PLANT CELL CULTURE

- *Media*
- *PlantCon™ Cell Culture Vessel*
- *GelGro™ Agar Replacement Gelling Agent*
- *Auxins, Cytokinins, and Gibberellins*
- *Enzymes*
- *Additional Reagents*

Comercially available cell culture reagents are now an indispensable part of the requirements of the plant cell culture laboratory. The media and reagents produced by ICN offer the agriculturist, horticulturist and plant molecular biologist excellent products which are manufactured from high grade materials and subjected to strict quality control guidelines. The availability of easily prepared, reliable, competitively priced media has brought the techniques of plant cell and organ culture within the reach of all interested in the use of these products for research, teaching and commercial applications.

Plant Culture Media

Chemicals used in media production are carefully selected and, whenever possible, analytical grade materials were used. Finished lots are inspected to ensure they conform to preset high quality standards before they are released for sale. Except where otherwise noted, all media are of single strength. Please note that ICN's plant media includes additional iron as FeNa • EDTA rather than the salt specified in the original formulations. This is to ensure that iron is available in solution over a wide pH range.

Gamborg's B5 Medium

Gamborg's medium supports the growth of plant cells and callus.

Ref.: 1. Gamborg, O.L., Plant Physiol., 45:372 (1970).

Powder

	Catalog No.	Quantity
B5 w/o sucrose, kinetin, agar and 2,4-D	2613022	1x10 liter

NOTE: Iron is added as FeNa EDTA rather than the salt form specified in the original formulation to ensure that iron is available in solution over a greater pH range.

Murashige and Skoog Plant Medium (M &S)

This complete medium contains both macro- and micronutrients for plant tissue culture. It requires only the addition of sterile water followed by autoclaving. For semi-solid cultures, agar is added prior to autoclaving.

Ref.: 1. Murashige, T. and Skoog, P., Physiol. Plant, 15:473-497 (1962).

Powder

	Catalog No.	Quantity
M & S Plant Medium w/o sucrose, IAA, kinetin and agar	2610020	10x1 liter
	2610022	1x10 liter
	2610024	1x50 liter

NOTE: Iron is added as FeNa EDTA rather than the salt form specified in the original formulation to ensure that iron is available in solution over a greater pH range.

Murashige and Skoog Plant Salt Mixture (M &S)

This mixture contains basal salts for most Murashige plant-specific formulations.

Ref.: 1. Murashige, T. and Skoog, P., Physiol. Plant, 15:473-497 (1962).

Powder

	Catalog No.	Quantity
M & S Plant Salt Mixture w/o agar	2633020	10x1 liter
	2633022	1x10 liter
	2633024	1x50 liter

NOTE: Iron is added as FeNa EDTA rather than the salt form specified in the original formulation to ensure that iron is available in solution over a greater pH range.

Murashige Minimal Organic Medium

This medium contains no agar and can be used as a starting medium or pretransplanting medium for carrots, citrus and ferns.

Ref.: 1. Murashige, T. and Skoog, P., Physiol. Plant, 15:473-497 (1962).

Powder

	Catalog No.	Quantity
Minimal Organic Medium w/o agar	2600020	10x1 liter
	2600022	1x10 liter

NOTE: Iron is added as FeNa EDTA rather than the salt form specified in the original formulation to ensure that iron is available in solution over a greater pH range.

Plant Culture Biochemicals and Reagents

190673 **0-5°C** **(±)-ABSCISIC ACID** — 25 mg, 100 mg, 500 mg, 1 g
[14375-45-2]
Cis-Trans Isomer
Crystalline
Purity: 99+%
$C_{15}H_{20}O_4$ MW 264.3

150245 **RT** **ACETYLSALICYLIC ACID** — 250 g, 500 g, 1 kg
[50-78-2]
(2-Acetoxybenzoic acid; Aspirin)
Crystalline
$C_9H_8O_4$ MW 180.2

150178 **RT** **AGAR** — 100 g, 250 g, 500 g
[9002-18-0]
Bacteriological Grade
Specially purified for use in preparing solid culture media for microbiological and bacteriological applications. Produces strikingly clear gels and media. White to light yellow. 100 mesh powder.
Note: Also See ICN Gel-Gro™

154725 **RT** **ALGINIC ACID** — 100 g, 250 g, 500 g, 1 kg
[9005-38-3]
Sodium Salt
Low Viscosity
From *Macrocystis pyrifera* (Kelp)
Off-white powder.
Viscosity of 2% solution (25°C):
approx. 250 cps

