Crop Protection

Fungicide / Bactericide Reference Chart

A	Ilways Refer To Product Label!		Alternaria	Anthracnose	Bacterial spots	Black Spot	Botrytis	Cylindrocladium	Downy Mildew	Fire Blight	Fusarium	Leaf Spot	Phytopthora	Powdery Mildew	Pseudomonas	Pythium	Rhizoctonia			Thielaviopsis	Xanthomonas
Product	Active Ingredient	OMRI Listed	Alte	Antl	Bact	Blac	Botr	Cylii	Dov	Fire	Fusa	Leaf	Phyd	Pow	Psel	Pyth	Rhiz	Rust	Scab	Thie	Xan
3336	Thiophanate-Methyl			Х		Х	Х	Х		Х	Х	Х		Х			Х	Х	Х	Х	
6672	Thiophanate-Methyl			Х		Х	Х	Х		Х	Х	Х		Х			Х	Х	Х	Х	
Actinovate	Streptomyces lydicus	OMRI					Х				Х		Х	Х		Х	Х				
Adorn	Fluopicolide								Х				Х			Х					
Affirm	Polyoxin D zinc salt		Х	Х			Х		Х					Х			Х				
Agri-Mycin 50	Streptomycin sulfate				Х					Х					Х						
Aliette	Aluminum tris				Х				Х	Х			Х			Х					Х
Areca	Aluminum tris				Х				Х	Х			Х			Х					Х
Astun	Isofetamid						х														
Banner Maxx	Propiconazole		Х	х		х						х		х			х	х	х		
Banol	Propamocarb hydrochloride												х			х					
Banrot	Etridiazole, Thiophanate-Methyl										Х		х			Х	х			х	
Bayleton	Triadimefon						х					х		х				Х			
Botrystop	Ulocladium Oudemansii						х														
Broadform	Fluopyram, Trifloxystrobin		Х	х		Х	х					Х	х	Х			х	Х	Х		
Camelot O	Copper Octanoate	OMRI		х	х		х		х	х		х		х	х		х				х
Cease	Bacillus subtilis	OMRI	х	х	х		х						х	х	х						Х
Chipco 26GT	Iprodione		Х				х	х			Х	х					х				
Chipco 26019	Iprodione		х				х	х			х	х					х				
Compass	Trifloxstrobin		Х	х		Х	х	Х	х			х	х	х		Х	х	х	Х		
Companion	Bacillus subtilis			х			х				х		х			х	х				
Daconil	Chlorothalonil		Х	х		Х	х	Х				х		х				х	Х		
Decree	Fenhexamid						х														
Eagle	Myclobutanil			х		х					Х	х		х			х	х	Х		
Empress	Pyraclostrobin										х		х			х	х				
Exotherm Termil	Chlorothalonil		Х	х		Х	х						х	Х							
Fame	Fluoxastrobin		х	х					х		х	х	х	х		х	х	х			
Fenstop	Fenamidone								х				х			х					
Heritage	Azoxystrobin		Х	х		Х			х		Х	х	х	х		Х	Х	х	Х		
Insignia	Pyraclostrobin		х	х					х		х	х	х	х		х	х	х	х		
Junction	Mancozeb, Copper Hydroxide		х	х	х	х	х		х	(S)		х	х	х	х			х	х		х
Kleengrow	Didecyl dimethyl ammonium chloride				Х	·	х		х	. /	х	х		х						х	x
Medallion	Fludioxonil		х				х	х			Х						х			х	
Micora	Mandipropamid								х				х								
Milstop	Potassium Bicarbonate	OMRI	х	х			х		х					х							

Fungicide / Bactericide Reference Chart

continued

Crop Protection

Product	Always Refer To Product Label! Active Ingredient	OMRI Listed	Alternaria	Anthracnose	Bacterial spots	Black Spot	Botrytis	Cylindrocladium	Downy Mildew	Fire Blight	Fusarium	Leaf Spot	Phytopthora	Powdery Mildew	Pseudomonas	Pythium	Rhizoctonia	Rust	Scab	Thielaviopsis	Xanthomonas
Mural	Azoxystrobin, Benzovindiflupyr		х	х		х	х	х	х		х	х	х	х			х	х	х		
Nordox	Cuprous Oxide	OMRI	х	х	х	х	х		х	х		Х	х	х	х			х	х		х
Obtego	Trichoderma asperelluym, gamsii	OMRI									х		х			х	х				
Orkestra	Fluaxpyroxad, Pyraclostrobin		х	х			х	х	х		х	х		х			х	х	х		
Orvego	Ametoctradin, Dimethomorph								Х				Х								
OxiPhos	Hydrogen peroxide, Phosphorous acid				х		х			х		х	х			х					
Pageant	Pyraclostrobin, Boscalid		Х	Х			Х	Х	Х		Х	Х	х	Х			Х	Х	Х		
Palladium	Cyprodnil, Fludioxonil		Х	Х			Х	Х			Х	Х		Х			Х		Х		
Phyton 35	Copper Sulphate Pentahydrate				х	х	х	х	х					х	х				х		х
Prefence	Streptomyces Sp. Strain k61		Х								х										
Prostar	Flutolanil																Х	Х			
Protect	Mancozeb		Х	Х		Х	Х	Х	Х		Х	Х	Х			Х	Х	Х	Х		
Pipron	Piperalin													Х							
Pvent	Gliocladium Catenulatum		Х	Х			Х				Х		Х			Х	Х				
Regalia	Extract of Reynoutria sachalinensis	OMRI			х		х		х		х	х		х	х	х	х	х			х
Regime	Banda de Lupinus albus doce (BLAD)						х							х							
RootShield	Trichoderma harzianum	OMRI						Х			Х					Х	Х			Х	
RootShield Plus	Trichoderma harzianum & virens	OMRI						Х			Х		Х			Х	Х			Х	
Segovis	Oxathiapiprolin								Х				Х								
Segway O	Cyazofamid								Х				Х			Х					
Spectro 90	Chlorothalonil, Thiophanate methyl		Х	Х		х	Х	Х	Х		х	х		Х			Х	Х	х		
Spirato GHN	Fludioxonil		Х				Х	Х			Х	х					Х			Х	
Stature	Dimethomorph								Х				Х								
Subdue MAXX	Mefenoxam								Х				Х			Х					
Terraclor 400	Pentachloronitrobenzene (PCNB)																Х				
Terraguard	Triflumizole		Х				Х	Х	Х		Х			Х			Х	Х	Х	Х	
Terrazole L	Etridiazole												Х			Х					
Terrazole WP	Etridiazole												х			х					
Tourney	Metconazole										х	х		х			х	х	х		
Transom	Thiophanate-Methyl			х		х	х	х		х	х	х		х			х	х	х	х	
Triathlon BA	Bacillus amyloliquefaciens		х						х		х			х		х	х				х
Trigo	Trifloxstrobin, Triadimenfon			х		х	х		х			х						х	х		
Trinity	Triticonazole			Х							х						х	х			
Truban	Etridiazole												х			х					
Zerotol	Hydrogen Peroxide, Peroxyacetic Acid	OMRI					х		х		х		х	х	х	х	х			х	

REFERENCE GUIDE for **GREENHOUSE** and **NURSERY** PRODUCTION **FUNGICIDES**

RESISTANCE MANAGEMENT

As with other pesticides, fungicides must be used in a program to avoid or delay resistance. Do not rely on products with the same mode of action. Rotation of products with different modes of action, and using product combinations with different modes of action are parts of a resistance management strategy. Be especially careful when using products considered to be high risk for resistance development. This category includes many of our newer products. See the explanation of resistance risk at the end of the fungicide section.

Most fungicides work more effectively to prevent disease from becoming established, rather than eradicating disease that is already present. Constant monitoring – and modification where possible – of environmental conditions and scouting crops for signs of disease symptoms are vital parts of effective fungicide use and resistance management.

Always read the label and check with local authorities for further information regarding resistance management.

**Use Site(s) Key: GH = Greenhouse, N = Nursery



(By Mode of Action Group and Class)

Fungicides

MOA Co & Group		Common Name	Trade Name	REI	Use Site(s)**	Company
1	Thiophanates	Thiophanate-methyl	OHP 6672"	12	GH/N	OHP, Inc.
			3336™	12	GH/N	Nufarm
0	es (Methyl Benzimidazole Car k: High (See explanation of r	rbamates) esistance risk following the mode o	of action listing)			
2 Dicarboximide	Dicarboximides	Iprodione	OHP Chipco [®] 26019	12	GH/N	OHP, Inc.
Resistance risk	k: Medium to High					
3	Imidazoles	Triflumizole	Terraguard [*]	12	GH/N	OHP, Inc.
	Pyrimidines	Fenarimol	Rubigan [*]	12	Ν	Gowan Company
Tri	azoles (includes conazole)) Propiconazole	Banner [®] MAXX [®] II	12	Ν	Syngenta
		Myclobutanil	Eagle ⁻ 20 EW	24	GH/N	Corteva Agriscience
		Triticonazole	Trinity	12	GH/N	BASF
			Trinity' TR	4-12	GH	BASF
DMI-fungicide Resistance risk	es (DeMethylation Inhibitors)\ <: Medium	N				
0	Acylamines (PhenyAmides) <: Medium to High	Metalaxyl-M (=Mefenoxam)	Subdue [®] MAXX [®]	0-48	GH/N	Syngenta
5 Amines ("Morj Resistance risk	Piperadines pholines") <: Low to Medium	Piperalin	Pipron'	12	GH	SePRO Corp.
7	Thiopene amides	Isofetamid	Astun	12	GH/N	OHP, Inc
	Phenyl-Benzamides	Flutolanil	ProStar [*]	12	GH/N	Bayer Cropscience
	te dehydrogenase inhibitors) <: Medium to High)				

* Depends on Greenhouse ventilation



Fungicides

continued

(By Mode of Action Group and Class)

MOA Code *	
& Group	Class

MOA Co & Group		Common Name	Trade Name	REI	Use Site(s)**	Company
11	Oximino-acetates	Trifloxystrobin	Compass' O	12	GH/N	Bayer Cropscience
	Methoxy-acrylates	Azoxystrobin	Heritage	4	GH/N	Syngenta
	Methoxy-carbamates	Pyraclostrobin	Empress [≈] Intrinsic	12	GH/N	BASF
	Imidazolinones	Fenamidone	FenStop	12	GH	Bayer Cropscience
)ol-fungic <u>ides</u> lesistance risk	<u>(Quinone outside inhibitors)</u> : High					
12	Phenylpyrroles	Fludioxonil	Medallion	12	GH/N	Syngenta
	(PhenylPyrroles) : Low to Medium					
14	Aromatic Hydrocarbons	PCNB	Terraclor	12	GH/N	OHP, Inc.
	Thiadiazole	Etridiazole	Terrazole	12	GH/N	OHP, Inc.
0	(Aromatic Hydrocarbons)		Truban'	12	GH/N	ICL Specialty Fertilizers
	Low to Medium	Fenhexamid	Decree'	12	CUAL	CoDDO Corr
17 SBI: Class III)	Hydroxyanilides	rennexamid	Decree	12	GH/N	SePRO Corp.
	Low to Medium					
19	Polyoxins	Polyoxin-D	Affirm⁼	4	GH/N	Nufarm
Polyoxins Resistance risk	: Low to Medium					
-	Cyano-imidazole Quinone inside inhibitor) : Medium to High	Cyazofamid	Segway ⁻ O	12	GH/N	OHP, Inc.
28	Carbamates	Propamocarb	Banol	24	GH/N	Bayer Cropscience
Carbamates Resistance risk	: Low to Medium					
33	Ethyl Phosphonates	Fosetyl-Al	Aliette	12	GH/N	Bayer Cropscience
		[Also	classified by EPA with plant host defense indu Areca	icers] 12	GH/N	OHP, Inc
	Phosphite	Phosphorous acid	Alude™	4	GH/N GH/N	Nufarm
Phosphonates Resistance risk					0.1,11	
40	Cinnamic Acid Amides	Dimethomorph	Stature [®] SC	12	GH/N	BASF
	Mandelic Acid Amides	Mandipropamid	Micora⁼	4	GH/N	Syngenta
-	s (Carboxylic Acid Amides) : Low to Medium					
Benzamides	idinylmethyl-benzamides	Fluopicolide	Adorn	12	GH/N	Nufarm
Resistance risk		D '''	T		<u> </u>	0.15
	illus sp. and the fungicidal ipopeptides produced	Bacillus amyloliquefaciens strain D747	Triathlon [•] BA	4	GH/N	OHP, Inc.
Microbial (Bac Resistance risk						
* Doponds on (Freenbourg ventilation					

* Depends on Greenhouse ventilation ** Greenhouse and/or nursery uses depend on the formulation. Check labels for uses.

