLUTION, 100 MG/ML IN DISTILLED WATER

See Molecular Biology Section for Complete Listing

I4068 - INDIGO CARMINE

See Seed Testing Section for Complete Listing

I885 - INDOLE-3-ACETIC ACID

IAA; Heteroauxin
Plant Tissue Culture Tested

- Powder
- CAS Number: 87-51-4
- Formula: $C_{10}H_9NO_2$
- Molecular Weight: 175.19
- Soluble in KOH
- Store at -20 to 0 °C
- Merck 13, 4986

AVAILABLE PACKAGE SIZES

5g 25g 100g

I364 - INDOLE-3-ACETIC ACID SOLUTION (1 MG/ML)

IAA; Heteroauxin
Sterile Filtered
Plant Tissue Culture Tested

- Liquid
- CAS Number: 87-51-4
- Formula: $C_{10}H_9NO_2$
- Molecular Weight: 175.19
- Miscible with Water
- Store at -20 to 0 °C
- Light Sensitive
- Merck 13, 4986

AVAILABLE PACKAGE SIZES

100mL

I460 - INDOLE-3-BUTYRIC ACID SOLUTION (1 MG/ML)

IBA; 4-[3-Indolyl]butyric Acid
Sterile Filtered
Plant Tissue Culture Tested

- Liquid
- CAS Number: 133-32-4
- Formula: $C_{12}H_{13}NO_2$
- Molecular Weight: 203.24
- Miscible with Water
- Store at -20 to 0 °C
- Light Sensitive
- Merck 13, 4987

AVAILABLE PACKAGE SIZES

100mL

I538 - INDOLE-3-BUTYRIC ACID

IBA; 4-[3-Indolyl]butyric Acid
Plant Tissue Culture Tested

- Powder
- CAS Number: 133-32-4
- Formula: $C_{12}H_{13}NO_2$
- Molecular Weight: 203.24
- Soluble in KOH
- Store at 2 to 6 °C
- Merck 13, 4987

AVAILABLE PACKAGE SIZES

5g 25g 100g

I409 - INDOLE-3-PROPIONIC ACID

IPA
Plant Tissue Culture Tested

- Powder
- CAS Number: 830-96-6
- Formula: $C_{11}H_{11}NO_2$
- Molecular Weight: 189.2
- Soluble in KOH
- Store at 2 to 6 °C

AVAILABLE PACKAGE SIZES

5g

PLANT GROWTH REGULATORS USAGE AND STORAGE CHART

See "Figure 18. Plant Growth Regulators Usage and Storage Chart" on page 244 in the Technical Section.

I560 - INDOLE-3-BUTYRIC ACID, POTASSIUM SALT

K-IBA; 4-[3-Indolyl]butyric Acid, Potassium Salt
Plant Tissue Culture Tested

- Powder
- CAS Number: 60096-23-3
- Formula: $C_{12}H_{12}NO_2K$
- Molecular Weight: 241.3
- Soluble in Water
- Store at 2 to 6 °C

AVAILABLE PACKAGE SIZES

5g 25g 100g

I703 - MYO-INOSITOL

i-Inositol; *meso*-Inositol;
1,2,3,5/4,6-Hexahydroxycyclohexane
Plant Tissue Culture Tested

- Powder
- CAS Number: 87-89-8
- Formula: $C_6H_{12}O_6$
- Molecular Weight: 180.16
- Soluble in Water
- Store at Room Temperature
- Merck 13, 5001

AVAILABLE PACKAGE SIZES

100g 500g 1Kg 5Kg

I331 - IRON CHELATE

Sequestrene® 330;
Sodium ferric diethylenetriaminepentaacetate; NaFe - DTPA
Plant Tissue Culture Tested

- Powder
- Soluble in Water
- Store at Room Temperature


AVAILABLE PACKAGE SIZES

100g 500g

I373 - ISOPROPYL-β-D-THIOGALACTOPYRANOSIDE

See Molecular Biology Section for Complete Listing


M521 - MAGNESIUM CHLORIDE HEXAHYDRATE		
Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 7791-18-6 • Formula: $MgCl_2 \cdot 6H_2O$ • Molecular Weight: 203.3 • Soluble in Water • Store at Room Temperature • Merck 13, 5684 		
AVAILABLE PACKAGE SIZES		
100g	500g	1Kg


M542 - MAGNESIUM NITRATE HEXAHYDRATE		
Nitromagnesite Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 13446-18-9 • Formula: $Mg(NO_3)_2 \cdot 6H_2O$ • Molecular Weight: 256.41 • Soluble in Water • Store at Room Temperature • Merck 13, 5697 		
		
AVAILABLE PACKAGE SIZES		
500g	1Kg	5Kg

M200 - MAGNESIUM SULFATE HEPTAHYDRATE			
Epsom Salts Plant Tissue Culture Tested			
<ul style="list-style-type: none"> • Powder • CAS Number: 10034-99-8 • Formula: $MgSO_4 \cdot 7H_2O$ • Molecular Weight: 246.48 • Soluble in Water • Store at Room Temperature • Merck 13, 5715 			
AVAILABLE PACKAGE SIZES			
500g	1Kg	5Kg	10Kg

M150 - MAGNESIUM SULFATE ANHYDROUS	
Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 7487-88-9 • Formula: $MgSO_4$ • Molecular Weight: 120.37 • Soluble in Water • Store at Room Temperature • Merck 13, 5715 	
AVAILABLE PACKAGE SIZES	
500g	1Kg

M635 - MAGNESIUM SULFATE ANHYDROUS, USP	
GRADE	
USP Grade Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 7487-88-9 • Formula: $MgSO_4$ • Molecular Weight: 120.37 • Soluble in Water • Store at Room Temperature • Merck 13, 5715 	
AVAILABLE PACKAGE SIZES	
1Kg	

M573 - MALACHITE GREEN OXALATE	
Basic Green; Aniline Green	
<ul style="list-style-type: none"> • Powder • CAS Number: 2437-29-8 • $C_{23}H_{25}N_2 \cdot C_2HO_4 \cdot 0.5C_2H_2O_4$ • Molecular Weight: 463.5 • Soluble in Water and Ethanol • Store at Room Temperature • Merck 13, 5722 	
	
AVAILABLE PACKAGE SIZES	
25g	100g

M471 - L-MALEIC ACID	
<i>cis</i> -Butenedioic Acid; <i>cis</i> -1,2-Ethylenedicarboxylic Acid Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 110-16-7 • Formula: $C_4H_4O_4$ • Molecular Weight: 116.07 • Soluble in Water • Store at Room Temperature • Merck 13, 5726 	
	
AVAILABLE PACKAGE SIZES	
100g	500g


M494 - MALEIC ACID HYDRAZIDE	
Maleic Hydrazide; 1,2-Dihydro-3,6-pyridazinedione Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 123-33-1 • Formula: $C_4H_4N_2O_2$ • Molecular Weight: 112.10 • Soluble in Hot Water and DMSO • Store at Room Temperature • Merck 13, 5728 	
AVAILABLE PACKAGE SIZES	
25g	100g