193856 **RT** **AMMONIUM NITRATE, ACS** — 500 g, 1 kg
[6484-52-2]
ACS Reagent Grade
Purity: ≥98%
NH_4NO_3 MW 80.0

191407 **RT** **AMMONIUM PHOSPHATE, ACS** — 100 g, 500 g, 1 kg
[7722-76-1]
Monobasic
ACS Reagent Grade
Crystalline
$NH_4H_2PO_4$ MW 115.03

150373 **RT** **AMMONIUM SULFATE** — 100 g, 500 g, 1 kg
[7783-20-2]
Enzyme Grade
Heavy metals (as Pb no greater than 0.0005%)
$(NH_4)_2SO_4$ MW 132.1

150449 **0°C** **N^6-BENZYLADENOSINE** — 100 mg, 250 mg
[4294-16-0]
(6-Benzylaminopurine riboside)
Crystalline
An A_1 Adenosine receptor agonist.
$C_{17}H_{19}N_5O_4$ MW 357.4

100912 **RT** **6-BENZYLAMINOPURINE** — 500 mg, 1 g, 5 g, 25 g
[1214-39-7]
(N^6-Benzyladenine)
Crystalline
Inhibitor of respiratory kinase
in plants. Increases post-harvest life of green vegetables.
$C_{12}H_{11}N_5$ MW 225.3

154851 **0°C** **N-BENZYL-9-(2-TETRAHYDRO-PYRANYL)ADENINE** — 50 mg, 100 mg
[2312-73-4]
Crystalline
$C_{17}H_{19}N_5O$ MW 309.4

191411 **RT** **BORIC ACID, ACS** — 100 g, 500 g, 1 kg, 5 kg
[10043-35-3]
ACS Reagent Grade
Crystalline
H_3BO_3 MW 61.83

101290 **RT** **CASEIN HYDROLYSATE ENZYMATIC** — 1 lb, 5 lb
Inquire for bulk prices
(Nz-Amine A)
An enzymatic hydrolysate of whole casein.

150584 **0-5°C** **CELLULASE** — 2 KU, 5 KU, 25 KU, 10 5 U
[9012-54-8]
(1,4,-[1,3:1,4]-β-D-glucan)
From *Trichoderma virde*
E.C. 3.2.1.4
For use in protoplast preparation by separation of protoplasts from plant tissues.
Unit Definition: One unit will liberate 1.0 μmole of glucose from cellulose in 1 hour, pH 5.0 at 37°C.
Activity: 1-2 units/mg solid

191500 **0°C** **CENTROPHENOXINE** — 25 g, 100 g, 500 g
[3685-84-5]
([4-Chlorophenoxy] acetic acid 2-[dimethylamino] ethyl ester; Meclofenoxate)
Hydrochloride
$C_{12}H_{16}ClNO_3 \bullet HCl$ MW 294.2

190321 **RT** **CHLORAMPHENICOL** — 5 g, 25 g, 100 g, 500 g, 1 kg
[56-75-7]
(D(-)-threo-2,2-Dichloro-N-[β-hydroxy-α-(hydroxymethyl)-β-(4-nitro-phenyl)ethylacetamide)
Crystalline
Purity: >99%
Determination in serum by HPLC
Ref.: Wal, J., et al., J. Chromatogr., **145**, 502-6 (1978).
In meal: Russel, H., Chromatogr., **11**, 341-3 (1978).
$C_{11}H_{12}Cl_2N_2O_5$ MW 323.1

154961 **RT** **CHLOROCHOLINE CHLORIDE** — 5 g, 25 g, 100 g
[999-81-5]
([2-Chloroethyl]trimethylammonium chloride)
Crystalline
$C_5H_{13}Cl_2N$ MW 158.1

150618 **RT** **CHLOROGENIC ACID** — 100 mg, 500 mg, 1 g, 5 g
[327-97-9]
(3-Caffeoylquinic acid)
Crystalline
Predominantly trans isomer
$C_{16}H_{18}O_9$ MW 354.3

101364 **RT** **p-CHLOROPHENOXYACETIC ACID** — 25 g, 100 g, 500 g
[122-88-3]
Crystalline
Purity: 98%
$C_8H_7ClO_3$ MW 186.6

101243 **RT** ***trans*-CINNAMIC ACID** — 25 g, 100 g, 500 g
[104-55-2]
(β-Phenylacrylic acid)
Light tan crystals
Purity: 99+%
$C_9H_8O_2$ MW 148.2