Crop Protection



Fungicides

continued

(By Mode of Action Group and Class)

A LIPOUD	Class		Tue de Neuro	DEL	Use	C
& Group	Class	Common Name	Trade Name	REI	Site(s)**	Company
M1	Inorganic	Copper sulfate	Camelot	12	GH/N	SePRO Corp.
			Cuproxat	24	GH/N	Nufarm
			Phyton [®] 27	24	GH/N	Phyton Corp.
		Copper hydroxide	CuPro [™] 5000	24	GH/N	SePRO Corp.
			Kalmor™	24	GH/N	OHP, Inc.
		Cuprous Oxide	Nordox 75WG	12	GH/N	Nordox AS
Inorganic Resistance risk:	Low to Medium					
			P:	2.4	<u></u>	
M3	Dithiocarbamates and relatives	Mancozeb	Dithane	24	GH/N	Corteva Agriscience
			Fore	24	GH/N	Corteva Agriscience
			Junction™	24	GH/N	SePRO Corp.
			Pentathlon™	24	GH/N	SePRO Corp.
		Manganese + zinc	Protect [™] DF	24	GH/N	Nufarm
	tes and relatives Low to Medium	-				
M5	Chloronitriles (phthalonitriles)	Chlorothalonil	Daconil [®] Ultrex [®]	12	GH/N	Syngenta
	(AllPro [®] Exotherm Termil	*		Value Garden Supply ds on greenhouse ventilati
	ohthalonitriles) Low to Medium				Depen	as on greenhouse ventilde
U15	Piperidinyl-thiazole-	Oxathiapiprolin	Segovis	4	GH/N	Syngenta
	isoxazolines zole-isoxazolines Low to Medium					
NC	Biopesticide	Trichoderma harzianum T22	PlantShield [®] HC	0	GH/N	BioWorks, Inc.
NC	Biopesticide	Trichoderma harzianum T22	PlantShield [®] HC RootShield [®]	0	GH/N GH/N	BioWorks, Inc. BioWorks, Inc.
NC	Biopesticide	Trichoderma harzianum T22 Trichoderma harzianum T22 + Trichoderma virens G41				
NC	Biopesticide	Trichoderma harzianum T22 +	RootShield	0	GH/N	BioWorks, Inc.
NC	Biopesticide	Trichoderma harzianum T22 + Trichoderma virens G41	RootShield [®] RootShield [®] Plus	0 0	GH/N GH/N	BioWorks, Inc. BioWorks, Inc.
NC	Biopesticide	Trichoderma harzianum T22 + Trichoderma virens G41 Gliocladium virens GL21	RootShield RootShield Plus SoilGard	0 0 4	GH/N GH/N GH/N	BioWorks, Inc. BioWorks, Inc. OHP, Inc.
NC	Biopesticide	Trichoderma harzianum T22 + Trichoderma virens G41 Gliocladium virens GL21 Bacillus subtilis GB03	RootShield RootShield Plus SoilGard Companion	0 0 4 4	GH/N GH/N GH/N GH/N	BioWorks, Inc. BioWorks, Inc. OHP, Inc. Growth Products
NC	Biopesticide	Trichoderma harzianum T22 + Trichoderma virens G41 Gliocladium virens GL21 Bacillus subtilis GB03 Bacillus subtilis MBl600	RootShield RootShield Plus SoilGard Companion Subtilex NG	0 0 4 4 4	GH/N GH/N GH/N GH/N GH	BioWorks, Inc. BioWorks, Inc. OHP, Inc. Growth Products BASF
NC	Biopesticide	Trichoderma harzianum T22 + Trichoderma virens G41 Gliocladium virens GL21 Bacillus subtilis GB03 Bacillus subtilis MB1600 Bacillus subtilis QST713	RootShield RootShield Plus SoilGard Companion Subtilex NG Cease	0 0 4 4 4 4	GH/N GH/N GH/N GH GH/N	BioWorks, Inc. BioWorks, Inc. OHP, Inc. Growth Products BASF BioWorks, Inc.
NC	Biopesticide Bicarbonate	Trichoderma harzianum T22 + Trichoderma virens G41 Gliocladium virens GL21 Bacillus subtilis GB03 Bacillus subtilis MB1600 Bacillus subtilis QST713	RootShield RootShield Plus SoilGard Companion Subtilex NG Cease Actinovate SP	0 0 4 4 4 4 4	GH/N GH/N GH/N GH GH/N GH/N	BioWorks, Inc. BioWorks, Inc. OHP, Inc. Growth Products BASF BioWorks, Inc. Mycorrhizal App
NC		Trichoderma harzianum T22 + Trichoderma virens G41 Gliocladium virens GL21 Bacillus subtilis GB03 Bacillus subtilis MBl600 Bacillus subtilis QST713 Streptomyces lydicus WYEC108	RootShield RootShield Plus SoilGard Companion Subtilex NG Cease Actinovate SP Actino Iron	0 0 4 4 4 4 4 4 4	GH/N GH/N GH/N GH GH/N GH/N GH/N	BioWorks, Inc. BioWorks, Inc. OHP, Inc. Growth Products BASF BioWorks, Inc. Mycorrhizal App Mycorrhizal App
NC		Trichoderma harzianum T22 + Trichoderma virens G41 Gliocladium virens GL21 Bacillus subtilis GB03 Bacillus subtilis MBl600 Bacillus subtilis QST713 Streptomyces lydicus WYEC108	RootShield RootShield Plus SoilGard Companion Subtilex NG Cease Actinovate SP Actino Iron Carb-O-Nator	0 0 4 4 4 4 4 4 4 4	GH/N GH/N GH/N GH/N GH/N GH/N GH/N	BioWorks, Inc. BioWorks, Inc. OHP, Inc. Growth Products BASF BioWorks, Inc. Mycorrhizal App Mycorrhizal App Certis USA, LLC
NC	Bicarbonate Hydrogen Dioxide/Peroxide	Trichoderma harzianum T22 + Trichoderma virens G41 Gliocladium virens GL21 Bacillus subtilis GB03 Bacillus subtilis MBI600 Bacillus subtilis QST713 Streptomyces lydicus WYEC108 Potassium bicarbonate Hydrogen dioxide +	RootShield RootShield Plus SoilGard Companion Subtilex NG Cease Actinovate SP Actino Iron Carb-O-Nator MilStop	0 0 4 4 4 4 4 4 4 4 1	GH/N GH/N GH/N GH/N GH/N GH/N GH/N GH/N	BioWorks, Inc. BioWorks, Inc. OHP, Inc. Growth Products BASF BioWorks, Inc. Mycorrhizal App Mycorrhizal App Certis USA, LLC BioWorks, Inc.
NC	Bicarbonate Hydrogen Dioxide/Peroxide	Trichoderma harzianum T22 + Trichoderma virens G41 Gliocladium virens GL21 Bacillus subtilis GB03 Bacillus subtilis MBI600 Bacillus subtilis QST713 Streptomyces lydicus WYEC108 Potassium bicarbonate Hydrogen dioxide + peroxyacetic acid Hydrogen dioxide + peroxyacetic acid + octanoic acid Clarified hydrophobic extract of neem oil	RootShield RootShield Plus SoilGard Companion Subtilex NG Cease Actinovate SP Actino Iron Carb-O-Nator MilStop ZeroTol	0 0 4 4 4 4 4 4 4 1 0-1	GH/N GH/N GH/N GH/N GH/N GH/N GH/N GH/N	BioWorks, Inc. BioWorks, Inc. OHP, Inc. Growth Products BASF BioWorks, Inc. Mycorrhizal App Mycorrhizal App Certis USA, LLC BioWorks, Inc. Biosafe Systems
NC	Bicarbonate Hydrogen Dioxide/Peroxide	Trichoderma harzianum T22 + Trichoderma virens G41 Gliocladium virens GL21 Bacillus subtilis GB03 Bacillus subtilis MBI600 Bacillus subtilis QST713 Streptomyces lydicus WYEC108 Potassium bicarbonate Hydrogen dioxide + peroxyacetic acid Hydrogen dioxide + peroxyacetic acid Clarified hydrophobic extract of neem oil (also classified by EPA as a biopesticide)	RootShield RootShield Plus SoilGard Companion Subtilex NG Cease Actinovate SP Actino Iron Carb-O-Nator MilStop ZeroTol X3 ^m	0 0 4 4 4 4 4 4 4 1 0-1 0-2 4	GH/N GH/N GH/N GH/N GH/N GH/N GH/N GH/N	BioWorks, Inc. BioWorks, Inc. OHP, Inc. Growth Products BASF BioWorks, Inc. Mycorrhizal App Mycorrhizal App Certis USA, LLC BioWorks, Inc. Biosafe Systems Phyton Corp. OHP, Inc.
	Bicarbonate Hydrogen Dioxide/Peroxide	Trichoderma harzianum T22 + Trichoderma virens G41 Gliocladium virens GL21 Bacillus subtilis GB03 Bacillus subtilis MBI600 Bacillus subtilis QST713 Streptomyces lydicus WYEC108 Potassium bicarbonate Hydrogen dioxide + peroxyacetic acid Hydrogen dioxide + peroxyacetic acid Clarified hydrophobic extract of neem oil (also classified by EPA as a biopesticide) Petroleum oil	RootShield RootShield Plus SoilGard Companion Subtilex NG Cease Actinovate SP Actino Iron Carb-O-Nator MilStop ZeroTol X3 [™] Triact 70 Suffoil-X [™]	0 0 4 4 4 4 4 4 4 1 0-1 0-2 4	GH/N GH/N GH/N GH/N GH/N GH/N GH/N GH/N	BioWorks, Inc. BioWorks, Inc. OHP, Inc. Growth Products BASF BioWorks, Inc. Mycorrhizal App Certis USA, LLC BioWorks, Inc. Biosafe Systems Phyton Corp. OHP, Inc.
	Bicarbonate Hydrogen Dioxide/Peroxide	Trichoderma harzianum T22 + Trichoderma virens G41 Gliocladium virens GL21 Bacillus subtilis GB03 Bacillus subtilis MBI600 Bacillus subtilis QST713 Streptomyces lydicus WYEC108 Potassium bicarbonate Hydrogen dioxide + peroxyacetic acid Hydrogen dioxide + peroxyacetic acid Clarified hydrophobic extract of neem oil (also classified by EPA as a biopesticide) Petroleum oil	RootShield RootShield Plus SoilGard Companion Subtilex NG Cease Actinovate SP Actino Iron Carb-O-Nator MilStop ZeroTol X3 ^m	0 0 4 4 4 4 4 4 4 1 0-1 0-2 4	GH/N GH/N GH/N GH/N GH/N GH/N GH/N GH/N	BioWorks, Inc. BioWorks, Inc. OHP, Inc. Growth Products BASF BioWorks, Inc. Mycorrhizal App Mycorrhizal App Certis USA, LLC BioWorks, Inc. Biosafe Systems Phyton Corp. OHP, Inc.



Fungicides

(By Mode of Action Group and Class)

MOA & Gro	Code* oup Class	Common Name	Trade Name	REI	Use Site(s)**	Company
NC Co	ontinued		M-Pede*	12	GH/N	Gowen Company
1+2	Thiophanate + Dicarboxamide	Thiophanate-methyl + Iprodione	26/36™	12	GH/N	Nufarm
1+14	Thiophanate + Thiadiazole	Thiophanate-methyl + Etridiazole	Banrot	12	GH/N	ICL Specialty Fertilizers
1+M5	Thiophanate + Chloronitrile	Thiophanate-methyl + Chlorothalonil	Spectro [®] 90	12	GH/N	Nufarm
3+11	Demethylation Inhibitors (DMI fungicides) + Strobilurins	Triadimefon + Trifloxystrobin	Trigo	12	GH/N	Bayer Cropscience
3+M5	Demethylation inhibitor + Chloronitrile	Propiconazole + Chlorothalonil	Concert' II	12	Ν	Syngenta
7+11	SDHI + Strobilurin	Boscalid + Pyraclostrobin	Pageant [™] Intrinsic [™]	12	GH/N	BASF
	Pyridine Carboxamide + Strobilurin	BenZovindiflupyr + Azoxystrobin	Mural≊	12	GH/N	Syngenta
		Fluxapyroxad + Pyraclostrobin	Orkestra⁼	12	GH/N	BASF
45+40	Triazolo-pyrimidylamines + Cinnamic Acid Amides	Ametoctradin + Dimethomorph	Orvego	12	GH/N	BASF
9+12	Anilo-pyrimidine+ Phenylpyrrole	Cyprodinil + Fludioxinil	Palladium [∞]	12	GH/N	Syngenta

* Depends on Greenhouse ventilation

** Greenhouse and/or nursery uses depend on the formulation.

Check labels for uses.

***Fungicides Modes of Action**

- 1. Inhibition of tubulin formation in mitosis
- 2. Affect cell division, DNA and RNA synthesis and metabolism
- 3. DMI (DeMethylation Inhibitors) Demethylase in sterol biosynthesis
- 4. Phenylamides-Affect RNA synthesis
- 5. Inhibition of isomerase in sterol biosynthesis
- 7. Affect mitochondrial transport chain
- 9. Methionine biosynthesis (proposed)
- 11. Quinone outside inhibitors (Qol)
- 12. MAP protein kinase in osmotic signal transduction
- 14. Lipid peroxidation (proposed)
- 17. 3-keto reductase during C4 demethylation

- 19. Chitin synthase inhibition in cell wall development
- 21. Quinone inside inhibitors (Qil)
- 28. Affect cell membrane permeability, fatty acids (proposed)
- 33. Unknown mode of action. Phosphonates.
- 40. Cell wall biosynthesis: cellulose synthase
- 43. Delocalization of spectrin-like proteins
- 44. Microbial disrupters of pathogen cell membranes (Biologicals)
- 45. Respiration Complex III: cytochrome bc1 (ubiquinone reductase) at Qo site
- M. Multi-site activity. Chemicals that act at several sites, which may differ among the group members
- NC. Unknown: The mode of action cannot be placed within any other grouping

This list is from the U.S. Environmental Protection Agency, in cooperation with the Fungicide Resistance Action Committee (FRAC). FRAC is a technical working group within the Global Crop Protection Federation (GCPF). More information on the fungicide Resistance Action Committee and the Mode of Action Classification is available from: www.frac.info.

Explanation of Resistance Risk

Resistance risk categories were developed by FRAC. There are ways to estimate the potential for resistance development. The resistance risk is generally based on whether the fungicide mode of action (MOA) is single or multi-site. Single site MOA products have a higher resistance risk than multi site MOA products. The pathogen types targeted by the fungicides also are factors. Fungicides should always be used by rotating MOA types.

Crop Protection

















26GT® Fungicide

by Bayer CropScience, LP

A broad spectrum fungicide that can be applied to a wide range of ornamental plants, either as a foliar spray, dip, or drench. Provides 14 days or longer control with quick knockdown.

REI 12 Hrs

RATE 32-80oz per 100gal

SIGNAL WORD Caution **CHEMICAL FAMILY** Dicarboximide **ACTIVE INGREDIENT Iprodione CONTROLS** Rhizoctonia, Fusarium, Botrytis, Alternaria

2.5gal

PROKZ4250930 Min. Buy 1 EA

3336[®] EG Fungicide by Nufarm Americas Inc.

