

Product Number	Product Description	Product Notes		Package Size
B141	BM-1 TERRESTRIAL ORCHID MEDIUM	Storage Temp	2-6° C	1 L
	Contains Agar	Soluble In	Water	10 L
	Contains the macro- and micronutrients, vitamins, and plant growth regulators required to culture orchids.			50 L
	Especially suited for terrestrial orchids. Seed germination may be enhanced with the addition of 50 ml/L Coconut Water (Prod. No. C195). Plant Tissue Culture Tested			
B138	BM-1 TERRESTRIAL ORCHID MEDIUM	Storage Temp	2-6° C	1 L
	Same formulation as B141 without Agar	Soluble In	Water	10 L
	Plant Tissue Culture Tested			50 L
B142	BM-2 TERRESTRIAL ORCHID MEDIUM	Storage Temp	2-6° C	1 L
	Contains 0.2 mg/L 6-Benzylaminopurine (BA) and Agar	Soluble In	Water	10 L
	Contains the macro- and micronutrients, vitamins, and plant growth regulators required to culture orchids.			50 L
	Plant Tissue Culture Tested			
I365	ICHIHASHI NEW PHALAENOPSIS (NP) MEDIUM	Storage Temp	2-6° C	1 L
	Contains the components as described by Ichihashi (1992); modified to contain 82.0 mg/L NH <sub>4</sub> NO <sub>3</sub> .	Soluble In	Water	10 L
	Plant Tissue Culture Tested			50 L
K400	KNUDSON C ORCHID MEDIUM	Storage Temp	2-6° C	1 L
	Morel Modification	Soluble In	Water	10 L
	With the macro- and micronutrients as described by Knudson (1946).			50 L
	Plant Tissue Culture Tested			
K425	KNUDSON C MODIFIED PLUS ORCHID MEDIUM	Storage Temp	2-6° C	1 L
	Proprietary Formulation	Soluble In	Water	10 L
	A complete orchid replate and seed sowing medium. Contains activated Charcoal, Sucrose, Banana Powder, and a gelling agent.			50 L
	Plant Tissue Culture Tested			
L472	LINDEMANN ORCHID BASAL MEDIUM	Storage Temp	2-6° C	1 L
	Contains Sucrose and Vitamins	Soluble In	Water	10 L
	Contains the macro- and micronutrients, as described by Lindemann et al. (1970).			50 L
	Plant Tissue Culture Tested			
M551	MALMGREN MODIFIED TERRESTRIAL ORCHID MEDIUM	Storage Temp	2-6° C	1 L
	Without Sucrose	Soluble In	Water	10 L
	Contains the macro- and micronutrients, agar, and organic constituents as described by Malmgren (1996).			50 L
	Plant Tissue Culture Tested			
M507	MURASHIGE CATTLEYA ORCHID MULTIPLICATION MEDIUM	Storage Temp	2-6° C	1 L
	Contains the macro- and micronutrients as described by Murashige and Skoog (1962).	Soluble In	Water	10 L
	Plant Tissue Culture Tested			50 L
O139	ORCHID MAINTENANCE/ REPLATE MEDIUM	Storage Temp	2-6° C	1 L
	Without Charcoal and Agar	Soluble In	Water	10 L
	Plant Tissue Culture Tested			50 L
P668	ORCHID MAINTENANCE MEDIUM	Storage Temp	2-6° C	1 L
	Contains Charcoal, Without Agar	Soluble In	Water	10 L
	Plant Tissue Culture Tested			50 L
P658	ORCHID MAINTENANCE MEDIUM	Storage Temp	2-6° C	1 L
	Contains Charcoal and Agar	Soluble In	Water	10 L
	Plant Tissue Culture Tested			50 L
O156	ORCHID MAINTENANCE/ REPLATE MEDIUM	Storage Temp	2-6° C	1 L
	Contains Banana and Charcoal, Without Agar	Soluble In	Water	10 L
	Plant Tissue Culture Tested			50 L
P748	ORCHID MAINTENANCE/ REPLATE MEDIUM	Storage Temp	2-6° C	1 L