101406 **RT** **COLCHICINE** — 100 mg, 500 mg, 1 g, 5 g
[64-86-8]
Special Shipping Requirements: Hazardous Material. Contact Customer Service for details. $8.00 additional service charge per shipment.
$C_{22}H_{25}NO_6$ MW 399.4

101553 RT **2,4-DICHLOROPHENOXYACETIC ACID** — 100 g, 250 g, 500 g, 1 kg
[94-75-7]
(2,4-D)
LD_{50}: 80 mg/kg humans, taken orally.
Off-white to tan crystals.
CAUTION: POISONOUS!
$C_8H_6Cl_2O_3$ MW 221

195141 0-5°C **DL-DIHYDROZEATIN** — 1 mg, 5 mg
[14894-18-9]
Crystalline
Purity: ~95%
$C_{10}H_{15}N_5O$ MW 221.3

195142 0°C **DL-DIHYDROZEATIN RIBOSIDE** — 1 mg, 5 mg
[22663-55-4]
Crystalline
Purity: ~97%
$C_{15}H_{23}N_5O_5$ MW 353.4

195144 0°C **6-(γ,γ-DIMETHYLALLYLAMINO) PURINE** — 100 mg, 500 mg, 1 g
[2365-40-4]
[N^6-(Δ^2-Isopentenyl)adenine]
Crystalline
A plant cytokinin produced during mold development and a spore germination inhibitor. It also serves as a general kinase inhibitor.
$C_{10}H_{13}N_5$ MW 203.2

157869 RT **1,3-DIPHENYLUREA** — 1 g, 5 g, 25 g, 100 g
[102-07-8]
(Carbanilide)
Crystalline
$C_{13}H_{12}N_2O$ MW 212.3

195173 RT **ETHYLENEDIAMINETETRAACETIC ACID** — 100 g, 250 g, 500 g, 1 kg
[6381-92-6]
Disodium Salt
Dihydrate
Purity: 99%
Chelating agent. Produces colorless aqueous solutions.
$C_{10}H_{14}N_2O_8Na_2 \bullet 2H_2O$ MW 372.2

158042 RT **FERRIC SULFATE** — 250 g, 500 g, 1 kg
[10028-22-5]
(Iron[III] sulfate)
$Fe_2[SO_4]_3$ MW 399.9

158043 RT **FERRIC TARTRATE** — 100 g, 500 g
[2944-68-5]
$Fe_2(C_4H_4O_6)_3$ MW 555.9

101716 0°C **FLUORESCEIN DIACETATE** — 5 g, 10 g, 25 g, 100 g
[596-09-8]
Crystalline
Used as substrate for esterases.
$C_{24}H_{16}O_7$ MW 416.4

100276 0-5°C **FLUORESCEIN ISOTHIOCYANATE** — 100 mg, 250 mg, 500 mg, 1 g
[3326-32-7]
Isomer I
Purity: 90% min.
Suitable for protein labelling.
$C_{21}H_{11}NO_5S$ MW 389.4

150180 RT **GEL-GRO™** — 100 g, 250 g, 500 g, 1 kg
(Gellan Gum)
A naturally-derived gelling polymer which can be used in place of agar. It is a highly purified heteropolysaccharide that forms clear gels in aqueous systems. Useful as a gelling agent in microbiological and plant tissue culture work. For more details, ask for our Gel-Gro™ technical bulletin.

Other Plant Cell Biology Products from ICN:

- PlantCon™ Culture Vessels
- Murashige & Skoog Media
- Hormones
- Growth Factors

See Cell Biology Section, Plant Culture

100282 RT **GIBBERELLIC ACID** — 1 g, 5 g, 10 g
[77-06-5]
Potassium Salt 10%
Plant growth hormone
$C_{19}H_{21}O_6K$ MW 384.5

100288 RT **GIBBERELLIC ACID** — 1 g, 5 g
[77-06-5]
Potassium Salt 75%
Plant growth hormone
$C_{19}H_{21}O_6K$ MW 384.5

195206 RT **β-GLYCEROPHOSPHATE** — 25 g, 50 g, 100 g, 500 g, 1 kg
[819-83-0]
Disodium Salt
Pentahydrate
L-α-isomer impurity 0.1% maximum. Suitable for the Bodansky phosphatase procedure.
$C_3H_7O_6PNa_2 \bullet 5H_2O$ MW 306.1

151230 0°C **HEMICELLULASE** — 1 KU, 5 KU
[9025-56-3]
From *Aspergillus sp.*
Off-white powder
Activity: 0.005-0.05 unit/mg solid, using locust bean gum as a substrate in a β-galactose dehydrogenase system.
Unit Definition: One unit will liberate 1.0 μmole of D-galactose from hemicellulose per hour at pH 5.5 and 37°C.