A broad-spectrum disease control for turf and ornamental plants. Combines the power of thiophanate-methyl with the convenience of an extruded granular formulation for control of troublesome plant diseases such as Rhizoctonia. A low-dust extruded granule with quick-dissolve properties, 3336 EG extends many benefits to the user including easy measuring and easy mixing.

REI 12 Hrs

SIGNAL WORD Caution **CHEMICAL FAMILY** Thiophanates **ACTIVE INGREDIENT** Thiophanate-methyl

CONTROLS Anthracnose, Brown Rot, Leaf Scabs, Fusarium, Rhizoctonia and many more.

5lb

NTS10556045 Min. Buy 1 EA

3336® F Fungicide

by Nufarm Americas Inc.

A broad spectrum fungicide for control of a wide range of diseases in turf and ornamentals. Use for annual and perennial flowers, bedding and foliage plants, turf, trees and evergreens. REI 12 Hrs

SIGNAL WORD Caution **CHEMICAL FAMILY** Thiophanates

ACTIVE INGREDIENT Thiophanate-methyl CONTROLS Anthracnose, Brown Rot, Leaf Scabs, Fusarium, Rhizoctonia and

many more.

32oz NTS10498121 Min. Buy 1 EA 2.5gal NTS10498225 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ



6672[®] Fungicide by OHP, Inc.

OHP 6672 4.5F fungicide controls a broad spectrum of diseases of bedding, flowering, herbaceous, vegetable plants, shrubs and trees grown in the greenhouse, nursery, landscapes and interiorscapes. REI 12 Hrs

RATE 10 to 20oz per 100gal. **SIGNAL WORD** Caution **CHEMICAL FAMILY** Thiophanates **ACTIVE INGREDIENT** Thiophanate-methyl **CONTROLS** Anthracnose, Botrytis, Fusarium and many more.

4.57

2.5gal OHP986125 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

50WP

OHP986188

2lb



OMR

Actinovate® SP Biological Fungicide

by Nufarm Americas Inc

Actinovate® SP Biological Fungicide suppresses and controls root rot, damping-off fungi and foliar fungal pathogens. When used as a soil drench, it also suppresses and controls soil-borne fungi. REI 1 Hr

SIGNAL WORD Caution **CHEMICAL FAMILY Biopesticide**

ACTIVE INGREDIENT Streptomyces lydicus

CONTROLS Phythium, Phytophthora, Verticillium, Fusarium,

Rhizoctonia, Powdery Mildew, Downy Mildew, Botrytis and other root and foliar fungi.

Min. Buy 1 EA

1807 NOVZ5000-725 Min. Buy 1 EA





Adorn[®] Fungicide by Nufarm Americas Inc.

Adorn fungicide controls ornamental plant diseases such as Downy Mildew, Phytophthora and Pythium in greenhouse ornamentals, outdoor nurseries, landscape ornamentals and shrubs. Can be used as a spray or drench.

REI 12 Hrs RATE 1 to 4oz per 100gal.

VAL61510.928

32oz

SIGNAL WORD Caution **CHEMICAL FAMILY Benzamides ACTIVE INGREDIENT Fluopicolide CONTROLS** Downy Mildew, Phytophthora, Pythium.

Min. Buy 1 EA





Affirm[™] WDG Fungicide by Nufarm Americas Inc.

A concentrated, easy-to-mix water dispersible granule formulation that delivers excellent disease control and minimal spray residues. Use for disease control on turf, ornamentals, Christmas trees and various crops including: cucurbit vegetables, fruit vegetables, pome fruits, strawberries, non-bearing fruit vines and non-bearing fruit and nut trees.

REI 4 Hrs

Crop Protection

RATE 4-8oz per 100gal SIGNAL WORD Caution CHEMICAL FAMILY Polyoxins ACTIVE INGREDIENT Polyoxin D CONTROLS Alternaria, Anthracnose, Apple scab, Botrytis, Powdery mildew, Rhizoctonia aerial blight, Rhizoctonia, Scabs

8oz

NTS10500415

2.4lb

NTS10500324 Min. Buy 1 EA

Aliette[®] WDG Fungicide by Bayer CropScience, LP

Provides long lasting Phytophthora and Downy Mildew control. Aliette has a unique upward and downward systemic activity to protect the entire plant for up to 30 days. **REI 12 Hrs**

Min. Buy 1 EA

RATE 2.5-5.0 lbs per 100gal. SIGNAL WORD Warning CHEMICAL FAMILY Phosphonate

ACTIVE INGREDIENT Aluminum Tris CONTROLS Phytophthora, Pythium, Downy Mildew and more.

5lb

BYR84956465

Min. Buy 1 EA



Areca[®] Fungicide by OHP, Inc.

Areca is an up-and-down systemic fungicide that may be applied to a wide range of ornamental flowering and foliage plants for control of diseases caused by Pythium, Phytophthora and Downy Mildew pathogens. Areca may be used on ornamentals and bedding plants grown in field nursery, greenhouse, landscape and conifer nurseries.

REI 12 Hrs

SIGNAL WORD Caution CHEMICAL FAMILY Phosphonate ACTIVE INGREDIENT Aliminum tris CONTROLS Pythium, Phythophora, Downy Mildew, and more.

5lb OHP981145

Min. Buy 1 EA



Astun® Ornamental Fungicide

by OHP, Inc.

Astun Ornamental Fungicide provides preventative and early curative activity on botrytis diseases of plants grown in commercial greenhouses and nurseries. Astun is most effective when used as a protectant fungicide and applied before the disease damages the crop. **REI 12 Hrs**

RATE 10 to 17oz per 100gal. SIGNAL WORD Caution CHEMICAL FAMILY Thiopene amides ACTIVE INGREDIENT Isofetamid CONTROLS Botrytis

32oz

OHP981150



Banner[®] Maxx[®] II Fungicide by Syngenta Crop Protection

Banner Maxx II provides broad-spectrum control of foliar diseases on ornamentals grown in the landscape and outdoor nurseries. Works quickly and controls diseases for up to 28 days.

REI 24 Hrs SIGNAL WORD Warning CHEMICAL FAMILY Triazole ACTIVE INGREDIENT S-metolachlor CONTROLS Rusts, Phomopsis, Alternaria, Cercospora, Septoria leaf spots, Anthracnose, Scabs, Rhizoctonia.

Min. Buy 1 EA

 Igal AGENCY

 SYN39961
 Min. Buy 1 EA



Banol® Fungicide

by Bayer CropScience, LP

Banol is an outstanding control product for Pythium and Phytophthora. Labeled for turf applications and as a drench in greenhouse and container grown ornamentals.

REI 24 Hrs RATE 2 to 4oz per 1,000 sq ft.

SIGNAL WORD Caution CHEMICAL FAMILY Carbamates ACTIVE INGREDIENT Propamocarb hydrochloride CONTROLS Pythium and Phytophthora.

1gal **PROKZ4192957** 2.5gal **AGENCY**

BYR79895402

Min. Buy 1 EA

Min. Buy 1 EA



Banrot[®] Fungicide by ICL/Specialty Fertilizers

A broad spectrum fungicide for use in commercial greenhouses and nurseries to control damping-off, root and stem rot diseases of ornamental and nursery crops caused by Pythium, Phytophthora, Rhizoctonia, Fusarium and Thielaviopsis.

REI 12 Hrs

SIGNAL WORD Danger

CHEMICAL FAMILY Thiadiazole, Thiophanates

ACTIVE INGREDIENT Etridizaole, Thiophanate Methyl

CONTROLS Pythium, Phytophthora, Thielaviopsis, Fusarium, Rhizoctonia

40WP

Banrot 40 WP is a wettable powder formulation for liquid applications RATE 4-8oz per 100gal

2lb

EVR957252E Min. Buy 1 EA

8G

Banrot 8G is a granular formulation for incorporation into growing media RATE 8oz per 1cu yd

40lb

EVR950241E

Bayleton[®] 50WSP Fungicide by Bayer CropScience, LP

Bayleton 50 fungicide controls a broad spectrum of fungal diseases on flowers, foliage plants, shrubs, shade trees and turf grass. Packaged in 5.5 ounce water soluble packets for easy measuring.

Min. Buy 1 EA

REI 12 Hrs

RATE Two 5.5oz water soluble packets per acre.

SIGNAL WORD Caution

CHEMICAL FAMILY DeMethylation Inhibitor

ACTIVE INGREDIENT Triadmefon

CONTROLS Rhizoctonia, Fusarium, Gray and Pink Snow Mold

Min. Buy 1 EA

4 x 5.5oz Packets

PROKZ1578840

BotryStop® Biofungicide

by Bioworks Inc.

BotryStop is a biological fungicide for the control of Botrytis and Sclerotinia. Labeled for use on a wide variety of field or greenhouse grown vegetables, grapes and other small fruits. Also for use on ornamentals in the greenhouse or nursery. OMRI listed.

REI 4 Hrs

RATE 2 to 4lbs/100gal **SIGNAL WORD**

CHEMICAL FAMILY Biopesticide

ACTIVE INGREDIENT Ulocladium oudemansii (U3 strain) **CONTROLS** Botrytis and Sclerotinia.

12lb

BW1U98A61 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP





Broadform™ Fungicide by Bayer CropScience, LP

Broadform is a broad spectrum fungicide that helps maximize foliar disease control on key pathogens including Botrytis, leaf spot and dieback diseases. Two modes of action control multiple diseases that could be attacking the plant at a given time. Labeled for use on greenhouse and nursery-grown ornamentals, including fruits, nuts and Christmas trees.

REI 12 Hrs

RATE 2 to 8oz per 100gal SIGNAL WORD Caution CHEMICAL FAMILY Strobilurin + SDHI **ACTIVE INGREDIENT** Fluopyram and Trifloxystrobin **CONTROLS** Botrytis, Diplodia, Botryosphaeria and Phomopsis black spot, anthracnose, rusts, powdery mildew

12oz AGENCY BYR85758497

Min. Buy 1 EA

Camelot™ O Fungicide / Bactericide by SePRO Corporation

A liquid copper formulation using proven technology to provide broad-spectrum bacterial and fungal disease control on a wide variety of ornamental plants, greenhouse vegetable / herb crops and turf grass. Formulated with fixed copper combined with fatty acids to form a true soap providing outstanding performance. Requires minimal elemental copper for excellent disease control through its superior coverage ability and foliar adherence.

REI 4 Hrs

RATE 0.5 to 2gal per 100gal. **SIGNAL WORD** Caution **CHEMICAL FAMILY Compound** ACTIVE INGREDIENT Copper Octanoate **CONTROLS** Bacterial and Fungal pathogens.

1gal SEPRO19-0452A Min. Buy 1 EA



CEASE® Microbial Fungicide / Bactericide by Bioworks Inc.

Cease microbial fungicide controls a wide array of fungal and bacterial pathogens, both foliar and soil-borne. For use on ornamentals, trees, shrubs and greenhouse vegetables. OMRI listed.

OMRI

REI 4 Hrs

RATE 96 to 192oz per 100gal. OMR **SIGNAL WORD** Caution **CHEMICAL FAMILY Biopesticide ACTIVE INGREDIENT** Bacillus subtilis **CONTROLS** Botrytis, Powdery Mildew, Fusarium, Pythium and more. 1gal BW300100 Min. Buy 1 EA 2.5gal

BW1C19A24 Min. Buy 1 EA











Chipco[®] 26019 Fungicide by Bayer CropScience, LP

Broad spectrum fungicide for use as a spray, drench, or dip for the control of diseases on a wide range of ornamental plants and turf applications. REI 12 Hrs

RATE 32 to 80oz per 100gal SIGNAL WORD Warning **CHEMICAL FAMILY** Dicarboximide **ACTIVE INGREDIENT Iprodione CONTROLS** Phytophthora, Pythium, Downy Mildew, Brown Patch, Fusarium Blight and more.

2.5gal

Crop Protection

PROKZ4251007 Min. Buy 1 EA

Chipco[®] 26019 N/G Fungicide

by OHP, Inc.

Chipco 26019 is a broad spectrum fungicide that may be applied safely to a wide range of ornamental flowering and foliage plants, either as a foliar spray, drench, or dip.

REI 12 Hrs

RATE 1 to 2lbs per 100gal

SIGNAL WORD Caution **CHEMICAL FAMILY** Dicarboximides **ACTIVE INGREDIENT Iprodione**

CONTROLS Rhizoctonia, Fusarium, Botrytis and more.

2lb OHP981462



Companion[®] Biological Fungicide by Growth Products

Companion biological fungicide prevents, controls and suppresses soil and foliar diseases on greenhouse, nursery and ornamental crops. Companion's fast-colonizing beneficial rhizobacteria stimulate root growth and promote vigor while crowding out plant pathogens. **REI 4 Hrs**

SIGNAL WORD Caution **CHEMICAL FAMILY Biopesticide**

ACTIVE INGREDIENT Bacillus subtilis G803

CONTROLS Alternaria, Botrytis, Anthracnose, Fusarium,

Powdery Mildew and many more.

1aal

GRWP80110 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

2.5gal

GRWP80120 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Compass® 50WG Fungicide by Bayer CropScience, LP

Compass is a broad spectrum fungicide for the prevention and treatment of foliar and soil pathogens. Mesostemic and translaminar movement provides disease control in and around the plant tissue. REI 12 Hrs

RATE 2oz per 100gal.

SIGNAL WORD Warning **CHEMICAL FAMILY Strobilurin ACTIVE INGREDIENT Trifloxystrobin**

CONTROLS Fusarium, Rhizoctonia, Black Spot, Botrytis, Downy Mildew, Powdery Mildew and more. See label.