	Contains Banana, Charcoal, and Agar	Soluble In	Water	10 L
	Replate Medium I			50 L
	Plant Tissue Culture Tested			

All components expressed in mg/L	BM-1 Terrestrial Orchid Medium w/ Agar	BM-2 Terrestrial Orchid Medium	Ichihashi New Phalaenopsis (NP) Medium	Knudson C Orchid Medium	Knudson C Modified Plus Orchid Medium	Lindemann Orchid Basal Medium	Malingren Mod. Terres. Orchid Medium	Murashige Cattleya Orchid Multi. Medium	Orchid Maintenance/ Replate Medium	Orchid Maintenance Medium	Orchid Maintenance Medium	Orchid Maintenance/ Replate Medium	Orchid Maintenance/ Replate Medium
COMPONENT	B141	B142	I365	K400	K425	L472	M551	M507	O139	P668	P658	O156	P748
Aluminum Chloride•6H <sub>2</sub> O						0.0561							
Ammonium Nitrate			82.0	500				1650	825	825	825	825	825
Ammonium Sulfate			303.9	500		1000							
Boric Acid	10	10	3.1			1.014		6.2	3.1	3.1	3.1	3.1	3.1
Calcium Chloride, Anhydrous								333	166	166	166	166	166
Calcium Nitrate			637.6	347.2		347.2							
Calcium Phosphate, Tribasic							75						
Cobalt Chloride•6H <sub>2</sub> O	0.025	0.025	0.0125					0.025	0.0125	0.0125	0.0125	0.0125	0.0125
Cupric Sulfate•5H <sub>2</sub> O	0.025	0.025	0.0125			0.019		0.025	0.0125	0.0125	0.0125	0.0125	0.0125
Na2 EDTA	37.25	37.25	37.3				37.26		37.3	37.3	37.3	37.3	37.3
Ferric Citrate						4.4							
Ferric Sodium EDTA								36.7					
Ferrous Sulfate•7H <sub>2</sub> O	27.85	27.85	27.8	25			27.8		27.85	27.85	27.85	27.85	27.85
Magnesium Nitrate			256.4										
Magnesium Sulfate	100	100		122.13		58.62	97.69	181	90.35	90.35	90.35	90.35	90.35
Manganese Sulfate•H <sub>2</sub> O	25	25	11.2	5.682		0.0515	1.54	16.9	8.45	8.45	8.45	8.45	8.45
Molybdic Acid (Sodium Salt)•2H <sub>2</sub> O	0.25	0.25	0.125					0.25	0.125	0.125	0.125	0.125	0.125
Nickel Chloride•6H <sub>2</sub> O						0.0312							
Potassium Chloride				250		1050							
Potassium Iodide			0.415			0.099		0.83	0.415	0.415	0.415	0.415	0.415
Potassium Nitrate			424.0					1900	950	950	950	950	950
Potassium Phosphate, Monobasic	300	300	462.7	250		135	75	170	85	85	85	85	85
Zinc Sulfate•7H <sub>2</sub> O	10	10	4.3			0.565		8.6	5.3	5.3	5.3	5.3	5.3
Activated Charcoal							1000			2000	2000	2000	2000
Agar	5000	6000					7000				8000		7000
Banana Powder												30,000	30,000
6-Benzylaminopurine (BA)		0.2											
D-Biotin	0.05	0.05					0.05						
Casein, Enzymatic Hydrolysate	500	500					400						
Citric Acid (Free Acid) Anhydrous								150					
Folic Acid	0.5	0.5					0.5						
Gelrite			3000										
L-Glutamine	100	100											
Glycine (Free Base)	2.0	2.0	2.0			2.0	2.0	2.0					
Indole-3-acetic Acid								0.3					
Indole-3-butyric Acid								1.75					
MES (Free Acid)									1000	1000	1000	1000	1000
myo-Inositol	100	100	100.0			100	100	100	100	100	100	100	100
α-Naphthaleneacetic Acid								1.75					
Nicotinic Acid (Free Acid)	5.0	5.0	0.5			1.0	5.0	0.5	1.0	1.0	1.0	1.0	1.0
Pineapple Powder							20,000						
Peptone from Meat									2000	2000	2000	2000	2000
Pyridoxine•HCl	0.5	0.5	0.5			1.0	5.0	0.5	1.0	1.0	1.0	1.0	1.0