151291 RT **N-HYDROXYETHYLETHYLENE-DIAMINE-N,N′,N′-TRIACETIC ACID** — 100 g, 500 g, 1 kg
[150-39-0]
(HEEDTA)
Free Acid
Purity: >99%
Chelating agent that can mask Fe (III) at pH 7-12.
White powder almost insoluble in water.
$C_{10}H_{18}N_2O_7$ MW 278.3

102037 0°C **INDOLE-3-ACETIC ACID** — 5 g, 25 g, 100 g
[87-51-4]
Plant Growth Hormone
Off-white to tan crystals
Purity: ~99%
$C_{10}H_9NO_2$ MW 175.2

100638 -20-0°C **INDOLE-3-ACETIC ACID ETHYL ESTER** — 1 g, 5 g, 25 g
[778-82-5]
Plant Growth Hormone
Crystalline
$C_{12}H_{13}NO_2$ MW 203.2

102039 0-5°C **INDOLE-3-ACETONITRILE** — 1 g, 5 g
[771-51-7]
(β-Indolylacetonitrile)
Crystalline
Natural plant growth hormone.
$C_{10}H_8N_2$ MW 156.2

102042 0-5°C **INDOLE-3-BUTYRIC ACID** — 1 g, 5 g, 25 g, 50 g
[133-32-4]
Plant Growth Hormone
Crystalline
$C_{12}H_{13}NO_2$ MW 203.2

102048 0°C **INDOLE-3-PROPIONIC ACID** — 1 g, 5 g, 10 g, 25 g
[830-96-6]
Crystalline
Light yellow
Purity: ~99%
$C_{11}H_{11}NO_2$ MW 189.2

151363 RT **ISOPROPYL-N-(3-CHLORO-PHENYL)-CARBAMATE** — 1 g, 5 g, 25 g
[101-21-3]
(Chloro-IPC)
Purity: 99%
Light tan crystals
Inhibits plant metabolism
$C_{10}H_{12}NO_2Cl$ MW 213.7

155129 RT **ISOPROPYL N-PHENYL-CARBAMATE** — 1 g, 5 g, 10 g
[122-42-9]
(IPC)
Purity: 99%
Tan crystals.
Inhibitor of plant metabolism.
$C_{10}H_{13}NO_2$ MW 179.2

195264 RT **KAINIC ACID** — 100 mg, 500 mg, 1 g
[487-79-6]
(2-Carboxyl-3-carboxymethyl-4-isopropenylpyrrolidine)
Crystalline
A minor amino acid found in Digenea simplex seaweed.
$C_{10}H_{15}NO_4$ MW 213.2

102117 0°C **KINETIN** — 100 mg, 500 mg, 1 g, 5 g
[525-79-1]
(6-Furfurylaminopurine)
White crystals
Purity: >95%
Plant growth accelerator.
$C_{10}H_9N_5O$ MW 215.2

102118 0-5°C **KINETIN RIBOSIDE** — 1 g
[4338-47-0]
(6-Furfurylaminopurine riboside; N_6-Furfuryladenosine)
Crystalline
$C_{15}H_{17}N_5O_5$ MW 347.3

191422 RT **MAGNESIUM SULFATE, ACS** — 100 g, 500 g, 1 kg, 5 kg
[10034-99-8]
ACS Reagent Grade
Purity: 98.0-102.0%
Crystalline
Heptahydrate
$MgSO_4 \bullet 7H_2O$ MW 246.5

102229 RT **MALEIC ACID HYDRAZIDE** — 25 g, 100 g
[123-33-1]
(1,2-Dihydro-3,6-pyridazinedione)
Crystalline
$C_4H_4N_2O_2$ MW 112.1

102248 RT **D-MANNITOL** — 500 g, 1 kg, 5 kg
[69-65-8]
(Manna sugar; Mannite)
Crystalline
Purity: ~99%
$C_6H_{14}O_6$ MW 182.2