1lb

BYR2584569

Min. Buy 1 EA

Daconil Ultrex® Fungicide by Syngenta Crop Protection

A contact fungicide that exhibits a multi-site mode of action which can delay or prevent resistance to single-site fungicides. It contains a builtin surfactant to provide superior sticking power for extended coverage and unsurpassed protection of the leaf surface, even after heavy rains or watering Registered for control of 50 diseases on more than 75 ornamental plants and provides residual control for 14 to 21 days.

REI 12 Hrs RATE 2 to 3oz per 1,000sq ft. SIGNAL WORD Danger **CHEMICAL FAMILY Nitrile ACTIVE INGREDIENT 82.5% Chlorothalonil** CONTROLS Dollar Spot, Leaf Spot, Brown Patch, Anthracnose and more.

5lb AGENCY SYN31215



Daconil WeatherStik® Fungicide

by Syngenta Crop Protection

For control of turf and ornamental diseases. Works as a contact fungicide for the control of many turf and ornamental diseases and has low resistance risk. Sticks and stays for broad spectrum disease control for up to 14 days. Contains a sticking agent that keeps the fungicide on the plant.

Min. Buy 1 EA

REI 12 Hrs

RATE 2 to 3oz per 1,000sq ft. **SIGNAL WORD** Caution **CHEMICAL FAMILY Nitrile ACTIVE INGREDIENT 54% Chlorothalonil CONTROLS** Dollar Spot, Leaf Spot, Brown Patch, Anthracnose and more.

2.5gal AGENCY SYN31217

Daconil ZN® Fungicide

by Syngenta Crop Protection

For control of turf and ornamental diseases. Works as a contact fungicide for the control of many turf and ornamental diseases and has low resistance risk. Registered for control of 50 diseases on more than 75 ornamental plants. Provides residual control for 14 to 21 days. REI 12 Hrs

RATE 5oz per 1,000ga	ıl.	
SIGNAL WORD Dang	ler	
CHEMICAL FAMILY N	litrile	and the second
ACTIVE INGREDIENT	38.5% Chlorothalonil	100
CONTROLS Dollar Sp	ot, Leaf Spot, Brown Patch,	-
Anthracnose and m	ore.	1.0
		11 plan
2.5gal AGENCY		
SYN31214	Min. Buy 1 EA	

Min. Buy 1 EA

Decree® 50WDG Fungicide by SePRO Corporation

Protective and curative action with residual activity against Botrytis cinerea in ornamentals. Features a 12-hour REI that allows for Botrytis control in propagation and at retail, while 7-14 day residual control gives growers great value per application. Can be applied to flowers in bloom and poinsettias in full color with little detectible residue and no phytotoxicity.

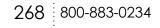
REI 12 Hrs RATE 1 to 1.5lb per 100gal. **SIGNAL WORD** Caution **CHEMICAL FAMILY Hydroxy Annelid ACTIVE INGREDIENT Fenhexamid CONTROLS** Botrytis



SEPRO19-0460

Min. Buy 1 EA







Eagle® 20EW Fungicide by Corteva Agriscience

Systemic protectant fungicide for use on ornamentals in greenhouses, nurseries and landscapes as well as turf and golf applications. Controls key diseases like powdery mildew, rust, scab and anthracnose. REI 24 Hrs

RATE 1 to 2oz per 1,000sq ft.

SIGNAL WORD Caution

CHEMICAL FAMILY Triazole

ACTIVE INGREDIENT Mycolobutanil

CONTROLS Anthracnose, Brown Spot, Dollar Spot, Fusarium, Powdery Mildew and more.

Min. Buy 1 EA

Min. Buy 1 EA

160z

DOW173917

1gal DOW19-2505B

EcoSwing® Botanical Fungicide

by Gowan EcoŚwing botanical fungicide controls fungal diseases on outdoor and greenhouse food crops, ornamental plants, flowers, trees and shrubs. OMRI listed.

REI 4 Hrs

RATE 24 to 32oz per Acre

SIGNAL WORD Caution

CHEMICAL FAMILY Botanical

ACTIVE INGREDIENT Swinglea glutinosa **CONTROLS** Botrytis, Powdery Mildew, Alternaria, Stem rots

32oz GOW76811



Empress[®] Intrinsic[®] Fungicide

by BASF Corp

Drench application with Empress fungicide will protect young, susceptible plants from root-infecting pathogens in rooted plug, propagation and transplant stages of production. Intrinsic brand fungicides enhance growth efficiency for strong, dense root growth. REI 12 Hrs

RATE 3 to 6oz per 100gal

SIGNAL WORD Warning **CHEMICAL FAMILY Strobilurin ACTIVE INGREDIENT** Pyraclostrobin **CONTROLS** Fusarium, Phytophthora, Pythium, Rhizoctonia.

24oz BAS59014402

Min. Buy 1 EA

Exotherm Termil Fungicide

by Allpro

A protectant fungicide for use on certain ornamentals and should be applied prior to the development of disease. For use in commercial greenhouses only. This product ignites and vaporizes leaving a fine dust like particle which thoroughly covers the plants in an enclosed greenhouse. REI 12 Hrs

RATE One 5.25oz can treats up to 1,000sq ft.

SIGNAL WORD Danger

CHEMICAL FAMILY Nitrile

ACTIVE INGREDIENT Chlorothalonil

CONTROLS Leafspots and Foliar Blights, Flower Spots and Blights, Phytophthora Leaf Blight, Dieback, Powdery Mildew, Rusts and more.

20 x 5.25oz VGS12250 Min. Buy 1 EA SHIPPING INFO RESTRICTED



Fame[®] SC Fungicide

For the control of foliar, stem and root diseases in turf and ornamentals. Foliar spray or soil drench applications providing fast penetration into leaf tissues and rain fast within 15 minutes. For commercial production and in landscape areas around residential, municipal and commercial properties, field grown ornamentals and ornamentals in greenhouses, interiorscapes and other enclosed structures. RE

KEI 12 Hrs	1.1
RATE 1 to 4oz per 100gal	15
SIGNAL WORD Caution	1
CHEMICAL FAMILY Strobilurin	
ACTIVE INGREDIENT Fluoxastrobin	-
CONTROLS Anthracnose, Brown Spot, Dollar Spot, Fusarium,	- 100 C
Powdery Mildew and more.	♥ Fame

16oz AGENCY FMC10064759

Fenstop™ Fungicide by Bayer CropScience, LP

Used for the prevention and control of downy mildew, Phytophthora and Pythium on commercially grown ornamentals in greenhouses. It can be applied as a drench or foliar application.

Min. Buy 1 FA

REI 12 Hrs

RATE 7 to 14oz per 100gal SIGNAL WORD Warning

CHEMICAL FAMILY Imidazolinone

ACTIVE INGREDIENT Fenamidone

CONTROLS Phytophthora, Pythium, Downy Mildew, and more.

Min. Buy 1 EA

32oz AGENCY BYR84983705

Heritage[®] WDG Fungicide by Syngenta Crop Protection

A broad-spectrum fungicide for control of more than 33 diseases including all four classes of pathogens. Labeled for use on greenhouse ornamentals, vegetable and herb plants, fruit and nut trees. **REI 4 Hrs**

RATE 1 to 4oz per 100gal

SIGNAL WORD Caution CHEMICAL FAMILY Strobilurin

ACTIVE INGREDIENT Azoxystrobin

CONTROLS Phomopsis Blight, Alternaria Leaf Spot, Downy Mildew, Anthracnose, Rose Blackspot, Powdery Mildews, Rusts, Botrytis,

Rhizoctonia, Sclerotium, Fusarium

11b AGENCY	
SYN74240	1
6lb AGENCY	
SYN74818	1

Min. Buy 1 EA

Min. Buy 1 EA









Insignia[®] SC Intrinsic[®] Fungicide

Insignia is a turf and landscape ornamental fungicide in a liquid formulation for easier handling and mixing. Controls key diseases for up to 28 days. Rainfast within 1 hour.

REI 4 Hrs

Crop Protection

RATE 0.4 to 0.7oz per 1,000sq ft

SIGNAL WORD Warning

CHEMICAL FAMILY Strobilurin ACTIVE INGREDIENT Pyraclostrobin

CONTROLS Anthracnose, Brown Patch, Fusarium Patch, Leaf Spot, Snow Mold, Rhizoctonia and more.

30.5oz AGENCY

BAS59012451

Min. Buy 1 EA

Kalmor [®] Fungicide / Bactericide by OHP, Inc.

Kalmor is a fungicide/bactericide for prevention and control of diseases on a variety of plants and crops. Labeled for use on greenhouse and ornamental crops, fruits, vegetable and tree crops.

REI 24 Hrs RATE 1 to 2lbs per 100gal **SIGNAL WORD** Caution **ACTIVE INGREDIENT** Copper Hydroxide CONTROLS Anthracnose, Botrytis, Bacterial and fungal leaf spot, and more. OMRI

2.5gal OHP984900

Min. Buy 1 EA

KleenGrow™ Disinfectant + Bactericide + Algaecide + Fungicide by Pace 49 Inc. KleenGrow™ is a biodegradable, 4th generation DDAC quaternary

ammonium which provides curative and preventative broad - spectrum control of algae, fungi, and bacteria on greenhouse flowers and ornamentals. KleenGrow can safely be applied as a spray, drench, or drip on crops, from propagation, bulbs/seeds, to finished crops, while offering residual disease control by way of membrane disruption with no worry of crop resistance. Kleengrow can also be used to control algae, bacteria, and viruses on hard surfaces. Product can safely be used to disinfect greenhouse structures, floors, benches, cool pads, irrigation lines, plastic pots/trays, tools, coolers, and in footbaths to reduce the spread of algae and diseases.

REI 12 Hrs - For Recirculated Water, 48 Hrs - For Use On Crops

RATE 6-25oz per 100gal (see label for rate per crop size)

SIGNAL WORD Danger

CHEMICAL FAMILY Quaternary Ammonium

ACTIVE INGREDIENT Didecyldimethyl ammonium chloride

CONTROLS Algae, foliar diseases, crown and root rots, Powdery Mildew, Botrytis, Pythium, Phytophthora, Fusarium, Erwinia and Xanthomonas

1aal

PAC4919-0603I Min. Buy 1 FA SHIPPING INFO SHIPS HAZ 5gal

PAC4919-0603J Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

30gal Drum

PAC4919-0603K Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

55gal Drum

PAC4919-0603B Min. Buy 1 EA SHIPPING INFO SHIPS HAZ



Medallion[®] WDG Fungicide by Syngenta Crop Protection

Formulated as a water dispersible granule, providing growers with a more user-friendly way to control major foliar, root and stem diseases. Delivers 21-28 day residual control as a drench and 7-14 day residual control as a foliar spray. Labeled for use in greenhouses, shade houses, outdoor nurseries, interiorscapes and landscapes.

REI 12 Hrs

RATE 1 to 4oz per 100gal	1
SIGNAL WORD Caution	
CHEMICAL FAMILY Phenylpyrrole	
ACTIVE INGREDIENT Fludioxonil	-
CONTROLS Botrytis, Fusarium, Rhizoctonia and more.	

8oz AGENCY

SYN51008

Min. Buy 1 EA



Micora[®] Fungicide

by Syngenta Crop Protection

Provides immediate contact protection and long-lasting disease control by locking to the leaf surface and slowly flowing into the leaf over an extended period of time. May be used as a spray to control downy mildew diseases and stem blights caused by Phytophthora spp. or as a drench to control Phytophthora crown and root rots on a variety of crops. **REI 4 Hrs**

RATE 4 to 8oz per 100gal SIGNAL WORD **CHEMICAL FAMILY** Carboxylic Acid Amide ACTIVE INGREDIENT Mandipropamid **CONTROLS** Downy Mildew and Phytophthora.

32oz AGENCY

SYN47280 Min. Buy 1 EA

MilStop[®] Fungicide by Bioworks Inc.

MilStop is a broad spectrum foliar fungicide. Highly effective on powdery mildews, it also helps prevent other foliar diseases. Use sites include greenhouse, nursery and field crops. It can also be used on interiorscapes and woody herbs. OMRI listed.

REI 1 Hr	
RATE 2lbs per 100gal	
SIGNAL WORD Caution	1.2
CHEMICAL FAMILY Bicarbonate	and the second sec
ACTIVE INGREDIENT Potassium bicarbonate	
CONTROLS Powdery mildew	
T A A A A A A A A A A A A A A A A A A A	
5lb	Wilstop

BW1M17B04 Min. Buy 1 EA

25lb BW1M17A06 Min. Buy 1 FA SHIPPING INFO DIRECT SHIP



Mural[®] Fungicide

by Syngenta Crop Protection

Two active ingredients provide broad-spectrum disease control in one versatile solution. Powered by an advanced generation SDHI and Heritage® fungicide to control the widest range of root diseases in ornamental and vegetable plants. Mural provides control of key foliar, stem and root diseases including Botrytis, Rhizoctonia and leaf spots like powdery mildew and anthracnose. Provides disease control in both nursery and greenhouse operations and prevents and controls more than 50 root and foliar diseases.

REI 12 Hrs RATE 4 to 7oz per 100gal SIGNAL WORD Warning CHEMICAL FAMILY Strobilurin + SDHI ACTIVE INGREDIENT Azoxystrobin, Benzovindiflupyr **CONTROLS** Botrytis, Fusarium, Rhizoctonia and more.

Min. Buy 1 EA

11b AGENCY SYN56731







Fungicide & Insecticide Multipack



Mural[®] + Mainspring[®] GNL Fungicide / Insecticide by Syngenta Crop Protection

Mural fungicide and Mainspring GNL insecticide together in one multipak offers protection from ornamental diseases and pests at savings of 15% over individual prices. Multipak contains 3lbs of Mural and 2 pts of Mainspring

REI 12 Hrs

SIGNAL WORD

CHEMICAL FAMILY

ACTIVE INGREDIENT Mainspring-Cyantraniliprole, Mural-Azoxystrobin, Benzovindiflupyr

CONTROLS Aphids, Thrips, Whiteflies and more as well as ornamental diseases.