M5536 - DL-MALIC ACID		
DL-Hydroxybutanedioic acid Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 6915-15-7 • Formula: $C_4H_6O_5$ • Molecular Weight: 134.09 • Soluble in Water • Store at Room Temperature • <i>Merck 13, 5730</i> 		
AVAILABLE PACKAGE SIZES		
500g	1Kg	5Kg

M474 - MALT EXTRACT		
Co-extract of Corn and Malted Barley Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 8002-48-0 • Soluble in Water • Store at Room Temperature 		
AVAILABLE PACKAGE SIZES		
500g	1Kg	

M588 - D-MALTOSE MONOHYDRATE					
4- <i>O</i> - α -D-Glucopyranosyl-D-glucose Plant Tissue Culture Tested					
<ul style="list-style-type: none"> • Powder • CAS Number: 6363-53-7 • Formula: $C_{12}H_{22}O_{11} \cdot H_2O$ • Molecular Weight: 360.32 • Soluble in Water • Store at Room Temperature • <i>Merck 13, 5736</i> 					
AVAILABLE PACKAGE SIZES					
100g	500g	1Kg	5Kg	10Kg	25Kg

M455 - MANGANESE CHLORIDE TETRAHYDRATE					
Plant Tissue Culture Tested					
<ul style="list-style-type: none"> • Powder • CAS Number: 13446-34-9 • Formula: $MnCl_2 \cdot 4H_2O$ • Molecular Weight: 197.91 • Soluble in Water • Store at Room Temperature • <i>Merck 13, 5751</i> 					
AVAILABLE PACKAGE SIZES					
100g					

M250 - MANGANESE SULFATE MONOHYDRATE	
Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 10034-96-5 • Formula: $MnSO_4 \cdot H_2O$ • Molecular Weight: 169.02 • Soluble in Water • Store at Room Temperature • <i>Merck 13, 5763</i> 	
	
AVAILABLE PACKAGE SIZES	
100g	500g





M637 - MANGANESE SULFATE MONOHYDRATE, USP GRADE	
USP Grade Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 10034-96-5 • Formula: $MnSO_4 \cdot H_2O$ • Molecular Weight: 169.02 • Soluble in Water • Store at Room Temperature • <i>Merck 13, 5763</i> 	
	
AVAILABLE PACKAGE SIZES	
100g	500g





M562 - D-MANNITOL	
USP Grade Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 69-65-8 • Formula: $C_6H_{14}O_6$ • Molecular Weight: 182.2 • Soluble in Water • Store at Room Temperature • <i>Merck 13, 5769</i> 	
AVAILABLE PACKAGE SIZES	
500g	1Kg 5Kg

M486 - D-(+)-MANNOSE	
Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 3458-28-4 • Formula: $C_6H_{12}O_6$ • Molecular Weight: 180.16 • Soluble in Water • Store at Room Temperature • <i>Merck 13, 5772</i> 	
AVAILABLE PACKAGE SIZES	
25g	250g

M567 - MEAT EXTRACT		
Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • Soluble in Water • Store at Room Temperature 		
AVAILABLE PACKAGE SIZES		
500g	1Kg	
M5856 - MEDIA COLORATION SAMPLER		
Media Coloration Sampler comes with four 1 gram package sizes of red (Product Number F323), green (Product Number F320), blue (Product Number F322), and yellow (Product Number F321) media dyes.		
Plant Tissue Culture Tested		
Recommended 0.01 to 0.1g per liter.		
<ul style="list-style-type: none"> • Powder • Soluble in Water • Store at Room Temperature 		
AVAILABLE PACKAGE SIZES		
4x1g Kit		
F322 - MEDIA DYE, BLUE		
Brilliant Blue FCF; FD&C Blue #1		
Plant Tissue Culture Tested		
Recommended 100 mg to 250 mg per liter.		
For our media coloration sampler containing four different media dyes, see product M5856.		
<ul style="list-style-type: none"> • Powder • CAS Number: 3844-45-9 • Formula: $C_{37}H_{34}N_2Na_2O_9S_3$ • Molecular Weight: 792.86 • Soluble in Water • Store at Room Temperature • Merck 13, 1359 		
AVAILABLE PACKAGE SIZES		
1g	10g	100g
F320 - MEDIA DYE, GREEN		
Pyla-Cert Green MX-415		
A mixture of FD&C Green #3 and FD&C Yellow #5		
Plant Tissue Culture Tested		
Recommended 100 mg to 250 mg per liter.		
For our media coloration sampler containing four different media dyes, see product M5856.		
<ul style="list-style-type: none"> • Powder • Soluble in Water • Store at Room Temperature 		
AVAILABLE PACKAGE SIZES		
1g	10g	100g

F323 - MEDIA DYE, RED		
Erythrosine; FD&C Red #3		
Plant Tissue Culture Tested		
Recommended 100 mg to 250 mg per liter.		
For our media coloration sampler containing four different media dyes, see product M5856.		
<ul style="list-style-type: none"> • Powder • CAS Number: 16423-68-0 • Formula: $C_{20}H_6I_4Na_2O_5$ • Molecular Weight: 879.86 • Soluble in Water • Store at Room Temperature • Merck 13, 3727 		
AVAILABLE PACKAGE SIZES		
1g	10g	100g
F321 - MEDIA DYE, YELLOW		
Tartrazine; FD&C Yellow #5		
Plant Tissue Culture Tested		
Recommended 100 mg to 250 mg per liter.		
For our media coloration sampler containing four different media dyes, see product M5856.		
<ul style="list-style-type: none"> • Powder • CAS Number: 1934-21-0 • Formula: $C_{16}H_9N_4Na_3O_9S_2$ • Molecular Weight: 534.37 • Soluble in Water • Store at Room Temperature • Merck 13, 9160 		
AVAILABLE PACKAGE SIZES		
1g	10g	100g
M5781 - METHYLENE BLUE		
See Seed Testing Section for Complete Listing		
M539 - L-METHIONINE		
(S)-2-Amino-4-(methylthio)butanoic Acid		
Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 63-68-3 • Formula: $C_5H_{11}NO_2S$ • Molecular Weight: 149.21 • Soluble in Water • Store at Room Temperature • Merck 13, 6004 		
AVAILABLE PACKAGE SIZES		
25g	100g	

N609 - NIACINAMIDE			
Nicotinamide; 3-Pyridinecarboxamide; Vitamin B ₃ ; Vitamin PP Plant Tissue Culture Tested			
<ul style="list-style-type: none"> • Powder • CAS Number: 98-92-0 • Formula: C₆H₆N₂O • Molecular Weight: 122.12 • Soluble in Water • Store at Room Temperature • Merck 13, 6550 			
AVAILABLE PACKAGE SIZES			
25g	100g		
N478 - NICKEL (II) CHLORIDE HEXAHYDRATE			
Plant Tissue Culture Tested			
<ul style="list-style-type: none"> • Powder • CAS Number: 7791-20-0 • Formula: NiCl₂•6H₂O • Molecular Weight: 237.7 • Soluble in Water • Store at Room Temperature • Merck 13, 6529 		 	
AVAILABLE PACKAGE SIZES			
5g	100g		
N458 - NICKEL (II) SULFATE HEXAHYDRATE			
Plant Tissue Culture Tested			
<ul style="list-style-type: none"> • Powder • CAS Number: 10101-97-0 • Formula: NiSO₄•6H₂O • Molecular Weight: 262.84 • Soluble in Water • Store at Room Temperature • Merck 13, 6541 		 	
AVAILABLE PACKAGE SIZES			
5g	100g	500g	1Kg
N765 - NICOTINIC ACID			
Niacin; Pyridine-3-carboxylic Acid Plant Tissue Culture Tested			
<ul style="list-style-type: none"> • Powder • CAS Number: 59-67-6 • Formula: C₆H₅NO₂ • Molecular Weight: 123.12 • Soluble in Water • Store at Room Temperature • Merck 13, 6552 			
AVAILABLE PACKAGE SIZES			
100g	500g		