Sucrose	20,000	20,000	20,000.0	20,000		20,000		20,000	20,000	20,000	20,000	20,000	20,000
Thiamine•HCl	0.5	0.5	0.1			10	10	10	10	10	10	10	10
Grams of powder to prepare 1 liter	26.22	27.22	25.35	22	79.11	22.71	28.84	24.57	25.31	27.31	35.31	57.31	64.31
pH±0.5 at RT	5.5	5.5	4.5	4.5	4.8	4.5	4.3	3.5	5.5	5.3	5.5	5.0	5.5

Proprietary Formulation

Product Number	Product Description	Product Notes		Package Size
P793	ORCHID MULTIPLICATION MEDIUM Without Charcoal and Agar Plant Tissue Culture Tested	Storage Temp Soluble In	2-6° C Water	1 L 10 L 50 L
O753	ORCHID MULTIPLICATION MEDIUM Contains Agar, Without Charcoal Mother Flasking Medium III Plant Tissue Culture Tested	Storage Temp Soluble In	2-6° C Water	1 L 10 L 50 L
P723	ORCHID SEED SOWING MEDIUM Contains Charcoal and Agar Mother Flasking Medium II Plant Tissue Culture Tested	Storage Temp Soluble In	2-6° C Water	1 L 10 L 50 L
P785	PHYTOTECH ORCHID REPLATE MEDIUM Replate Medium II, Proprietary Formulation Contains Sucrose, Banana, and a gelling agent. Does not contain Activated Charcoal. A complete orchid replate and seed sowing medium. Plant Tissue Culture Tested	Storage Temp Soluble In	2-6° C Water	1 L 10 L 50 L
P782	PHYTOTECH ORCHID REPLATE MEDIUM Without Banana, Proprietary Formulation Contains Sucrose and a gelling agent. An orchid replate and seed sowing medium. Plant Tissue Culture Tested	Storage Temp Soluble In	2-6° C Water	1 L 10 L 50 L
T849	TERRESTRIAL (CYPRIPEDIUM) ORCHID MEDIUM Contains 400 mg/L Calcium Nitrate, Without Casein Mother Flasking Medium V With the macro- and micronutrients, glucose, and agar as described by Steele (1996). Plant Tissue Culture Tested	Storage Temp Soluble In	2-6° C Water	1 L 10 L 50 L
T839	TERRESTRIAL (CYPRIPEDIUM) ORCHID MEDIUM Contains 400 mg/L Calcium Nitrate and 400 mg/L Casein Without Ammonium Nitrate Plant Tissue Culture Tested	Storage Temp Soluble In	2-6° C Water	1 L 10 L 50 L
T842	TERRESTRIAL (CYPRIPEDIUM) ORCHID MEDIUM Contains 600 mg/L Calcium Nitrate and 200 mg/L Casein Without Ammonium Nitrate Plant Tissue Culture Tested	Storage Temp Soluble In	2-6° C Water	1 L 10 L 50 L
V505	VACIN & WENT MODIFIED ORCHID BASAL SALT MIXTURE Contains the macro- and micronutrients as described by Vacin and Went (1949); modified with an equivalent iron molar concentration of ferrous sulfate in place of ferric tartrate. Plant Tissue Culture Tested	Storage Temp Soluble In	2-6° C Water	1 L 10 L 50 L
V882	VACIN & WENT MODIFIED ORCHID BASAL MEDIUM Without Sucrose Contains the macro- and micronutrients as described by Vacin and Went (1949); modified with an equivalent iron molar concentration of ferrous sulfate in place of ferric tartrate. Plant Tissue Culture Tested	Storage Temp Soluble In	2-6° C Water	1 L 10 L 50 L
V891	VACIN & WENT MODIFIED ORCHID MEDIUM Contains Sucrose Contains the macro- and micronutrients as described by Vacin and Went (1949); modified with an equivalent iron molar concentration of ferrous sulfate in place of ferric tartrate. Plant Tissue Culture Tested	Storage Temp Soluble In	2-6° C Water	1 L 10 L 50 L