Multipack / Contains 3lb Mural® & 2ea 16oz Mainspring® GNL AGENCY SYN60500 Min. Buy 1 EA

Fungicides & Bactericides

BRANDT Nordox 75 WG Fugicide by **BRANDT**

A high performance natural copper fungicide / bactericide for high retention and effectiveness in adverse weather conditions. A wettable granule used to control fungal and bacterial diseases on fruits, vegetables, flowers and ornamentals.

REI 12 Hrs when used in enclosed structures

SIGNAL WORD Caution

CHEMICAL FAMILY Inorganic Copper

ACTIVE INGREDIENT Cuprous Oxide **CONTROLS** Anthracnose, Fusarium, Downy Mildew

and many more.

12.5lb

BRANDT3000-01-020 Min. Buy 1 EA

Obtego Fungicide by SePRO Corporation

Obtego Fungicide and Plant Symbiont serves as a multi-functional tool for growers by protecting the plant from damaging soil-borne pathogens and enhancing root growth. Obtego and plant roots live in a mutually beneficial symbiosis. As Obtego colonizes the root system, the Obtego fungi promote competition and parasitism of plant damaging pathogens in the soil.

REI 4 Hrs

RATE 2.5 to 7.5oz per 100gal

SIGNAL WORD Caution

CHEMICAL FAMILY Biological

ACTIVE INGREDIENT Trichoderma asperellum (ICC 012), T. gamsii (ICC 080) CONTROLS Fusarium, Phytophthora, Pythium, Rhizoctonia, Sclerotium

New

OMR

11b AGENCY

SEPRO1017121 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

5lb AGENCY

SEPRO101045 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Orkestra® Intrinsic® Fungicide by BASF Corp

Fungicides & Bactericides

Orkestra Intrinsic brand fungicide provides nursery and greenhouse growers with fast, long-acting disease control during production, resulting in healthier, more consistent, high guality plants. Orkestra Intrinsic brand fungicide provides preventive, early curative and residual protection against key ornamental diseases, quickly stopping the growth of fungal cells. Delivers dual modes of action for better efficacy and resistance management.

REI 12 Hrs

RATE 4 to 10oz per 100 gal SIGNAL WORD Warning **CHEMICAL FAMILY Strobilurin + SDHI ACTIVE INGREDIENT Fluxapyroxad & Pyraclostrobin** CONTROLS Botrytis, rust, powdery mildew, downy mildew,

anthracnose, leaf spots, thielaviopsis, aerial phyophthora

16oz AGENCY	
BAS59014379	Min. Buy 1 EA
80oz AGENCY	
BAS59016487	Min. Buy 1 EA

Orvego[®] Fungicide by BASF Corp

Controls Phytopthora and Downey Mildew on ornamentals. Orvego offers a quick knockdown of spoors to stop the disease from spreading. Use in the greenhouse, nursery, landscape and interiorscapes. REI 12 Hrs

RATE 11 to 14oz per 100gal

SIGNAL WORD Caution

CHEMICAL FAMILY Triazolo-Pyrimidylamines + Cinnamic Acid Amines

ACTIVE INGREDIENT Amectoctradin & Dimethomorph **CONTROLS** Phytopthora, Downey Mildew.

2807

BAS59012736 Min. Buy 1 EA

OxiPhos® Fungicide / Bactericide by BioSafe Systems

OxiPhos® is a systemic bactericide/fungicide for use on greenhouse and nursery crops, turf, and fruits, vegetables, and herbs. OxiPhos targets pythium, phytophthora, bacterial blights, downy mildew, and more! Use OxiPhos throughout the growing season to both prevent and control plant pathogens. OxiPhos has a dual mode of action (systemic and contact) and can be applied as a foliar spray, root drench or tank mixed with ZeroTol® 2.0 and AzaGuard®. **REI 4 Hrs**

RATE 42oz per 100gal

SIGNAL WORD Danger/Corrosive **CHEMICAL FAMILY** Neutralized Phosphorous Acid ACTIVE INGREDIENT Phosphorus acid and Hydrogen Peroxide

CONTROLS Pythium, Phytophthora and Downy Mildew

2.5gal

BSF7700-2.5 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ





Crop Protection

OxiPhos



Pageant[®] Intrinsic[®] Fungicide

Pageant is a broad-spectrum fungicide that is effective on many plant diseases. Pageant Intrinsic brand fungicide also provides plant health benefits such as improved tolerance to stress and increased efficiency of plant processes.

REI 12 Hrs

Jrop Protection

RATE 4 to 18oz per 100gal SIGNAL WORD Caution CHEMICAL FAMILY Strobilurin + SDHI ACTIVE INGREDIENT Boscalid & Pvraclostrobin **CONTROLS** Alternaria, Botrytis, Cercospora,

Cladosporium, Cylindrocladium, Fusarium, Helminthosporium, Phomopsis, Phytophthora,

Pythium, Rhizoctonia, leaf spots.

11b AGENCY

BAS59012349 Min. Buy 1 EA 12lb AGENCY BAS59012429 Min. Buy 1 EA

Pageant[®] TR Intrinsic[®] Fungicide

Pageant is a broad-spectrum fungicide that is effective on many plant diseases. Pageant Intrinsic brand fungicide also provides plant health benefits such as improved tolerance to stress and increased efficiency of plant processes. Can also be used in the cargo area of trucks to protect plants during transportation.

REI 12 Hrs

RATE One can covers up to 3,000 sq ft.

Must be used in a closed greenhouse or truck.

SIGNAL WORD Caution

CHEMICAL FAMILY Strobilurin + SDHI

ACTIVE INGREDIENT Boscalid & Pyraclostrobin

CONTROLS Alternaria, Botrytis, Cercospora, Cladosporium, Cylindrocladium, Fusarium, Helminthosporium, Phomopsis,

Min. Buy 1 EA

Phytophthora, Pythium, Rhizoctonia, leaf spots.

3oz

```
BAS59012766
```

Palladium® Fungicide

by Syngenta Crop Protection

Combines two active ingredients to provide contact and systemic activity. Effective on a wide range of foliar and stem diseases found in the nursery and greenhouse, including Botrytis, Rhizoctonia, powdery mildew and certain leaf-spotting and stem rot pathogens. Provides preventive and curative disease control with 7-14 days of residual activity.

REI 12 Hrs

RATE 2 to 4oz per 100gal

SIGNAL WORD Danger CHEMICAL FAMILY Anilo-Pyrimidine + Phenylpyrrole **ACTIVE INGREDIENT** Cyprodinil and Fludioxonil **CONTROLS** Botrytis, Fusarium, Rhizoctonia and more.

21b AGENCY SYN38781

Min. Buy 1 EA

Phyton 27® Fungicide + Bactericide by Phyton Corp

A broad-spectrum, systemic bactericide + fungicide that has proven effective against many pathogens, including Botrytis (gray mold), Bacterial Leaf Spot, Powdery Mildew and more. Its active ingredient is absorbed into the plant's vascular tissue where it can move up, down and across the plant, killing pathogens that attack internal plant tissues. With a residual of up to 21 days, it provides long-lasting protection, leaves no visible residue and helps to enhance overall plant health.

REI 24 Hrs RATE 13 to 25oz per 100gal

SIGNAL WORD Danger

CHEMICAL FAMILY Copper Compound **ACTIVE INGREDIENT** Copper Sulfate Pentahydrate

CONTROLS Anthracnose, Apple Scab, Bacterial Blight, Black Spot, Botrytis, Cedar Apple Rust, Colletotrichum, Crown Gall, Cylindrocladium, Dothistroma, Downy Mildew, Entomosporium, Erwinia, Fireblight, Phytophthora, Powdery Mildew, Pseudomonas, Rhizoctonia, Rust, Scab, Verticillium, Xanthomonas

1 Liter (33.8oz) PHTNP27-101031 Min. Buy 1 EA laa

PHTNP27-101011 Min. Buy 1 EA



Phyton 35[®] Fungicide + Bactericide by Phyton Corp

A broad-spectrum, systemic bactericide + fungicide that has proven effective against many pathogens, including Botrytis (gray mold), Bacterial Leaf Spot, Powdery Mildew and more. Its active ingredient is absorbed into the plant's vascular tissue where it can move up, down and across the plant, killing pathogens that attack internal plant tissues. With a residual of up to 21 days, it provides long-lasting protection, leaves no visible residue and helps to enhance overall plant health.

REI 24 Hrs

RATE 13 to 25oz per 100gal SIGNAL WORD Danger

CHEMICAL FAMILY Copper Compound **ACTIVE INGREDIENT** Copper Sulfate Pentahydrate

CONTROLS Anthracnose, Apple Scab, Bacterial Blight, Black

Spot, Botrytis, Cedar Apple Rust, Colletotrichum, Crown

Gall, Cylindrocladium, Dothistroma, Downy Mildew, Entomosporium, Erwinia, Fireblight, Phytophthora, Powdery Mildew, Pseudomonas, Rhizoctonia, Rust, Scab, Verticillium, Xanthomonas.

Min. Buy 1 EA

1 Liter (33.8oz)

PHTNP35-300034

1aal PHTNP35-300128 Min. Buy 1 EA







272 : 800-883-0234





Pipron[®] Fungicide by SePRO Corporation

Fast, reliable control of powdery mildew for greenhouse ornamentals. Pipron is a contact fungicide, which provides excellent eradication activity on powdery mildew. It is fast acting, reliable and nonphytotoxic to most species. Pipron boasts a visible mildew kill the same day as it is used, but has no residual activity.

REI 12 Hrs

RATE 4 to 8oz per 100gal SIGNAL WORD Warning

CHEMICAL FAMILY Dichlorobenzoate **ACTIVE INGREDIENT** Piperalin **CONTROLS** Powdery mildew

3207

SEPRO19-0560

Min. Buy 1 EA

PreFence[™] Biofungicide by Bioworks Inc.

PreFence biofungicide for control of seed rot, root and stem rot and wilt diseases. Labeled for use on greenhouse ornamentals and vegetables, tree seedlings and turf.

REI 4 Hrs

SIGNAL WORD Caution

CHEMICAL FAMILY

ACTIVE INGREDIENT Streptomyces sp. Strain K61

CONTROLS Fusarium, Alternaria, Phomopsis, Pythium,

Phytophthora and Rhizoctonia

5g BW1ST105A64 Min. Buy 1 FA SHIPPING INFO DIRECT SHIP

25g

BW1ST105A65 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

100g

BW1ST105A44 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

ProStar[®] 70WG Fungicide by Bayer CropScience, LP

ProStar WG is a locally systemic fungicide that includes control of Rhizoctonia and rust diseases. It is the standard control for Sclerotium rolfsii (Southern blight).

OMR]

REI 12 Hrs RATE 3 to 12 oz per 100 gal

SIGNAL WORD Caution

CHEMICAL FAMILY Benzamides

ACTIVE INGREDIENT Flutolanil CONTROLS Fairy Ring, Brown Patch, Gray Snow Mold, Southern Blight and more.

Min. Buy 1 EA

3lb

BYR80007809

Don't See What You Need?

Use the BFG Mobile App or visit www.bfgsupply.com to see a much larger selection of Fungicides.

Protect™DF Fungicide by Nufarm Americas Inc.

Protect DF fungicide provides control of many key diseases in commercial turf, field ornamentals and shade trees, golf courses, groundcovers and herbaceous plants.

REI 24 Hrs

RATE 6 to 8oz per 1,000sq ft	
SIGNAL WORD Caution	
CHEMICAL FAMILY Dithiocarbamate	Peter
ACTIVE INGREDIENT Mancozeb	-
CONTROLS Rust, Leaf Spot, Red Thread, Copper Spot.	1
Fusarium and more.	and the second second

6lb

NTS10506660 Min. Buy 1 EA



PVent controls soil-borne plant pathogens and foliar pathogen. It is labeled for use on greenhouse and nursery crops and agricultural crops grown indoors. Application can be made by soil substrate, hydroponic solution incorporation, drench or foliar spray. PVent consists of living microbes. Store unopened packages for up to 12 months in a cool dry place (below 41°) or up to 2 weeks at room temperature (maximum 77°).

REI 4 Hrs

CHEMICAL FAMILY Biological

ACTIVE INGREDIENT Gliocladium catenulatum Strain J1446 CONTROLS Botrytis, Phytopthora, Pythium, Rhizoctonia and many more.

Min. Buy 1 EA

See label for complete list.

0.5lb Bag

BSF69012 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

11b Bag BSF6901

SHIPPING INFO DIRECT SHIP Case of 12 x .5lb Bags

BSF6900012 Min. Buy 12 EA SHIPPING INFO DIRECT SHIP

Case of 12 x 1lb Bags BSF6900001 Min. Buy 12 EA SHIPPING INFO DIRECT SHIP

Case of 6 x 2.2lb Baas

BSF6900022 Min. Buy 6 EA SHIPPING INFO DIRECT SHIP

Regalia® CG Fungicide / Bactericide

by Marrone Bio Innovations Regalia's unique mode of action of Induced Systemic Resistance (ISR) brings a sustainable option to help simplify and extend your IPM program. It can be used as a stand-alone product, in rotation with or in combination with other fungicides to strengthen IPM programs and to help manage resistance in organic & conventional crops, and turf and ornamentals. Regalia also improves the crop's tolerance to

OMRI

stress by enhancing overall plant health. REI 4 Hr RATE 0.5 to 1gal per 100gal SIGNAL WORD Caution CHEMICAL FAMILY Biofungicide

ACTIVE INGREDIENT Extract of Reynoutria sachalinensis

CONTROLS Controls: Alternaria, Anthracnose, Black Spot, Botrytis, Downy Mildews, Phytophthora, Rhizoctonia, Powdery Mildew

Min. Buy 1 EA

Min. Buy 1 EA

1at MB10084

1aal MB10081







Nen

Crop Protection



New





Fungicides & Bactericides Protects by growing on roots "shielding" them against root of manging fungi. One application provides up to 2 weeks of protection. Releases enzymes that dissolve the cell wall of protection. Releases enzymes that dissolve the cell wall of protection. Releases enzymes that dissolve the cell wall of protection. Releases enzymes that dissolve the cell wall dissolve the cell wall of protection. Releases enzymes that dissolve the cell wall of protection. Releases enzymes that dissolve the cell wall of protection. Releases enzymes that dissolve the cell wall dissolve the cell wall of protection. Releases enzymes that dissolve the cell wall dissolve the cell wall of protection. Releases control of major soil borne root gives preventative control of major soil borne root diseases. Direct ship only. diseases. Direct ship only. Image: Control of the cont





REI 0 Hrs SIGNAL WORD Caution CHEMICAL FAMILY Biological ACTIVE INGREDIENT Trichoderma harzianum Rifai strain T-22 CONTROLS Soilborne plant pathogens and root diseases.