195309 RT **MES** — 10 g, 25 g, 100 g, 250 g, 1 kg
[4432-31-9]
(2-[N-Morpholino]ethanesulfonic acid)
Free Acid
Monohydrate
Crystalline
One of the Zwitterionic buffers.
pKa = 6.15 at 25°C
Ref: Good, N., et al., Biochemistry, **5**, 467 (1966).
$C_6H_{13}NO_4S \bullet H_2O$ MW 213.2

151705 RT **MOLYBDIC ACID** — 100 g, 500 g, 1 kg
[10102-40-6]
Sodium Salt
Crystalline
Dihydrate
$Na_2MoO_4 \bullet 2H_2O$ MW 241.9

102398 RT **α-NAPHTHALENEACETIC ACID** — 25 g, 100 g
[86-87-3]
(1-Naphthylacetic acid)
Light yellow crystals
Purity: ~99%
$C_{12}H_{10}O_2$ MW 186.2

155789 RT **β-NAPHTHOXYACETIC ACID** — 25 g, 100 g, 500 g
[120-23-0]
Free Acid
Gray crystals.
$C_{12}H_{10}O_3$ MW 202.2

151745 RT **NITRILOTRIACETIC ACID** — 25 g, 100 g, 250 g, 500 g
[139-13-9]
(NTA)
White powder, slightly soluble in water (approx. 0.13g/100 ml at 5°C).
Versatile chelating agent.
$C_6H_9NO_6$ MW 191.1

151790 RT **OROTIC ACID** — 10 g, 25 g, 100 g, 1 kg
[65-86-1]
(6-Carboxy-2,4-dihydroxypyrimidine)
Anhydrous
Crystalline
Free Acid
$C_5H_4N_2O_4$ MW 156.1

151803 0°C **PECTINASE** — 500 U, 1 KU, 5 KU
[9032-75-1]
(Polygalacturonase; poly-[1,4α-D-galacturonide]glycono-hydrolase; E.C.3.2.1.15)
From *Rhizopus sp.*
Crude powder
Activity: 350-400 units per gm solid.
Unit Definition: One unit will liberate one micromole of galacturonic acid from polygalacturonic acid per minute at pH 4.0 at 25°C.
Ref.: Duke, D., Chao, W. and Nyman, L.P. *BioTechniques*, **10**, No. 2, 166-171 (1991).

156058 0-5°C **PECTINASE** — 1 KU, 5 KU, 10 KU, 25 KU, 100 KU
[9032-75-1]
(Polygalacturonase; Poly-[1,4-α-D-galacturonide]glycanohydrolase; EC 3.2.1.15)
From *Aspergillus niger*
Solution in glycerol
Activity: 3-9 units per mg protein.
Unit Definition: One unit will liberate 1.0 µmole of galacturonic acid per min at pH 4.0 at 25°C.

151804 0-5°C **PECTOLYASE** — 25 mg, 100 mg, 250 mg, 1 g
From *Aspergillus japonicus*
Reported to contain endopolygalacturonase (E.C.3.2.1.15), endo-pectin lyase (E.C.4.2.2.3) and a maceration stimulating factor. Lyophilized powder containing approx. 60% protein (Lowry); balance primarily lactose.
Activity: 2-4 units per mg solid.
Unit Definition: One unit will liberate 1.0 µmole of galacturonic acid from polygalacturonic acid per minute at pH 5.5 at 25°C.

156067 RT **PENTACHLORONITROBENZENE** — 100 g
[82-68-8]
(Quintozene)
Purity: 97%
Light green powder.
$C_6Cl_5NO_2$ MW 295.3

195369 0-5°C **PERCOLL** — 25 ml, 100 ml, 500 ml
[65455-52-9]
Colloidal PVP coated silica for cell separation. Aseptically filled.

102640 RT — **PHLOROGLUCINOL** — 10 g, 25 g, 100 g, 250 g
[6099-90-7]
Dihydrate
(1,3,5-Trihydroxybenzene)
Crystalline
A reagent for pentoses, pentosans and aldehydes. Also used as a bone decalcifier in microscopy specimens.
$C_6H_6O_3 \bullet 2H_2O$ MW 162.1