V895	VACIN & WENT MODIFIED ORCHID MEDIUM Contains Agar and Sucrose Mother Flasking Medium I Contains the macro- and micronutrients as described by Vacin and Went (1949); modified with an equivalent iron molar concentration of ferrous sulfate in place of ferric tartrate. Plant Tissue Culture Tested	Storage Temp Soluble In	2-6° C Water	1 L 10 L 50 L

All components expressed in mg/L	Orchid Multiplication Medium	Orchid Multiplication Medium	Orchid Seed Sowing Medium	PhytoTech Orchid Replate Medium	PhytoTech Orchid Replate Medium	Terrestrial (Cypripedium) Orchid Medium	Terrestrial (Cypripedium) Orchid Medium	Terrestrial (Cypripedium) Orchid Medium	Vacin & Went Modified Orchid Basal Salt Mixture	Vacin & Went Modified Orchid Basal Medium	Vacin & Went Modified Orchid Medium	Vacin & Went Modified Orchid Medium		
	P793	O753	P723	P785	P782	T849	T839	T842	V505	V882	V891	V895		
Ammonium Citrate				Proprietary Formulation	Proprietary Formulation	19	19	19						
Ammonium Nitrate	825	825	412.5			1400								
Ammonium Sulfate										500	500	500	500	
Boric Acid	3.1	3.1	1.65					0.5	0.5	0.5				
Calcium Chloride, Anhydrous	166	166	83											
Calcium Nitrate								400	400	600				
Calcium Phosphate, Tribasic											200	200	200	200
Cobalt Chloride•6H <sub>2</sub> O	0.0125	0.0125	0.0063											
Cupric Sulfate•5H <sub>2</sub> O	0.0125	0.0125	0.0063					0.025	0.025	0.025				
Na <sub>2</sub> EDTA	37.3	37.3	18.65								37.26	37.26	37.26	37.26
Ferric Ammonium Citrate								25	25	25				
Ferrous Sulfate•7H <sub>2</sub> O	27.85	27.85	13.93								27.8	27.8	27.8	27.8
Magnesium Sulfate	90.35	90.35	75.18					97.69	97.69	97.69	122.1	122.1	122.1	122.1
Manganese Sulfate•H <sub>2</sub> O	8.45	8.45	4.23					1.54	1.54	1.54	5.0875	5.0875	5.0875	5.0875
Molybdc Acid (Sodium Salt)•2H <sub>2</sub> O	0.125	0.125	0.0625					0.02	0.02	0.02				
Potassium Chloride								100	100	100				
Potassium Iodide	0.415	0.415	0.2075					0.1	0.1	0.1				
Potassium Nitrate	950	950	475					200	200	200	525	525	525	525
Potassium Phosphate, Monobasic	85	85	42.5					200	200	200	250	250	250	250
Zinc Sulfate•7H <sub>2</sub> O	5.3	5.3	2.65					0.5	0.5	0.5				
Activated Charcoal			1000											
Agar		7000	8000					6000	6000	6000				7000
6-Benzylaminopurine (BA)	2.0	2.0												
Casein, Enzymatic Hydrolysate									400	200				
D-Glucose								20,000	20,000	20,000				
MES (Free Acid)	1000	1000	500											
myo-Inositol	100	100	100											
α-Naphthaleneacetic Acid	0.5	0.5												
Nicotinic Acid (Free Acid)	0.5	0.5	1.0											
Peptone from Meat	2000	2000	2000											
Pyridoxine•HCl	0.5	0.5	1.0											
Sucrose	20,000	20,000	20,000										20,000	20,000
Thiamine•HCl	1.0	1.0	10							0.4	0.4	0.4		
Grams of powder to prepare 1 liter	25.3	32.3	32.74	65.79	43.81	28.44	27.44	27.44	1.67	1.67	21.667	28.67		
pH±0.5 at RT	5.0	5.5	5.8			5.3	5.5	5.3	5.8	5.8	5.5	5.8		

For additional information consult our Orchid Media Selection Guide on our web site.