101b

BW2H03A05 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

40lb BW2H03A08 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

500lb BW2H03A10 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

1,000lb
BW2H03A11 Min. Buy 1 EA
SHIPPING INFO DIRECT SHIP

RootShield[®] WP Biofungicide by Bioworks Inc.



REI 0 Hrs SIGNAL WORD Caution CHEMICAL FAMILY Biological ACTIVE INGREDIENT Trichoderma harzianum Rifai strain T-22 CONTROLS Soilborne plant pathogens and root diseases.

3lb

BW2H02A03 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

1lb

BWRSWP1 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

30lb

BW2H02A07 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

RootShield[®] Plus G Biofungicide by Bioworks Inc.

101



10.01

REI 0 Hrs SIGNAL WORD Caution CHEMICAL FAMILY Biological ACTIVE INGREDIENT Trichoderma harzianum Rifai strain T-22 and Trichoderma virens strain G-41 CONTROLS Pythium, Rhizoctonia, Fusarium, Cylindrocladium, Thielaviopsis

Granules

BW2HR46A05 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

40lb

BW2HR46A08 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

500lb

BW2HR46A10 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

1,000lb

BW2HR46A11 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

RootShield[®] Plus WP Biofungicide by Bioworks Inc.



REI 0 Hrs SIGNAL WORD Caution CHEMICAL FAMILY Biological ACTIVE INGREDIENT Trichoderma harzianum Rifai strain T-22 and Trichoderma virens strain G-41

CONTROLS Pythium, Rhizoctonia, Fusarium, Cylindrocladium, Thielaviopsis

3/b BW2HR45A03 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

11b BW2HR45A02 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

30/b BW2HR45A07 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP



Regime[™] Fungicide

Regime is a biological fungicide for the control of Botrytis and Powdery Mildew in flowering ornamentals. Regime has minimal toxicity to pollinators and beneficial insects.

Multisite mode of action with no known disease resistance.

REI 4 Hrs

RATE 20 to 45oz per acre

SIGNAL WORD Caution

CHEMICAL FAMILY Botanical

ACTIVE INGREDIENT banda de Lupinus albus doce (BLAD) **CONTROLS** Botrytis and Powdery Mildew.

1gal AGENCY

FMC10078122

Min. Buy 1 EA

Segovis® Fungicide

by Syngenta Crop Protection

Segovis® fungicide sets a higher standard for control of downy mildew and Phytophthora spp. diseases. Its strong activity and systemic properties provide long-lasting control when applied as a drench or foliar spray at low use rates. Novel mode of action provides a good tool for growers to diversify rotation programs and manage resistance concerns.

REI 4 Hrs

RATE 0.6 to 3.2oz per 100gal

SIGNAL WORD Warning

CHEMICAL FAMILY Piperidinyl-Thiazole-Isoxazolines **ACTIVE INGREDIENT** Oxathiapiprolin

CONTROLS Downy Mildew, Phytophthora.

160z SYN58199

Min. Buy 1 EA

Segway O® Fungicide

by OHP, Inc.

A flowable suspension concentrate formulation that controls Pythium, crown and root rots, and aerial phytophthora and downy mildews on ornamental plants grown in commercial greenhouses and nurseries. Should be utilized as a protectant fungicide and applied before conditions are favorable for disease development. Depending on disease pressure, Segway O offers protection for a period of 7 to 28 days.

REI 12 Hrs

RATE 1.5 to 6oz per 100gal **SIGNAL WORD** Caution **CHEMICAL FAMILY** Cyanoimidazole **ACTIVE INGREDIENT** Cyazofamid **CONTROLS** Pythium, Phytophthora, Downy Mildew.

16oz

640z

OHP987245

OHP987200

Min. Buy 1 EA



Spectro[®] 90WDG Fungicide by Nufarm Americas Inc.

Spectro 90 WDG combines two broad-spectrum fungicides to deliver contact and systemic protection. It prevents and controls disease in turf, annual and perennial flowers, as well as bedding plants, groundcovers and trees and shrubs.

REI 12 Hrs

RATE 1 to 2lbs per 100gal SIGNAL WORD Danger

CHEMICAL FAMILY Chloronitrile, Thiophanate

ACTIVE INGREDIENT Chlorothalonil and Thiophanate -methyl

CONTROLS Anthracnose, Brown Rot, Leaf Scabs, Fusarium, Rhizoctonia and many more.

5lb

NTS10501045

Min. Buy 1 EA

Spirato® GHN Fungicide by Nufarm Americas Inc.

Spirato GHN fungicide controls foliar, stem and root diseases in ornamentals grown in greenhouses and landscapes. Also labeled for control of certain diseases on select vegetable plants.

REI 12 Hrs

RATE 2 to 4oz per 100gal SIGNAL WORD Caution CHEMICAL FAMILY Phenylpyrroles **ACTIVE INGREDIENT Fludioxanil**

CONTROLS Rhizoctonia, Botrytis, Fusarium and more.

16oz NTS10726861

Stature[®] SC Fungicide by BASF Corp

A flowable formulation of dimethomorph. Proven performance for preventative control of Phytophthora and Downy mildew diseases. Can be applied as a spray, drench, or through chemigation. REI 12 Hrs

RATE 3.06 to 12.25oz per 100gal SIGNAL WORD Caution CHEMICAL FAMILY Cinnamic Acid Amide **ACTIVE INGREDIENT Dimethomorph CONTROLS** Downy Mildew, Aerial Phytophthora, Phytophthora Root/Crown/Stem Rot

Min. Buy 1 EA

Min. Buy 1 EA

25oz

BAS59011288

Subdue MAXX[®] Fungicide by Syngenta Crop Protection

A systemic fungicide that provides control of damping off, root and stem diseases caused by Pythium and Phytophthora as well as foliar diseases including Downy Mildew. Labeled for use on ornamentals, foliar and flowering plants, non bearing fruit and nut trees and landscapes and interiorscapes.

REI 48 Hrs

RATE 1oz per 100gal **SIGNAL WORD** Caution **CHEMICAL FAMILY Aclymine** ACTIVE INGREDIENT Mefenoxam **CONTROLS** Phytophthora, Pythium, Downy Mildew.

Min. Buy 1 EA

Min. Buy 1 EA

32oz		
CH14	9	
1gal	AGENCY	
SYN5	3195	





New



Subdue[®] G Fungicide by Syngenta Crop Protection

A granular formulation of Subdue Maxx. Use on bedding plants, flowers, perennials, shrubs and other ornamental plants in outdoor landscapes and interiorscapes to control damping-off, downy mildew and root and stem rot diseases caused by Pythium and Phytophthora. Apply either as a soil surface application or incorporate into the soil at the time of seeding and transplanting.

REI 48 Hrs

Crop Protection

RATE 1.6 to 8oz per cubic yard SIGNAL WORD Caution **CHEMICAL FAMILY** Aclymine **ACTIVE INGREDIENT** Mefenoxam CONTROLS Phytophthora, Pythium, Downy Mildew.

Min. Buy 1 EA

25lb

SYN53181



Subtilex[®] NG Biofungicide by BASF Corp

A biological fungicide for treatment of greenhouse crops. Subtilex contains bacteria that colonize developing root systems and suppress disease organisms. Protection against root and soil borne pathogens is extended throughout the growing season as bacteria grow with the roots.

REI 4 Hrs

RATE 0.3oz per 100gal **SIGNAL WORD** Caution **CHEMICAL FAMILY Biopesticide ACTIVE INGREDIENT** Bacillus subtilis strain MBI 600 CONTROLS Botrytis, Fusarium, Rhizoctonia, Pythium.

2oz

BAS59013343 Min. Buy 1 EA

TerraClean® 5.0 Fungicide / Bactericide

by Biosafe Systems

TerraClean 5.0 suppresses soil-borne pathogens by penetrating the soil and treating the root zone to reduce Pythium, Phytophthora and other pathogens. TerraClean uses an oxidation chemical reaction to kill bacteria, fungus and spores.

REI 0 Hrs

RATE 25oz per 200gal SIGNAL WORD Danger **CHEMICAL FAMILY** Peracetic Acid

ACTIVE INGREDIENT Hydrogen Dioxide and Peroxyacetic Acid

CONTROLS Soil-borne pathogens.

5gal

BSF6300-5 SHIPPING INFO SHIPS HAZ

Min. Buy 1 EA OMR





An effective ornamental soil fungicide for prevention and control of soil borne diseases caused by Rhizoctonia solani and other soil borne diseases. For use on ornamentals and vegetable bedding plants. Works primarily as a preventative agent through contact activity and should be applied before disease symptoms appear in order to achieve optimum results. Applications at first sign of disease have curative properties as well.

REI 12 Hrs

Subdue GR

RATE 6 to 12oz per 100gal SIGNAL WORD Caution **CHEMICAL FAMILY** Aromatic Hydrocarbons ACTIVE INGREDIENT PCNB CONTROLS Root Rot/Stem Rot, Bulb Rot/Crown Rot, Magnolia Leaf Spot.

1gal OHP988464

Min. Buy 1 EA

Terraguard[®] SC Fungicide by OHP, Inc.

A locally systemic fungicide that provides protection of hard to control diseases. Can be used as a cutting soak, soil drench, foliar spray or through chemigation for control of diseases on ornamental plants grown in enclosed commercial structures such as greenhouses, shade houses and interiorscapes. It prevents diseases from attacking leaf surfaces as it penetrates the plant where applied to stop disease development.

REI 12 Hrs

SIGNAL WORD Caution CHEMICAL FAMILY Imidazole **ACTIVE INGREDIENT Triflumizole CONTROLS** Rhizoctonia, Powdery Mildew, Thielaviopsis and more.

Min. Buy 1 EA





Terrazole® 35W Fungicide by OHP, Inc.

An effective soil fungicide for prevention and control of dampingoff, root rot and stem diseases caused by Pythium and Phytophthora species in ornamental, nursery crops and golf course tees and greens. REI 12 Hrs

RATE 3.5 to 10 oz per 100gal SIGNAL WORD Caution **CHEMICAL FAMILY Thiadiazole ACTIVE INGREDIENT Etridiazole CONTROLS** Pythium and Phytophthora.

2lbOHP988472

Terrazole® L Fungicide

by OHP, Inc. An effective soil fungicide for prevention and control of dampingoff, root rot and stem diseases caused by Pythium and Phytophthora

Min. Buy 1 FA

Min. Buy 1 EA

species in ornamental, nursery crops and golf course tees and greens. REI 12 Hrs RATE 2.5 to 7 oz per 100gal

SIGNAL WORD Danger **CHEMICAL FAMILY** Thiadiazole **ACTIVE INGREDIENT Etridiazole CONTROLS** Pythium and Phytophthora.

32oz OHP988478





@TerraClean 5.0

Tourney[®] Fungicide by Nufarm Americas Inc.

Controls a broad spectrum of diseases affecting outdoor woody ornamental plants in nursery and landscape settings, including powdery mildew, apple scab, rusts, leaf spots, anthracnose and Rhizoctonia root and crown rot-all with just one product. Also takes out tough diseases in turf like anthracnose, brown patch, summer patch, take-all patch, fairy ring, dollar spot, necrotic ring spot, gray leaf spot, snow mold and other patch diseases.

REI 12 Hrs RATE 1 to 4oz per 100gal **SIGNAL WORD** Caution **CHEMICAL FAMILY Triazole ACTIVE INGREDIENT Metconazole**

CONTROLS Anthracnose, Brown Rot, Leaf Scabs, Fusarium, Rhizoctonia and many more.

5lb

VAL19-0401A

Min. Buy 1 EA

Transom[™] 4.5F Fungicide by Prokoz, Inc

A liquid flowable systemic turf and ornamental fungicide for control of a broad spectrum of diseases of herbaceous, bedding, flowering and tropical foliage plants, shrubs, trees and flowers in the landscape, interiorscape, nursery and greenhouse, containerized woody shrubs and trees and turf grass.

REI 12 Hrs

RATE 12 to 20oz per 100gal SIGNAL WORD Danger **CHEMICAL FAMILY Thiophanates ACTIVE INGREDIENT Thiophanate-Methyl CONTROLS** Anthracnose, Botrytis, Powdery Mildew, Rhizoctonia and more.

2.5gal

PROKZ10349225 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

Triathlon BA® Biofungicide / Bactericide

by OHP, Inc.

A broad-spectrum preventative biofungicide for control of a wide variety of fungal and bacterial diseases on ornamentals, fruits, vegetables, herbs and spices grown in greenhouses, nurseries and shade houses, Triathlon BA is approved for use in organic production. **REI 4 Hrs**

RATE .5 to 6 qts per 100gal

SIGNAL WORD Caution **CHEMICAL FAMILY Biopesticide**

ACTIVE INGREDIENT Bacillus amyloliquefaciens strain D747 CONTROLS Botrytis, Powdery Mildew, Downy Mildew

and more.

1aal







Trigo® Fungicide by Bayer CropScience, LP

Trigo is a broad-spectrum, systemic fungicide for the control of foliar and stem diseases affecting ornamentals, shrubs and trees grown in nurseries, garden centers and greenhouses. Mesostemic and translaminar movement in and around the plant protects upper and lower leaf surfaces. Up to 30 days of residual control.