N617 - NITRIC ACID SOLUTION 1.0 N	
Aquafortis Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Liquid • CAS Number: 7697-37-2 • Formula: HNO₃ • Molecular Weight: 63.01 • Miscible with Water • Store at Room Temperature • Merck 13, 6608 	  
AVAILABLE PACKAGE SIZES	
1L	4L
N602 - NITROBLUE TETRAZOLIUM	
NBT; 2,2'-Di-p-nitrophenyl-5,5'-diphenyl-3,3'-(3,3'-dimethoxy-4,4'-diphenylene)-ditetrazolium Chloride	
<ul style="list-style-type: none"> • Powder • CAS Number: 298-83-9 • Formula: C₄₀H₃₀Cl₂N₁₀O₆ • Molecular Weight: 817.6 • Soluble in DMSO • Store at 2 to 6 °C 	
AVAILABLE PACKAGE SIZES	
100mg	1g
N604 - 2-NITROPHENYL-β-D-GALACTOPYRANOSIDE	
See Molecular Biology Section for Complete Listing	
N618 - 4-NITROPHENYL-β-D-GLUCURONIDE	
See Molecular Biology Section for Complete Listing	
O626 - L-ORNITHINE HYDROCHLORIDE	
2,5-Diaminopentanoic Acid Hydrochloride Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 3184-13-2 • Formula: C₅H₁₂N₂O₂•HCl • Molecular Weight: 168.65 • Soluble in Water • Store at Room Temperature 	
AVAILABLE PACKAGE SIZES	
25g	100g
STAINS & DYES USAGE TABLE	
See "Figure 35. Stains & Dyes Usage Table" on page 264 in the Technical Section.	

O6350 - ORANGE G

Acid Orange 10; 7-Hydroxy-8-phenylazo-1,3-naphthalene disulphonic acid disodium salt; Wool Orange 2G
Orange G is a plant tissue culture stain, and one of the three components in Flemming's triple stain. It is an azo dye used primarily as a histological stain.

- Powder
- CAS Number: 1936-15-8
- Formula: $C_{16}H_{10}N_2Na_2O_7S_2$
- Molecular Weight: 452.37
- Soluble in Water
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

25g 100g

O630 - ORYZALIN

4-(Dipropylamino)-3,5-dinitrobenzenesulfonamide
Plant Tissue Culture Tested

- Powder
- CAS Number: 19044-88-3
- Formula: $C_{12}H_{18}N_4O_6S$
- Molecular Weight: 346.36
- Soluble in DMSO
- Store at Room Temperature
- Merck 13, 6953



AVAILABLE PACKAGE SIZES

500mg 1g

P687 - PACLOBUTRAZOL

1-tert-butyl-2-(p-chlorobenzyl)-2-(1,2,4-triazol-1-yl)ethanol
Plant Tissue Culture Tested

- Powder
- CAS Number: 76738-62-0
- Formula: $C_{15}H_{20}ClN_3O$
- Molecular Weight: 293.80
- Soluble in DMSO
- Store at Room Temperature
- Merck 13, 7053



AVAILABLE PACKAGE SIZES

25g 100g

P6737 - PENTACHLORONITROBENZENE (PCNB)

See Seed Testing Section for Complete Listing

P777 - PENICILLIN G

See Seed Testing Section for Complete Listing

P6767 - PENICILLIN G SOLUTION (10 MG/ML)

See Seed Testing Section for Complete Listing

P775 - PEPTONE, TYPE 1, PEPTIC DIGEST OF MEAT

Plant Tissue Culture Tested

- Powder
- Soluble in Water
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

100g 500g 1Kg

P780 - PEPTONE, GLYSATE

Enzymatic Digest of Gelatin
Plant Tissue Culture Tested

- Powder
- Soluble in Water
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

500g 1Kg

P721 - PEPTONE, FROM SOYMEAL

Papainic; Enzymatic Digest of Soybean
Plant Tissue Culture Tested

- Powder
- Soluble in Water
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

500g 1Kg

P778 - L-PHENYLALANINE

(S)-2-amino-3-phenylpropanoic acid
Plant Tissue Culture Tested

- Powder
- CAS Number: 63-91-2
- Formula: $C_9H_{11}NO_2$
- Molecular Weight: 165.19
- Soluble in Water
- Store at Room Temperature
- Merck 13, 7355

AVAILABLE PACKAGE SIZES

25g 100g 500g

NEW PRODUCT

A1000 - PHYTO-ORGANIC™ AGAR

Phyto-Organic Products are sourced from the Organic Material Review Institute's (OMRI) list of organic chemicals and are Certified Organic. For use in laboratory research only.

Agar-Agar; Gum Agar. Derived from *Gelidium* species base.
Gel Strength: minimum 500 g/cm²
Plant Tissue Culture Tested

- Powder
- CAS Number: 9002-18-0
- Soluble in Boiling Water
- Store at Room Temperature
- Merck **13**, 184

AVAILABLE PACKAGE SIZES

9g	100g	500g	1Kg
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NEW PRODUCT

C1780 - PHYTO-ORGANIC™ FREEZE-DRIED COCONUT POWDER

Phyto-Organic Products are sourced from the Organic Material Review Institute's (OMRI) list of organic chemicals and are Certified Organic. For use in laboratory research only.

Plant Tissue Culture Tested

- Powder
- Suspension in Water
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

100g	500g	1Kg
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NEW PRODUCT

S7761 - PHYTO-ORGANIC™ SUCROSE

Phyto-Organic Products are sourced from the Organic Material Review Institute's (OMRI) list of organic chemicals and are Certified Organic. For use in laboratory research only.