156237 RT — **N-(PHOSPHONOMETHYL)-GLYCINE** — 1 g, 5 g
[1071-83-6]
Purity: 95%
$C_3H_8NO_5P$ MW 169.1

102786 RT — **POLYVINYLPYRROLIDONE** — 100 g, 500 g, 1 kg, 5 kg
[9003-39-8]
(PVP K 30)
MW AVERAGE 30,000

153496 RT — **POTASSIUM SULFATE** — 250 g, 1 kg
[7778-80-5]
Crystalline
K_2SO_4 MW 174.3

151310 RT — **8-QUINOLINOL** — 25 g, 100 g, 500 g
[148-24-3]
(8-Hydroxyquinoline)
Free Base
Purity: 99+%
Light yellow crystals
C_9H_7NO MW 145.2

100460 0-5°C — **RHODAMINE-B-ISOTHIOCYANATE** — 50 mg, 100 mg, 500 mg, 1 g
[36877-69-7]
Adsorption at 2100 cm^{-1}
Biologically reproducable results on conjugation
$C_{29}H_{30}ClN_3O_3S$ MW 536.1

191089 RT — **SALICYLIC ACID** — 100 g, 500 g, 1 kg
[69-72-7]
(2-Hydroxybenzoic Acid)
Free Acid
Purity: 99%
m.p. 177°C (dec)
CAUTION: STRONG IRRITANT!
$C_7H_6O_3$ MW 138.12

195495 RT — **SILVER NITRATE** — 5 g, 25 g, 100 g, 500 g
[7761-88-8]
Crystalline
Purity: 99.8%
$AgNO_3$ MW 169.87

191382 RT — **SODIUM METASILICATE, ACS** — 100 g, 250 g, 500 g, 1 kg, 3 kg
[13517-24-3]
Nonahydrate
ACS Reagent Grade
Purity: ≥97%
$Na_2SiO_3 \bullet 9H_2O$ MW 284.2

191444 RT — **SODIUM SULFATE, ACS** — 500 g, 1 kg, 5 kg
[7757-82-6]
Anhydrous
ACS Reagent Grade
Crystalline
Na_2SO_4 MW 142.04

156685 0-5°C — **SUCCINIC ACID 2,2-DIMETHYLHYDRAZIDE** — 25 g, 100 g
[1596-84-5]
(Daminozide)
White powder.
$C_6H_{12}N_2O_3$ MW 160.2

156843 RT — **THIABENDAZOLE** — 100 g
[148-79-8]
(2-[4-Thiazoly]benzimidazole)
Light yellow powder
$C_{10}H_7N_3S$ MW 201.2

103107 RT — **2,4,5-TRICHLOROPHENOXY-ACETIC ACID** — 25 g, 100 g, 500 g
[93-76-5]
Off-white to yellow crystals
Purity: ~97%
$C_8H_5Cl_3O_3$ MW 255.5

152169 0°C — **2,3,5-TRIIODOBENZOIC ACID** — 5 g, 10 g, 25 g, 50 g
[88-82-4]
Free Acid
Off-white to yellow crystals.
Inhibits growth action of 2,4-dichlorophenoxyacetic acid.
Ref.: Phytochemisty, **10**, 1213 (1971).
$C_7H_3I_3O_2$ MW 499.8

1696054 — **WATER** — 500 ml
For Cell Culture
Double deionized via reverse osmosis
Sterile
Storage temperature: 15-30°C

195547 0°C — **ZEATIN** — 5 mg, 10 mg, 25 mg
[1637-39-4]
Trans Isomer
(6-[4-Hydroxy-3-methylbut-2-enylamino]purine)
Natural
White to off-white powder
May contain up to 10% cis isomer.
$C_{10}H_{13}N_5O$ MW 219.2

153854 0-5°C — **ZEATIN** — 5 mg, 10 mg, 50 mg, 100 mg
(6-[(E)-4-Hydroxy-3-methyl-2-butenylamino] purine)
Synthetic
Trans Isomer
White, crystalline needles
Purity: >99.8% by HPLC
Highly potent growth hormone in plants. Stimulates cell division.
$C_{10}H_{13}N_5O$ MW 219.2

195548 0°C — **ZEATIN RIBOSIDE** — 1 mg, 5 mg
[28542-78-1]
Crystalline
Mixed Isomers
Approximately equal mixture of cis and trans isomers.
$C_{15}H_{21}N_5O_5$ MW 351.4

158315 RT — **ZINC NITRATE** — 500 g, 1 kg
[10196-18-6]
Crystalline
$Zn(NO_3)_2$ MW 189.4

193453 RT — **ZINC SULFATE** — 100 g, 500 g, 1 kg
[7446-20-0]
Heptahydrate
Purity: ≥98%
$ZnSO_4 \bullet 7H_2O$ MW 287.5