REI 12 Hrs

SIGNAL WORD Warning

CHEMICAL FAMILY Triazole, Strobilurin

ACTIVE INGREDIENT Trifloxystrobin and Triadmefon

CONTROLS Anthracnose, Downy Mildew, Powdery Mildew, Scab and more.

Min. Buy 1 FA

11b AGENCY

BYR84896411

Trinity[®] TR Fungicide by BASF Corp

Provides broad spectrum control of several key diseases. For use in greenhouses on bedding plants, cut flowers, flowering hanging baskets, foliage, potted flowering plants, ornamentals and perennials. REI 12 Hrs

RATE One can covers 1,500 sq ft

SIGNAL WORD Caution **CHEMICAL FAMILY** DeMethylation Inhibitor

ACTIVE INGREDIENT Triticonazole

CONTROLS Alternaria, Botrytis, Downy Mildew, Fusarium, Powdery Mildew.

Min. Buy 1 EA

307

BAS59012781

Truban[®] 25EC Fungicide by ICL/Specialty Fertilizers

Soil fungicide for the control of damping off, root and stem rot diseases caused by Pythium and Phytophthora in bedding plants, ornamental and nursery crops. Labeled for use in commercial greenhouses and nurseries. Liquid formulation.

REI 12 Hrs RATE 4 to 8oz per 100gal SIGNAL WORD Warning **CHEMICAL FAMILY Thiadiazole ACTIVE INGREDIENT Etridiazole CONTROLS** Damping Off, Stem and Root Rot Diseases

caused by Pythium and Phytophthora

Min. Buy 1 EA

3207 EVR950441E

Truban® 30 WP Fungicide

by ICL/Specialty Fertilizers Soil fungicide for the control of damping off, root and stem rot diseases caused by Pythium and Phytophthora in bedding plants, ornamental and nursery crops. Labeled for use in commercial greenhouses and nurseries. Wettable powder formulation.

REI 12 Hrs

RATE 3 to 10oz per 100gal SIGNAL WORD Warning **CHEMICAL FAMILY Thiadiazole** ACTIVE INGREDIENT Etridiazole **CONTROLS** Damping Off, Stem and Root Rot Diseases caused by Pythium and Phytophthora

EVR957001E

2lb

Min. Buy 1 FA



















ZeroTol® 2.0 Fungicide / Bactericide by Biosafe Systems

An effective broad spectrum bactericide / fungicide that increases plant health by killing algae, bacteria, fungi and their spores on contact. Labeled for edibles and greenhouse food crops and can also be used on ornamentals, turfs and landscapes. Controls foliar and root diseases and is safe to use on foliage and most open blooms. Leaves no harmful residue behind and has Zero REI. Can be applied as a foliar spray or drench.

REI 1 Hr

SIGNAL WORD Danger CHEMICAL FAMILY Hydrogren Peroxides ACTIVE INGREDIENT Hydrogen Dioxide and Peroxyacetic Acid CONTROLS Botrytis, Powdery Mildew, Phytophthora, Pythium and more.

2.5gal

BSF600025 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ 30gal Drum

BSFT0600030 Min. Buy 1 EA

SHIPPING INFO SHIPS HAZ

BSFTO600055 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

275gal Drum

55gal Drum BSFT0600055

BSF6000275 Min. SHIPPING INFO SHIPS HAZ

Min. Buy 1 EA

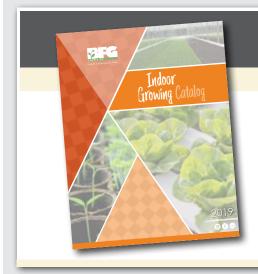


Interested in Indoor Growing products?

PICK UP A COPY OF OUR INDOOR GROWING CATALOG!

A full catalog of products collected to fit the specific needs of indoor growing!

Contact us to receive your copy today!



Pesticide Labels Test Your Knowledge



Crop Protection

Q. What is the difference between the terms "label" and "labeling"?

A. The label is the information printed on or attached to the pesticide container. Labeling includes the label, plus all other product information received from the manufacturer when you buy it.

Q. What do the words "Restricted Use Pesticide" tell you about the pesticide product?

A. "Restricted Use Pesticide" means that the product has been shown to be likely to harm people or the environment if it is not used correctly. It may be purchased and used only by certified applicators and those under their direct supervision.

Q. Where would you look to find out whether a pesticide is classified as Restricted Use?

A. If a pesticide is classified as Restricted Use, the words "Restricted Use Pesticide" will appear in a box on the front panel of the pesticide label.

Q. What are the differences between chemical name, common name, and brand name. Which of these terms should you use to most accurately identify a pesticide product?

A. The chemical name is a complex name that identifies the chemical components and structure of the pesticide. A common name is a shorter name that EPA recognizes as a substitute for the chemical name of a product. A brand name is the name — usually a trademark — used by a chemical company to identify a pesticide product. The common name (or the chemical name, if no common name is given) is the most accurate and useful way to identify a pesticide product.

Q. Name and explain the meaning of the signal words and symbols you may see on a pesticide product.

A. "Caution" indicates that the pesticide product is slightly toxic or relatively nontoxic. "Warning" indicates that the pesticide product is moderately toxic. "Danger" indicates that the pesticide product is highly toxic. "Poison" and the skull and crossbones symbol indicates that the pesticide product is highly toxic as a poison, rather than as a skin or eye irritant.

Q. Can you use the signal word on a pesticide label to judge the likelihood of suffering acute, delayed, or allergic effects if you are overexposed to the product?

A. Signal words and symbols indicate the likelihood that you will experience acute harmful effects if you are over-exposed. Signal words do not tell you anything about the risks of delayed harmful effects or allergic effects.

Q. What types of hazard statements should you look for in the pesticide labeling?

A. You should look for precautions about hazards to humans (and domestic animals), environmental hazards, and physical/chemical hazards.

Q. What types of precautionary statements may be included in the labeling section titled "Hazards to Humans"?

A. Acute effects precautions, delayed effects precautions, allergic effect precautions, and personal protective equipment requirements may be in the section of the labeling titled "Hazards to Humans."

Q. What is the meaning of the statement: "It is a violation of Federal law to use this product in a manner inconsistent with its labeling"?

A. It is illegal to use a pesticide in any way not permitted by the labeling. A pesticide may be used only on the plants, animals, or sites named in the directions for use. You may not use higher dosages, higher concentrations, or more frequent applications. You must follow all directions for use, including directions concerning safety, mixing, diluting, storage, and disposal. You must wear the specified personal protective equipment even though you may be risking only your own safety by not wearing it.

Q. Does the pesticide label contain all the instructions and directions for use that you need to use the product safely and legally?

A. Some pesticide products have all the necessary instructions and directions for use on the product label. For other products, more instructions and directions may be in other labeling that accompanies the product at the time of purchase. The label or labeling of still other products may refer to separate documents that contain specialized instructions and directions. Pesticide users are required by law to comply with all these types of instructions and directions -- not just with the label itself.

- Montana State University

Insecticide Reference Chart

Alm Pi	lays Refer To roduct Label!		ids	Beetles	ers	Caterpillars	Fungus Gnats	Leafhoppers	Leafminers	Leafrollers	Mealybugs	SS	Plant Bug	a	Shore Flies	Slugs & Snails	bs	Whiteflies
Product	Active Ingredient	OMRI Listed	Aphids	Bee	Borers	Cate	Fun	Leal	Leat	Leal	Mea	Mites	Plar	Scale	Sho	Slug	Thrips	Whi
Acephate 97 WDG	Acephate		х	х		х		х	х	х	Х		х	х			Х	х
Adept	Diflubenzuron						х								х			
Akari SC	Fenpyroximate										Х	Х						х
Altus	Flupyradifurone		х	х				х			Х		х	х			Х	х
Ancora	Isaria fumosorosea Apopka Strain 97	OMRI	х			х			х		х	х	х				х	х
Aria	Flonicamid		Х					Х			Х		Х	Х			Х	Х
Astro	Permethrin		Х	х		х	Х	Х	Х	Х	Х		Х				Х	Х
Attain TR	Bifenthrin		Х			х	х			х	Х	х	х	х			х	х
Avalon	Bifenthrin		х	х	х	х	Х	х	х	х	Х	х	Х	х			х	х
Avid	Abamectin								Х			х						
Aza-Direct	Azadirachtin		х	х	Х	Х	Х	х	Х	Х	Х			Х	Х		Х	Х
AzaGuard	Azadirachtin	OMRI	х	х	Х	Х	Х	х	Х	Х	Х			Х	Х		Х	Х
Azatin O	Azadirachtin	OMRI	х	х	Х	х	Х	Х	х	Х	Х			Х	х		Х	х
Beethoven TR	Etoxazole											х						
Benefit 60WP	Imidacloprid		х	х	Х		Х	х	х		Х			х			х	х
BotaniGard	Beauveria bassiana		Х	х				Х			Х		Х				х	Х
Botanigard Maxx	Beauveria bassiana, Pyrethrins		Х		Х			х			Х	х	Х				Х	Х
Captiva Prime	Capsicum, Garlic Oil, Soybean Oil	OMRI			х	х		х		х	Х	х	х				х	х
Citation	Cyromazine						Х		х						х			
Conserve SC	Spinosad			х		х			х	х					х		х	
CoreTect	Imidacloprid		Х	х	Х			Х	х	Х	Х		Х	Х			Х	Х
Deadline Ornamental	Metaldehyde															х		
Decathlon 20WP	Cyfluthrin		Х	х		Х	Х	Х		Х	Х		Х				х	Х
Dimilin 25W	Diflubenzuron					Х	Х		Х						Х			Х
DiPel Pro DF	Bacillus thuringiensis kurstaki	OMRI				х				х								
Discus L	Cyfluthrin, Imidacloprid		Х	х		х	х	х	х		Х	х	х	х			Х	х
Distance IGR	Pyriproxyfen						Х		х		Х			х	х			х
Duraguard ME	Chlorpyrifos		х	х		х	х	х	х		Х	х	х	х	х		х	
Duraplex TR	Chlorpyrifos, Cyfluthrin		х			х	х				Х	х		х	х		Х	х
Dursban 50W	Chlorpyrifos		х	х	х	х		х	х	х	Х	х	х	х			х	х
Endeavor	Pymetrozine		Х															х
Enstar AQ	S-Kinoprene		х				х		х		Х			х			х	х
Flagship 25WG	Thiamethoxam		Х	Х			Х	Х	Х		Х		Х	Х			Х	Х
Floramite SC	Bifenazate											х						
Fulcrum	Pyriproxyfen						Х		Х		Х			х	х			х
Gnatrol WDG	Bacillus Thuringiensis israelensis	OMRI					х											
Grandevo	Chromobacterium	OMRI	Х			х		х	Х	Х	Х	х	Х				Х	Х
Hachi-Hachi SC	Tolfenpyrad		х			х		х			Х			Х			Х	Х
Hexygon DF	Hexythiazox											Х						
Kontos	Spirotetramat		х					х			Х	х		Х				Х
Кора	Potassium salts Fatty Acid	OMRI	х	х		х		х			Х	х	Х	Х				Х
Mainspring GNL	Cyantraniliprole		х	х	Х	х			х				Х	Х			Х	Х
Magus	Fenazaquin											Х						Х

Insecticide Reference Chart Continued

	Always Refer To Product Label!		Aphids	Beetles	Borers	Caterpillars	Fungus Gnats	Leafhoppers	Leafminers	Leafrollers	Mealybugs	es	Plant Bug	e	Shore Flies	Slugs & Snails	Thrips	Whiteflies
Product	Active Ingredient	OMRI Listed	Apl	Bee	Bor	Cat	Fur	Lea	Lea	Lea	Me	Mites	Pla	Scale	Sho	Slu	Thr	ЧХ
Mallet 2F	Imidacloprid		Х	Х	Х			Х	Х		Х			Х			Х	Х
Marathon 1G	Imidacloprid		Х	Х			Х	Х	Х		Х			Х			Х	Х
Marathon II	Imidacloprid		Х	Х	Х			Х	Х		Х			Х			Х	Х
Mavrik Aquaflow	Tau-fluvalinate		Х	Х		Х		Х			Х	Х					Х	Х
Mesurol 75WP	Methiocarb		Х									Х				Х	Х	
Millenium	Steinernema carpocapsae														Х			
Minx 2	Abamectin								Х			Х						
M-Pede	Potassium salts Fatty Acid	OMRI	Х	Х		х		Х			Х	Х	Х	Х				Х
Mycotrol	Beauveria bassiana	OMRI	Х	Х				Х			Х		Х				Х	Х
Nemashield	Steinernema feltiae						Х										Х	
Nemasys	Steinernema feltiae						Х										х	
NoFly WP	Isaria fumosorosea FE 9901	OMRI	Х				Х				Х						Х	Х
Notavo	Clofentezine											Х						
Onyx Pro	Bifenthrin		Х	Х	Х	х	х	Х	Х	Х	Х	х	Х	Х			х	Х
Orthene TR	Acephate		Х			Х	Х		Х	Х	Х	х		х			Х	х
Overture	Pyridalyl					х											х	
Pedestal	Novaluron					Х			Х								Х	Х
Pycana	Pyrethrins, Canola oil	OMRI	х	х	х	х	х	х	х	х	Х	х	х	Х			х	х
Pyronyl Crop Spray	Pyrethrins, Piperonyl butoxide		Х	Х	Х	х	Х	Х	Х	х	х		Х				Х	Х
Pyganic Specialty	Pyrethrins	OMRI	Х	х	х	х	Х	х	Х	х	Х	х	х	Х	х		Х	Х
Pylon	Chlorfenapyr					х	Х					х					Х	
Pyrethrum TR	Pyrethrins		х	х			Х	Х			Х	х		х			х	Х
Rycar	Pyrifluquinazon		Х					Х			Х						Х	Х
Safari 20SG	Dinotefuran		х	х	х	х	х	х	х		Х			х			х	х
Sanmite SC	Pyridaben											Х						Х
Savate	Spiromesifen											х						х
Scimitar GC	Lambda-cyhalothrin		х	х		х		Х	х	х	Х	х	Х	Х			х	Х
Sevin SL	Carbaryl		Х	х	х	х		Х	х	х	Х	х	х	х			Х	Х
Shuttle O	Acequinocyl											х						
Sirocco	Bifenzate, Abamectin								х			х						
Spear-T	GS-Omega/Kappa-HXTA-HV1A											х					х	х
Suffoil-X	Mineral Oil	OMRI	х				х			х	Х	х	х	Х			х	х
Sultan	Cyflumetofen											х						
Talstar	Bifenthrin		Х	х	Х	х	Х	Х	Х	х	Х	х	Х	Х			Х	Х
Talus	Buprofenzin							х			Х			Х				Х
Tame 2.4EC	Fenpropathrin		Х	х		Х		х	Х		Х	Х	х	Х			Х	х
TetraSan 5WDG	Etoxazole											Х						
Thuricide N/G	Bacillus thuringiensis kurstaki	OMRI				Х				Х								
Triact 70	Neem oil	OMRI	х					х				х		Х				Х
Tristar 8.5SL	Acetamiprid		х	Х		Х	Х	Х	Х		Х		х	Х			Х	Х
Ultra-Pure Oil	Mineral Oil		х	Х			Х		Х	Х	Х	Х	Х	Х			Х	х
																		-

Crop Protection

REFERENCE GUIDE for GREENHOUSE and NURSERY PRODUCTION INSECTICIDES / MITICIDES

RESISTANCE MANAGEMENT

Pest populations that are over exposed to a single pesticide may develop resistance to that pesticide. Resistance is due to the innate ability of some individuals in the pest population to survive even after being treated with a pesticide. When using pesticides repeatedly for crop protection, it is important to manage pesticide resistance by rotating chemicals with different modes of action (MOA) on the target pest or combining chemicals with different modes of action in the tank/spray mix.