β-D-Fructofuranosyl-α-D-glucopyranoside; D(+)-saccharose;
Cane Sugar
Plant Tissue Culture Tested

- Crystalline
- CAS Number: 57-50-1
- Formula: C₁₂H₂₂O₁₁
- Molecular Weight: 342.34
- Soluble in Water
- Store at Room Temperature
- Merck **13**, 8966

AVAILABLE PACKAGE SIZES

30g	100g	500g	1Kg	5kg
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P711 - PIPES

See Molecular Biology Section for Complete Listing

P679 - DL-PHOSPHINOTHRICIN, MONOAMMONIUM SALT

See Molecular Biology Section for Complete Listing

G523 - DL-PHOSPHINOTHRICIN SOLUTION (1 MG/ML)

See Molecular Biology Section for Complete Listing

P694 - PHLOROGLUCINOL

1,3,5-Trihydroxybenzene
Plant Tissue Culture Tested

- Powder
- CAS Number: 108-73-6
- Formula: C₆H₆O₃
- Molecular Weight: 126.12
- Soluble in Water
- Store at Room Temperature
- Merck **13**, 7413


AVAILABLE PACKAGE SIZES

25g	100g
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P717 - PICLORAM

4-Amino-3,5,6-trichloropicolinic Acid
Plant Tissue Culture Tested

- Powder
- CAS Number: 1918-02-1
- Formula: C₆H₃Cl₃N₂O₂
- Molecular Weight: 241.48
- Soluble in DMSO
- Store at Room Temperature
- Merck **13**, 7482



AVAILABLE PACKAGE SIZES

100mg	1g	5g	10g
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P862 - PINEAPPLE POWDER

A mixture of natural pineapple puree and maltodextrin.
Plant Tissue Culture Tested

- Powder
- Suspension in Water
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

500g	1Kg
------	-----

P770 - PLURONIC® F-68

Poloxamer 188
Plant Tissue Culture Tested
Pluronic® is a registered trademark of BASF Corporation.

- Powder
- CAS Number: 9003-11-6
- Formula: (C₃H₆O•C₂H₄O)_x
- Molecular Weight: 8400 Avg.
- Soluble in Water
- Store at Room Temperature
- Merck **13**, 7645

AVAILABLE PACKAGE SIZES

100g

P100 - POTASSIUM NITRATE

Plant Tissue Culture Tested

- Powder
- CAS Number: 7757-79-1
- Formula: KNO_3
- Molecular Weight: 101.10
- Soluble in Water
- Store at Room Temperature
- Merck 13, 7733



AVAILABLE PACKAGE SIZES

500g 1Kg 5Kg 10Kg 15Kg

P705 - POTASSIUM PHOSPHATE, DIBASIC ANHYDROUS

Dipotassium Phosphate; Dipotassium Hydrogen Phosphate
Plant Tissue Culture Tested

- Powder
- CAS Number: 7758-11-4
- Formula: K_2HPO_4
- Molecular Weight: 174.18
- Soluble in Water
- Store at Room Temperature
- Merck 13, 7743

AVAILABLE PACKAGE SIZES

100g 500g 1Kg

P846 - POTASSIUM PHOSPHATE, MONOBASIC ANHYDROUS

Monopotassium Phosphate; Potassium Dihydrogen Phosphate
Plant Tissue Culture Tested

- Powder
- CAS Number: 7778-77-0
- Formula: KH_2PO_4
- Molecular Weight: 136.09
- Soluble in Water
- Store at Room Temperature
- Merck 13, 7744

AVAILABLE PACKAGE SIZES

100g 500g 1Kg 5Kg 10Kg

P6780 - POTASSIUM SODIUM TARTRATE

See Seed Testing Section for Complete Listing

P854 - POTASSIUM SULFATE, ANHYDROUS

Plant Tissue Culture Tested

- Powder
- CAS Number: 7778-80-5
- Formula: K_2SO_4
- Molecular Weight: 174.26
- Soluble in Water
- Store at Room Temperature
- Merck 13, 7759

AVAILABLE PACKAGE SIZES

500g 1Kg 5Kg

UNDEFINED ORGANIC SUPPLEMENTS CHART

See "Figure 15. List of Common Undefined Organic Supplements & PhytoTech™ Product Numbers" on page 240 in the Technical Section.

P692 - POTATO POWDER

Plant Tissue Culture Tested

- Powder
- Suspension in Water
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

100g 500g 1Kg

NEW PRODUCT

P6847 - PROHEXADIONE CALCIUM

BX-112, 3,5-Dioxo-4-propionyl-cyclohexanecarboxylic acid calcium salt.

Plant growth regulator with anti-gibberellin activity.
Plant Tissue Culture Tested

- Powder
- CAS Number: 127277-53-6
- Formula: $C_{10}H_{10}CaO_5$
- Molecular Weight: 250.26
- Soluble in Water
- Store at Room Temperature
- Merck 13, 7868

AVAILABLE PACKAGE SIZES

100mg 1g

P698 - L-PROLINE

(S)-2-Pyrrolidinecarboxylic Acid
Plant Tissue Culture Tested

- Powder
- CAS Number: 147-85-3
- Formula: $C_5H_9NO_2$
- Molecular Weight: 115.13
- Soluble in Water
- Store at Room Temperature
- Merck 13, 7871

AVAILABLE PACKAGE SIZES

100g 500g 1Kg


AMINO ACIDS USED IN PLANT TISSUE CULTURE

See "Figure 14. List of Amino Acids by Type & PhytoTech™ Product Numbers" on page 240 in the Technical Section.

P6698 - L-PROLINE 2.5 M SOLUTION

(S)-2-Pyrrolidinecarboxylic Acid
Sterile Filtered
Plant Tissue Culture Tested

- Liquid
- CAS Number: 147-85-3
- Formula: $C_5H_9NO_2$
- Molecular Weight: 115.13
- Miscible with Water
- Store at 2 to 6 °C
- Merck 13, 7871



AVAILABLE PACKAGE SIZES

25mL 100mL

P733 - PUTRESCINE DIHYDROCHLORIDE

1,4-Butanediamine Dihydrochloride; Tetramethylenediamine Dihydrochloride
Plant Tissue Culture Tested

- Powder
- CAS Number: 333-93-7
- Formula: $C_4H_{12}N_2 \cdot 2HCl$
- Molecular Weight: 161.1
- Soluble in Water
- Store at Room Temperature
- Merck 13, 8038

AVAILABLE PACKAGE SIZES

1g 10g 25g

VITAMINS USED IN PLANT TISSUE CULTURE

See "Figure 13. List of Vitamins used in plant tissue culture & PhytoTech™ Product Numbers" on page 239 in the Technical Section.

P866 - PYRIDOXINE HYDROCHLORIDE

5-Hydroxy-6-methyl-3,4-pyridinedimethanol Hydrochloride; Vitamin B₆ Hydrochloride
Plant Tissue Culture Tested

- Powder
- CAS Number: 58-56-0
- Formula: $C_8H_{11}NO_3 \cdot HCl$
- Molecular Weight: 205.64
- Soluble in Water
- Store at Room Temperature
- Merck 13, 8072

AVAILABLE PACKAGE SIZES

25g 100g

P684 - PYRUVIC ACID, POTASSIUM SALT

α -Ketopropionic Acid, Potassium Salt
Plant Tissue Culture Tested

- Powder
- CAS Number: 4151-33-1
- Formula: $C_3H_3KO_3$
- Molecular Weight: 126.15
- Soluble in Water
- Store at 2 to 6 °C

AVAILABLE PACKAGE SIZES

25g 100g

R7228 - RHODAMINE B

Basic Violet 10, Brilliant Pink B, Rhodamine O, Tetraethylrhodamine
Rhodamine B is a protein-specific fluorescent stain commonly used in fluorescence microscopy; it stains plant tissue trichomes.

- Powder
- CAS Number: 81-88-9
- Formula: $C_{28}H_{31}ClN_2O_3$
- Molecular Weight: 479.01
- Soluble in Water
- Store at Room Temperature


AVAILABLE PACKAGE SIZES

1g 5g 25g 100g

R795 - RIBAVIRIN

1- β -D-Ribofuranosyl-1H-1,2,4-triazole-3-carboxamide; Virazole
Plant Tissue Culture Tested
Plant Tissue Culture Antiviral

- Powder
- CAS Number: 36791-04-5
- Formula: $C_8H_{12}N_4O_5$
- Molecular Weight: 244.2
- Soluble in Water
- Store at 2 to 6 °C
- Merck 13, 8282



AVAILABLE PACKAGE SIZES

1g

R779 - RIBOFLAVIN

USP Grade
7,8-dimethyl-10-(D-ribo-2,3,4,5-tetrahydroxypentyl)-isoalloxazine; Vitamin B₂
Plant Tissue Culture Tested

- Powder
- CAS Number: 83-88-5
- Formula: $C_{17}H_{20}N_4O_6$
- Molecular Weight: 376.37
- Soluble in KOH
- Store at Room Temperature
- Merck 13, 8284

AVAILABLE PACKAGE SIZES

25g

PRODUCT CATALOGUE & LABORATORY GUIDE

R7171 - ROSE BENGAL

See Seed Testing Section for Complete Listing

R7278 - RUTHENIUM RED

See Seed Testing Section for Complete Listing

S7775 - SALINE SOLUTION (0.85%)

See Seed Testing Section for Complete Listing

FOR MORE INFORMATION ON STAINS & DYES

See "Figure 35. Stains & Dyes Usage Table" on page 264 in the Technical Section.

S7400 - SAFRANIN O

Basic Red 2, Cotton Red, Gossypimine, Safranin T, Safranin Y or A

A biological stain, often used as a counter-stain to Crystal Violet (C1830)

- Powder
- CAS Number: 477-73-6
- Formula: $C_{20}H_{19}ClN_4$
- Molecular Weight: 350.84
- Soluble in Water
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

25g 100g

NEW PRODUCT

S7785 - METHYL SALICYLATE (MeSA)

2-Hydroxybenzoic acid methyl ester; Methyl; 2-hydroxybenzoate; Wintergreen Oil; MeSA

Methyl Salicylate is involved in plant defense reactions, present in plant tissues as well as being an airborne defense signal. Plant Tissue Culture Tested

- Liquid
- CAS Number: 119-36-8
- Formula: $C_8H_8O_3$
- Molecular Weight: 152.15
- Miscible with Water
- Store at Room Temperature
- Merck 13, 6143



AVAILABLE PACKAGE SIZES

500mL 1L

NEW PRODUCT

S7530 - SALICYLIC ACID

SA; 2-Hydroxybenzoic acid.

Salicylic Acid is an endogenous signal mediating local and systemic plant defense responses against pathogens. Plant Tissue Culture Tested

- Powder
- CAS Number: 69-72-7
- Formula: $C_7H_6O_3$
- Molecular Weight: 138.12
- Soluble in Ethanol (50mg/mL)
- Store at Room Temperature
- Merck 13, 18411



AVAILABLE PACKAGE SIZES

500g 1Kg

NEW PRODUCT

S7580 - SALICYLIC ACID SODIUM SALT

2-Hydroxybenzoic acid sodium salt; Sodium Salicylate

An endogenous signal mediating local and systemic plant defense responses against pathogens. Sodium Salicylate is a more water soluble form of Salicylic Acid. Plant Tissue Culture Tested

- Powder
- CAS Number: 54-21-7
- Formula: $C_7H_5NaO_3$
- Molecular Weight: 160.10
- Soluble in Water (1.25 g/mL)
- Store at Room Temperature
- Merck 13, 8411



AVAILABLE PACKAGE SIZES

500g 1Kg




S807 - L-SERINE



(S)-2-amino-3-hydroxypropanoic acid
Plant Tissue Culture Tested

- Powder
- CAS Number: 56-45-1
- Formula: $C_3H_7O_3N$
- Molecular Weight: 105.09
- Soluble in Water
- Store at Room Temperature
- Merck 13, 8534

AVAILABLE PACKAGE SIZES

25g 500g

S169 - SILVER NITRATE	
Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 7761-88-8 • Formula: AgNO₃ • Molecular Weight: 169.89 • Soluble in Water • Store at Room Temperature • Merck 13, 8591 	  
AVAILABLE PACKAGE SIZES	
25g	100g
NEW PRODUCT	
S7220 - SODIUM ACETATE TRIHYDRATE	
Sodium Acetate Trihydrate; Acetic Acid Sodium Salt Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 6131-90-4 • Formula: C₂H₃O₂Na • 3H₂O • Molecular Weight: 136.10 • Soluble in Water • Store at Room Temperature • Merck 13, 8642 	
AVAILABLE PACKAGE SIZES	
100g	1Kg
S803 - SODIUM BICARBONATE	
USP Grade Sodium Hydrogen Carbonate; Baking Soda Plant Tissue Culture Tested	
<ul style="list-style-type: none"> • Powder • CAS Number: 144-55-8 • Formula: NaHCO₃ • Molecular Weight: 84.01 • Soluble in Water • Store at Room Temperature • Merck 13, 8655 	
AVAILABLE PACKAGE SIZES	
25g	500g
S7550 - SODIUM CARBONATE	
See Phycology Section for Complete Listing	

S624 - SODIUM CHLORIDE		
Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 7647-14-5 • Formula: NaCl • Molecular Weight: 58.44 • Soluble in Water • Store at Room Temperature • Merck 13, 8671 		
AVAILABLE PACKAGE SIZES		
500g	1Kg	5Kg
S663 - SODIUM CITRATE DIHYDRATE		
Trisodium Citrate Dihydrate Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 6132-04-3 • Formula: C₆H₅Na₃O₇•2H₂O • Molecular Weight: 294.1 • Soluble in Water • Store at Room Temperature • Merck 13, 8675 		
AVAILABLE PACKAGE SIZES		
500g	1Kg	
S844 - SODIUM DODECYL SULFATE		
See Molecular Biology Section for Complete Listing		
S845 - SODIUM HYDROXIDE		
Soda Lye Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Pellets • CAS Number: 1310-73-2 • Formula: NaOH • Molecular Weight: 40.00 • Soluble in Water • Store at Room Temperature • Merck 13, 8701 	 	
AVAILABLE PACKAGE SIZES		
500g	1Kg	

S835 - SODIUM HYDROXIDE SOLUTION 1.0 N

Soda Lye
Sterile Filtered
Plant Tissue Culture Tested

- Liquid
- CAS Number: 1310-73-2
- Formula: NaOH
- Molecular Weight: 40.00
- Miscible with Water
- Store at Room Temperature
- Merck 13, 8701



AVAILABLE PACKAGE SIZES

100mL	500mL	1L	4L
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S7834 - SODIUM METASILICATE

See Phycology Section for Complete Listing

MICRONUTRIENT SOURCES CHART

See "Figure 10. List of Micronutrient Sources & *PhytoTech*™ Product Numbers" on page 237 in the Technical Section.

M651 - SODIUM MOLYBDATE (VI) DIHYDRATE

Molybdic Acid, Sodium Salt Dihydrate
Plant Tissue Culture Tested

- Powder
- CAS Number: 10102-40-6
- Formula: Na₂MoO₄•2H₂O
- Molecular Weight: 241.95
- Soluble in Water
- Store at Room Temperature
- Merck 13, 8718

AVAILABLE PACKAGE SIZES

100g	500g
------	------

S802 - SODIUM NITRATE

Plant Tissue Culture Tested

- Powder
- CAS Number: 7631-99-4
- Formula: NaNO₃
- Molecular Weight: 84.99
- Soluble in Water
- Store at Room Temperature
- Merck 13, 8720



AVAILABLE PACKAGE SIZES

500g	1Kg	5Kg
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S515 - SODIUM PHOSPHATE, MONOBASIC MONOHYDRATE

Sodium Dihydrogen Phosphate Monohydrate
Monosodium Phosphate
Plant Tissue Culture Tested

- Powder
- CAS Number: 10049-21-5
- Formula: NaH₂PO₄•H₂O
- Molecular Weight: 137.99
- Soluble in Water
- Store at Room Temperature
- Merck 13, 8734

AVAILABLE PACKAGE SIZES

100g	500g	1Kg	5Kg
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S745 - SODIUM PHOSPHATE, DIBASIC HEPTAHYDRATE

Disodium Hydrogen Phosphate Heptahydrate
Disodium Phosphate
Plant Tissue Culture Tested

- Powder
- CAS Number: 7782-85-6
- Formula: Na₂HPO₄•7H₂O
- Molecular Weight: 268.07
- Soluble in Water
- Store at Room Temperature
- Merck 13, 8733

AVAILABLE PACKAGE SIZES

500g	1Kg	5Kg
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S843 - SODIUM SULFATE ANHYDROUS

Plant Tissue Culture Tested

- Powder
- CAS Number: 7757-82-6
- Formula: Na₂SO₄
- Molecular Weight: 142.04
- Soluble in Water
- Store at Room Temperature
- Merck 13, 8755

AVAILABLE PACKAGE SIZES

100g	500g
------	------

S620 - SODIUM THIOSULFATE, ANHYDROUS

Sodium Hyposulfite
Plant Tissue Culture Tested

- Powder
- CAS Number: 7772-98-7
- Formula: Na₂S₂O₃
- Molecular Weight: 158.11
- Soluble in Water
- Store at Room Temperature
- Merck 13, 8769

AVAILABLE PACKAGE SIZES

500g	1Kg
------	-----

S744 - D-SORBITOL

D-Glucitol
Plant Tissue Culture Tested

- Powder
- CAS Number: 50-70-4
- Formula: $C_6H_{14}O_6$
- Molecular Weight: 182.17
- Soluble in Water
- Store at Room Temperature
- Merck **13**, 8797

AVAILABLE PACKAGE SIZES

500g	1Kg	5Kg	25Kg
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S742 - SPECTINOMYCIN DIHYDROCHLORIDE

See Molecular Biology Section for Complete Listing

S837 - SPERMIDINE, FREE BASE

N-(3-Aminopropyl)-1,4-butanediamine
Plant Tissue Culture Tested

- Solid that melts at Room Temperature
- CAS Number: 124-20-9
- Formula: $C_7H_{19}N_3$
- Molecular Weight: 145.25
- Soluble in Water
- Store at 2 to 6 °C
- Merck **13**, 8816

AVAILABLE PACKAGE SIZES

1g	5g	25g
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S716 - SSC BUFFER SOLUTION (20X), pH 7.0

See Molecular Biology Section for Complete Listing

S677 - SSPE BUFFER SOLUTION (10X)

See Molecular Biology Section for Complete Listing

S739 - STREPTOMYCIN SULFATE

See Molecular Biology Section for Complete Listing

S7739 - STREPTOMYCIN SULFATE SOLUTION (250 MG/ML)

See Molecular Biology Section for Complete Listing

S746 - SUCCINIC ACID 2,2-DIMETHYLHYDRAZIDE

Daminozide; SADH
Plant Tissue Culture Tested

- Powder
- CAS Number: 1596-84-5
- Formula: $C_6H_{12}N_2O_3$
- Molecular Weight: 160.17
- Soluble in Water
- Store at 2 to 6 °C
- Merck **13**, 2836

AVAILABLE PACKAGE SIZES

10g	100g
-----	------

S7750 - SUDAN IV

Biebrich scarlet R fat soluble, Fat Ponceau R or 4, Lipid Crimson, Oil Red IV, Scarlet Red Scharlach, Solvent Red 24, Sudan R or BB
Sudan IV is a biological stain used primarily to stain lipids and fatty substances present in cells and tissues.

- Powder
- CAS Number: 85-83-6
- Formula: $C_{24}H_{20}N_4O$
- Molecular Weight: 380.44
- Soluble in Isopropanol and Chloroform
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

25g	100g
-----	------

CARBOHYDRATE SELECTION GUIDE

See "Figure 12. Choosing a Carbohydrate" on page 238 in the Technical Section.

S391 - D-SUCROSE

β -D-Fructofuranosyl- α -D-glucopyranoside; D(+)-saccharose; Cane Sugar
Plant Tissue Culture Tested

- Powder
- CAS Number: 57-50-1
- Formula: $C_{12}H_{22}O_{11}$
- Molecular Weight: 342.34
- Soluble in Water
- Store at Room Temperature
- Merck **13**, 8966

AVAILABLE PACKAGE SIZES

30g	500g	1Kg	5Kg	25Kg
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S829 - D-SUCROSE, ULTRA-PURE

β -D-Fructofuranosyl- α -D-glucopyranoside; D(+)-Saccharose; Cane Sugar
Plant Tissue Culture Tested

- Powder
- CAS Number: 57-50-1
- Formula: $C_{12}H_{22}O_{11}$
- Molecular Weight: 342.34
- Soluble in Water
- Store at Room Temperature
- Merck **13**, 8966

AVAILABLE PACKAGE SIZES

500g	1Kg	5Kg	25Kg
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S804 - SULFURIC ACID SOLUTION 1.0 N

Sterile Filtered
Plant Tissue Culture Tested

- Liquid
- CAS Number: 7664-93-9
- Formula: H_2SO_4
- Molecular Weight: 98.07
- Miscible with Water
- Store at Room Temperature
- *Merck 13, 9064*



AVAILABLE PACKAGE SIZES

500mL	1L
-------	----

S7664 - SULFURIC ACID, 0.1% SOLUTION

See Phycology Section for Complete Listing

T8199 - TETRAZOLIUM BLUE

BTC, Blue Tetrazolium Chloride, TZ
Tetrazolium Blue is a colorless tetrazolium that forms a colored formazan when reduced; it is therefore used as an assay of reducing sugars. Tetrazolium Blue is used as an indicator for germination capacity.

- Powder
- CAS Number: 1871-22-3
- Formula: $C_{40}H_{32}Cl_2N_8O_2$
- Molecular Weight: 727.64
- Soluble in Methanol
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

1g	5g	10g	25g
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VITAMINS USED IN PLANT TISSUE CULTURE

See "Figure 13. List of Vitamins used in plant tissue culture & *PhytoTech*™ Product Numbers" on page 239 in the Technical Section.

T390 - THIAMINE HYDROCHLORIDE

3-[(4-Amino-2-methyl-5-pyrimidinyl)methyl]-5-(2-hydroxyethyl)-4-methylthiazolium chloride Hydrochloride;
Vitamin B₁ Hydrochloride
Plant Tissue Culture Tested

- Powder
- CAS Number: 67-03-8
- Formula: $C_{12}H_{17}ClN_4OS \cdot HCl$
- Molecular Weight: 337.27
- Soluble in Water
- Store at Room Temperature
- *Merck 13, 9366*

AVAILABLE PACKAGE SIZES

25g	100g
-----	------

T888 - THIDIAZURON

TDZ; 1-Phenyl-3-(1,2,3-thiadiazol-5-yl)urea
Plant Tissue Culture Tested
Purity: minimum 98%

- Powder
- CAS Number: 51707-55-2
- Formula: $C_9H_8N_4OS$
- Molecular Weight: 220.3
- Soluble in DMSO
- Store at -20 to 0 °C
- *Merck 13, 9384*

AVAILABLE PACKAGE SIZES

100mg	500mg	1g
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T438 - THIDIAZURON (95%)

TDZ; 1-Phenyl-3-(1,2,3-thiadiazol-5-yl)urea
Purity: 95%
Plant Tissue Culture Tested

- Powder
- CAS Number: 51707-55-2
- Formula: $C_9H_8N_4OS$
- Molecular Weight: 220.3
- Soluble in DMSO
- Store at -20 to 0 °C
- *Merck 13, 9384*

AVAILABLE PACKAGE SIZES

100mg	500mg	1g
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NEW PRODUCT

T7999 - THIDIAZURON SOLUTION (1 MG/ML IN DMSO)

TDZ; 1-Phenyl-3-(1,2,3-thiadiazol-5-yl)urea
Plant Tissue Culture Tested
Raw Material Purity: Minimum 98%

- Liquid
- CAS Number: 51707-55-2
- Formula: $C_9H_8N_4OS$
- Molecular Weight: 220.3
- Miscible with Water
- Store at -20 to 0 °C
- *Merck 13, 9384*




AVAILABLE PACKAGE SIZES

10mL	100mL
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T7982 - THIOUREA


See Seed Testing Section for Complete Listing

T857 - L-THREONINE, METHYL ESTER, HYDROCHLORIDE		
Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 39994-75-7 • Formula: $C_5H_{11}O_3N \cdot HCl$ • Molecular Weight: 169.6 • Soluble in Water • Store at -20 to 0 °C 		
AVAILABLE PACKAGE SIZES		
5g		
T869 - TIMENTIN		
See Molecular Biology Section for Complete Listing		
T767 - TIMENTIN SOLUTION (100 MG/ML)		
See Molecular Biology Section for Complete Listing		
T7869 - TIMENTIN SOLUTION (50 MG/ML)		
See Molecular Biology Section for Complete Listing		
T8092 - TOLUIDINE BLUE O		
See Seed Testing Section for Complete Listing		
T872 - TOMATO POWDER		
A mixture of natural tomato puree and maltodextrin. Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • Soluble in Water • Store at Room Temperature 		
AVAILABLE PACKAGE SIZES		
500g		1Kg
T841 - META-TOPOLIN		
6-(3-Hydroxybenzylamino)purine Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 75737-38-1 • Formula: $C_{12}H_{10}N_5OH$ • Molecular Weight: 241.5 • Soluble in KOH or NaOH • Store at -20 to 0 °C 		
AVAILABLE PACKAGE SIZES		
100mg	500mg	1g

T7885 - META-TOPOLIN SOLUTION (1MG/ML)		
6-(3-Hydroxybenzylamino)purine Sterile Filtered Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Liquid • CAS Number: 75737-38-1 • Formula: $C_{12}H_{10}N_5OH$ • Molecular Weight: 241.50 • Miscible with Water • Store at -20 to 0 °C 		
		
AVAILABLE PACKAGE SIZES		
10mL	25mL	100mL

T7968 - TREHALOSE DIHYDRATE		
See Seed Testing Section for Complete Listing		

T818 - 1-TRIACONTANOL		
1-Hydroxytriacontane; Melissyl Alcohol Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 593-50-0 • Formula: $C_{30}H_{62}O$ • Molecular Weight: 438.82 • Soluble in Hot EtOH • Store at 2 to 6 °C • Merck 13, 9665 		
AVAILABLE PACKAGE SIZES		
1g		

T828 - TRIFLURALIN		
α,α,α -Trifluoro-2,6-dinitro- <i>N,N</i> -dipropyl- <i>p</i> -toluidine Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 1582-09-8 • Formula: $C_{13}H_{16}F_3N_3O_4$ • Molecular Weight: 335.28 • Soluble in DMSO • Store at Room Temperature • Merck 13, 9757 		
		
AVAILABLE PACKAGE SIZES		
100mg	250mg	

T850 - 2,3,5-TRIIODOBENZOIC ACID		
TIBA Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 88-82-4 • Formula: $C_7H_3O_2I_3$ • Molecular Weight: 499.8 • Soluble in KOH • Store at -20 to 0 °C 		
AVAILABLE PACKAGE SIZES		
5g	10g	

T761 - TRINEXAPAC-ETHYL

Ethyl 4-cyclopropyl(hydroxyl)methylene-3,5-dioxocyclohexanecarboxylate
Plant Tissue Culture Tested

- Powder
- CAS Number: 95266-40-3
- Formula: $C_{13}H_{16}O_5$
- Molecular Weight: 252.3
- Soluble in Water
- Store at 2 to 6 °C



AVAILABLE PACKAGE SIZES

100mg 250mg

T8164 - 2,3,5-TRIPHENYL TRETRAZOLIUM CHLORIDE (TTC)

See Seed Testing Section for Complete Listing

T769 - TRIS ACETATE EDTA BUFFER SOLUTION (50X), pH 8.1 ± 0.1

See Molecular Biology Section for Complete Listing

T838 - TRIS BASE

See Molecular Biology Section for Complete Listing

T831 - TRIS BORATE EDTA BUFFER

See Molecular Biology Section for Complete Listing

T773 - TRIS BORATE EDTA BUFFER SOLUTION (5X)

See Molecular Biology Section for Complete Listing

T774 - TRIS BORATE EDTA BUFFER SOLUTION (10X)

See Molecular Biology Section for Complete Listing

T855 - TRIS-EDTA BUFFER

See Molecular Biology Section for Complete Listing

T752 - TRIS EDTA BUFFER SOLUTION (10X), pH 8.0

See Molecular Biology Section for Complete Listing

T814 - TRIS-GLYCINE BUFFER

See Molecular Biology Section for Complete Listing

T821 - TRIS GLYCINE SDS BUFFER

See Molecular Biology Section for Complete Listing

T749 - TRIS-GLYCINE-SDS BUFFER SOLUTION (10X)

See Molecular Biology Section for Complete Listing

T858 - TRIS HYDROCHLORIDE

See Molecular Biology Section for Complete Listing

T764 - TRIS HCL SOLUTION 1.0 M, pH 7.5

See Molecular Biology Section for Complete Listing

T832 - TRYPTONE

Enzymatic digest of Casein
Plant Tissue Culture Tested

- Powder
- Soluble in Water
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

500g 1Kg

T851 - L-TRYPTOPHAN

(S)- α -Amino-1H-indole-3-propanoic Acid
Plant Tissue Culture Tested

- Powder
- CAS Number: 73-22-3
- Formula: $C_{11}H_{12}N_2O_2$
- Molecular Weight: 204.2
- Soluble in Water
- Store at Room Temperature
- Merck **13**, 9868

AVAILABLE PACKAGE SIZES

100g 500g

T848 - TRYPTOSE

Enzymatic Hydrolysate of Protein; Trypticase
Plant Tissue Culture Tested

- Powder
- Soluble in Water
- Store at Room Temperature

AVAILABLE PACKAGE SIZES

500g

T8110 - TYROTHRIN

See Seed Testing Section for Complete Listing

T8020 - TYROTHRIN SOLUTION (10MG/ML)

See Seed Testing Section for Complete Listing


T873 - L-TYROSINE, FREE BASE


(S)- α -Amino-4-hydroxybenzenepropanoic Acid
Plant Tissue Culture Tested

- Powder
- CAS Number: 60-18-4
- Formula: $C_9H_{11}NO_3$
- Molecular Weight: 181.21
- Soluble in HCl; Slightly soluble in water
- Store at Room Temperature
- Merck **13**, 9907

AVAILABLE PACKAGE SIZES

5g 100g 500g 1Kg

U890 - UREA		
Carbonyldiamide; Carbamide Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 57-13-6 • Formula: CH₄N₂O • Molecular Weight: 60.06 • Soluble in Water • Store at Room Temperature • Merck 13, 9935 		
AVAILABLE PACKAGE SIZES		
500g	1Kg	5Kg
V878 - L-VALINE		
(S)-2-amino-3-methylbutanoic Acid Plant Tissue Culture Tested		
<ul style="list-style-type: none"> • Powder • CAS Number: 72-18-4 • Formula: C₅H₁₁NO₂ • Molecular Weight: 117.17 • Soluble in Water • Store at Room Temperature • Merck 13, 9975 		
AVAILABLE PACKAGE SIZES		
25g	100g	
V886 - VINEGAR, WHITE DISTILLED		
5% Acetic Acid		
<ul style="list-style-type: none"> • Liquid • CAS Number: 64-19-7 • Formula: C₂H₄O₂ • Molecular Weight: 60.06 • Miscible with Water • Store at Room Temperature 		
AVAILABLE PACKAGE SIZES		
15mL		
X874 - X-GAL		
See Molecular Biology Section for Complete Listing		
X877 - X-GLUC, MONOCYCLOHEXYL AMMONIUM SALT		
See Molecular Biology Section for Complete Listing		
X871 - X-GLUC, SODIUM SALT		
See Molecular Biology Section for Complete Listing		
X8451 - X-GLUC SOLUTION (20MG/ML)		
See Molecular Biology Section for Complete Listing		

Y892 - YEAST EXTRACT					
Microbiological Grade Plant Tissue Culture Tested					
<ul style="list-style-type: none"> • Powder • CAS Number: 8013-01-2 • Soluble in Water • Store at 2 to 6 °C 					
AVAILABLE PACKAGE SIZES					
500g	1Kg	2.5Kg			
MAKING STOCK SOLUTIONS OF PLANT GROWTH REGULATORS					
See "Figure 16. Stock Solution Dilution Chart" on page 242 in the Technical Section.					
Z125 - ZEATIN, TRANS ISOMER					
(2E)-2-methyl-4-(1H-purin-6-ylamino)-2-buten-1-ol Plant Tissue Culture Tested					
<ul style="list-style-type: none"> • Powder • CAS Number: 1637-39-4 • Formula: C₁₀H₁₃N₅O • Molecular Weight: 219.25 • Soluble in KOH • Store at -20 to 0 °C • Merck 13, 10170 					
AVAILABLE PACKAGE SIZES					
10mg	50mg	100mg	250mg	500mg	1g
Z875 - ZEATIN RIBOSIDE SOLUTION (1 MG/ML), TRANS ISOMER					
9-(β-D-Ribofuranosyl)-trans-zeatin, N6-(trans-4-Hydroxy-3-methyl-2-buten-1-yl)adenosine Aqueous Solution Sterile Filtered Plant Tissue Culture Tested					
<ul style="list-style-type: none"> • Liquid • CAS Number: 6025-53-2 • Formula: C₁₅H₂₁N₅O₅ • Molecular Weight: 351.4 • Miscible with Water • Store at -20 to 0 °C 					
AVAILABLE PACKAGE SIZES					
10mL					

PRODUCT CATALOGUE & LABORATORY GUIDE

BIOCHEMICALS

Z899 - ZEATIN RIBOSIDE, TRANS ISOMER

9-(β-D-Ribofuranosyl)-trans-zeatin, N6-(trans-4-Hydroxy-3-methyl-2-buten-1-yl)adenosine
Plant Tissue Culture Tested

- Powder
- CAS Number: 6025-53-2
- Formula: C₁₅H₂₁N₅O₅
- Molecular Weight: 351.4
- Soluble in KOH
- Store at -20 to 0 °C


AVAILABLE PACKAGE SIZES

10mg	50mg	100mg	250mg	1g
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Z860 - ZEATIN SOLUTION (1 MG/ML), TRANS ISOMER

(2E)-2-methyl-4-(1H-purin-6-ylamino)-2-buten-1-ol
Sterile Filtered
Plant Tissue Culture Tested

- Liquid
- CAS Number: 1637-39-4
- Formula: C₁₀H₁₃N₅O
- Molecular Weight: 219.25
- Miscible with Water
- Store at -20 to 0 °C
- Merck 13, 10170






AVAILABLE PACKAGE SIZES

10mL

Z897 - ZINC NITRATE HEXAHYDRATE

Plant Tissue Culture Tested

- Powder
- CAS Number: 10196-18-6
- Formula: Zn(NO₃)₂•6H₂O
- Molecular Weight: 297.48
- Soluble in Water
- Store at Room Temperature
- Merck 13, 10197



AVAILABLE PACKAGE SIZES

100g	500g	1Kg
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Z101 - ZINC SULFATE HEPTAHYDRATE

Plant Tissue Culture Tested

- Powder
- CAS Number: 7446-20-0
- Formula: ZnSO₄•7H₂O
- Molecular Weight: 287.54
- Soluble in Water
- Store at Room Temperature
- Merck 13, 10213

AVAILABLE PACKAGE SIZES

100g	500g
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FIND MICROBIOLOGY MEDIA ON PAGES 151 TO 159

- *LB Agars and Broths*
- *Tryptic Soy Broth*
- *YEP Media*
- *Hanahan's Broth*
- *Peptone Waters*