When labels permit, make two (2) applications of a product or tank mix in sequence, then rotate to products with different modes of action to improve coverage on target life stages of the pest. Try to avoid applying pesticides with the same mode of action to more than one generation of the pest per cycle.

Good resistance management starts with accurate identification of the pest problem and good record-keeping of all pesticide applications.

Time pesticide applications to coincide with the susceptible life stage of the pest based on their life cycle.

The appropriate and labeled (legal) method of application is also a very important factor to consider.

Low volume (L.V.) applications (smoke generator, thermal fog, cold fog, aerosol, and electrostatic) are commonly used in greenhouses. Low volume sprays generally are more effective against adults than immature stages. Use high volume sprays, directed under the leaves for best results against insect and mite eggs and nymphs.

Always read the label and check with your state or county extension specialists for further information regarding resistance management.

**Use Site(s) Key: GH = Greenhouse N = Nursery

(By Mode of Action Group and Class)

Resources Provided By

on

					Use	
MOA Group*	Class	Common Name	Trade Name	REI	Site(s)*	* Company
1A	Carbamates	Carbaryl	Sevin	12	Ν	Bayer Cropscience
		Methiocarb	Mesurol	24	GH/N	Gowan Company
1B	Organophosphates	Acephate	Orthene [®] TT&O	24	GH/N	Amvac Chemical Corp.
			Orthene [®] TR	24	GH	BASF
		Chlorpyrifos	DuraGuard' ME	24	GH/N	BASF
			Dursban [®] 50 WP	24	Ν	Corteva Agriscience
		Malathion	Gowan Malathion 8F	12	Ν	Gowan Company
		Phosmet	Imidan [®] 70W	24	Ν	Gowan Company
2B	Phenylpyrazoles	Fipronil	TopChoice™	24	Ν	Bayer Cropscience
3	Pyrethroids	Bifenthrin	Talstar	12	GH/N**	FMC Corp.
			OnyxPro [*]	12	Ν	FMC Corp.
			Attain [*] TR	12	GH	BASF
		Cyfluthrin	Decathlon [*]	12	GH/N	OHP, Inc.
		Fenpropathrin	Tame	24	GH/N	Nufarm
		Fluvalinate	Mavrik [®] Aquaflow	12	GH/N	Wellmark International
		Lambda-Cyhalothrin	Scimitar [®] GC	24	GH/N	Syngenta
		Permethrin	Astro	12	GH	FMC Corp.
			Permethrin 3.2 EC	12	GH/N***	Helena / Agri-Enterprise
			Ambush	12	GH/N***	Amvac Chemical Corp.
				*** Greer	nhouse roses o	only
	Botanicals	Pyrethrins	Pyrethrum [•] TR	12	GH	BASF
			PyGanic	12	GH/N	Mycorrhizal Applications

* Depends on Greenhouse ventilation

Resources Provided By

Insecticides / Miticides

Continued

(By Mode of Action Group and Class)

MOA Group	* Class	Common Name	Trade Name	REI	Use Site(s) [*]	** Company
4A	Neonicotinoids	Acetamiprid	TriStar	12	GH/N	Nufarm
		Dinotefuran	Safari	12	GH/N	Nufarm
		Imidacloprid	Marathon®	0-12	GH/N	OHP, Inc.
			Coretect Tree & Shrub Tablets™	12	GH/N	Bayer Cropscience
		Thiamethoxam	Flagship®	12	GH/N	Syngenta
4D	Butenolides	Flupyradifrone	Altrus™	4	GH/N	Bayer Cropscience
5	Spinosyns	Spinosad	Conserve	4	GH/N	Corteva Agriscience
			Entrust	4	GH/N	Corteva Agriscience
6	Glycosides	Abamectin	Avid [®]	12	GH/N	Syngenta
	Avermectin	Emamectin benzoate	Enfold™	12	Ν	Syngenta
		Milbemectin	Ultiflora	12	Ν	Gowan Company
7A	Juvenile hormone mimics	s-Kinoprene	Enstar [®] AQ	12	GH	Wellmark International
7B	Juvenile hormone mimics	Fenoxycarb	Award®	12	Ν	Syngenta
7C	Pyridine -	Pyriproxyfen	Distance	12	GH/N	Nufarm
	Insect Growth Regulators		Fulcrum®	12	GH/N	OHP, Inc.
9A	Pyridine azomethines	Pymetrozine	Endeavor	12	GH/N	Syngenta
9B	Pyridine azomethines	Pyrifluquinazon	Rycar	12	GH	SePRO Corp.
10A	Tetrazines	Clofentezine	Notavo™	12	GH/N	OHP, Inc
	Thiazolidinones	Hexythiazox	Hexygon [®] DF	12	GH/N	Gowan Company
10B	2, 4 - Diphenyloxzoline	Etoxazole	TetraSan	12	GH/N	Nufarm
	Derivatives		Beethoven™TR	4-24*	GH	BASF
11	Biopesticides	Bacillus thuringiensis	DiPel [®] Pro DF	4	GH/N	Nufarm
		Kurstaki	Thuricide [®] N/G	4	GH/N	OHP, Inc
		Bacillus thuringiensis Israelensis	Gnatrol [®]	4	GH/N	Nufarm
12B	Organotin miticides	Fenbutatin-oxide	ProMITE™	48	GH/N	SePRO Corp.
13	Pyrroles	Chlorfenapyr	Pylon®	12	GH	BASF
15	Benzoylureas -	Diflubenzuron	Adept [®]	12	GH	OHP, Inc.
	Insect Growth Regulators		Dimilin [®] SC	12	GH/N**	OHP, Inc.
		Novaluron	Pedestal [™]	12	GH/N	OHP, Inc.
16	Buprofezin	Buprofezin	Talus [®]	12	GH/N	SePRO Corp.
17	Cyromazine - Insect Growth Regulators	Cyromazine	Citation	12	GH/N	Syngenta

* Depends on Greenhouse ventilation



Insecticides / Miticides Continued

(By Mode of Action Group and Class)

MOA Group	* Class	Common Name	Trade Name	REI	Use Site(s)	** Company
18	Diacylhydrazines	Tebufenozide	Confirm	4	Ν	Gowan Company
		Methoxyfenozide	Intrepid [®]	4	GH/N	Corteva Agriscience
20A	Trifluoromethyl Aminohydrazone	Hydramethylnon	Amdro ⁻ Pro	12	Ν	BASF
20B	Carbazates	Bifenazate	Floramite®	12	GH	OHP, Inc
	Napthoquinone Derivatives	Acequinocyl	Shuttle [®] O	12	GH/N	OHP, Inc.
21A	METI Acaricides	Pyridaben	Sanmite	12	GH/N	Gowan Company
	and Insecticides	Fenpyroximate	Akari	12	GH	SePRO Corp.
		Tolfenpyrad	Hachi-Hachi [*]	12	GH	SePRO Corp.
		Fenazaquin	Magus™	12	GH/N	Gowan Company
22B	Semicarbazone	Metaflumizone	Siesta⁼	12	GH/N	BASF
23	Tetronic acids	Spiromesifen	Savate	12	GH/N	Bayer Cropscience
	Tetramic acids	Spirotetramat	Kontos	0-24	GH/N	Bayer Cropscience
25A	Beta-ketonitrile	Cyflumetofen	Sultan™	12	GH/N	BASF
28	Anthranillic diamide	Cyantraniliprole	Mainspring	4	GH/N	Syngenta
29	Pyridine carboxamides	Flonicamid	Aria	12	GH/N	FMC Corp.
UN	Biopesticide Insect Growth Regulators	Azadirachtin	Azatin [•] O	4	GH/N	OHP, Inc.
	Pyridalyl	Pyridalyl	Overture [*]	12	GH	Nufarm
М	Biopesticides	Beauveria bassiana	BotaniGard'	4	GH/N	BioWorks, Inc.
			BioCeres" WP	4	GH/N	Biosafe Systems
			Mycotrol [®] O	4	GH/N	BioWorks, Inc.
		lsaria fumosorosea Apopka Strain 97(ATCC20874)	Ancora®	4	GH/N	OHP, Inc
		Steinernema feltiae	Nemasys [*]	0	GH	BASF
		Steinernema carpocaspsae	Millenium	0	GH	BASF
	Oils	Botanical oil	Captiva®	4	GH/N	Gowan Company
		Clarified hydrophobic extract of neem oil	Triact [*] 70	4	GH/N	OHP, Inc.
		Mineral oil	Ultra-Pure™ Oil	4	GH/N	BASF
		Petroleum	Suffoil-X [∞]	4	GH/N	BioWorks, Inc.
	Soaps	Potassium salts of fatty acids	AllPro' Insecticidal Soap	12	GH/N	Value Garden Supply
_			Kopa™ Insecticidal Soap	12	GH/N	OHP, Inc
	on Greenhouse ventilation se and/or nursery uses depend on t	he formulation. Check labels for uses.	M-Pede	12	GH/N	Gowan Company







Resources Provided By

Insecticides / Miticides

MOA Combination Products

MOA Group*	Class	Common Name	Trade Name	REI	Use Site(s)	** Company
3+UN	Pyrethrins + Oils Pyrethrins Piperonyl butoxide	Pyrethrins + Canola Oil Pyrethrins +	Pycana™ Evergreen® Pro 60-6	12 12	GH/N GH/N	OHP, Inc Mycorrhizal Applications
1+3	Organophosphate + Pyrethroid	Chlorpyrifos + Cyfluthrin	DuraPlex® TR	24	GH	BASF
3+4A	Pyrethroid + Neonicotinoid	Cyfluthrin + Imidacloprid	Discus [®] L	12	GH/N	OHP, Inc.
6+UN	Glycoside+Carbazate	Abamectin+Bifenazate	Sirocco®	12	GH/N	OHP, Inc.

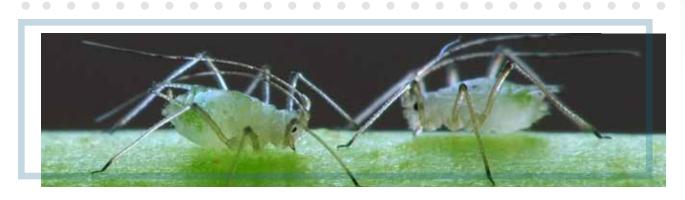
*Insecticides / Miticides Mode of Action

- 1. Acetylcholinesterase inhibitors. Inhibition of the enzyme acetylcholinesterase, interrupting the transmission of nerve impulses
- GABA-gated chloride channel antagonists: Interferes with GABA receptors of insect neurons, leading to repetitive nervous discharges
- Sodium channel modulators: Acts as an axonic poison by interfering with the sodium channels of both the peripheral and central nervous system stimulating repetitive nervous discharges, leading to paralysis.
- 4. Nicotinic acetylcholine receptor (nAChR) agonists. Binds to nicotinic acetylcholine receptor disrupting nerve transmission.
- 5. Nicotine acetylcholine receptor agonists (not group 4)
- Chloride channel Activators: Interferes with the GABA nerve receptor of insects.
- Juvenile hormone mimics (Insect growth regulator): Mimic juvenile hormones, which prevent molting from the larval to the adult stage.
- 9. Mite growth inhibitors.
- 10. Mite growth inhibitors.

- 11. Microbial disruptors of insect midgut membranes.
- 12. Inhibitors of mitochondrial ATP synthase.
- 13. Uncoupler of oxidative phosphorylation (disrupt H proton gradient formation).
- 15. Inhibit chitin biosynthesis type 0, Lepidopteran
- 16. Inhibit chitin biosynthesis type 1, Homopteran
- 17. Molting disruptor, Dipteran
- 18. Ecdysone receptor agonists.
- 20. Mitochondrial complex III electron transport inhibitors
- 21. Mitochondrial complex I electron transport inhibitors
- 22. Sodium channel blocker: Nerve action
- 23. Inhibitors of acetyl CoA carboxylase
- 25. Mitochondrial complex II electron transport inhibitors
- 28. Ryanodine receptor modulators: Nerve and muscle action
- 29. Chordotonal organ Modulators undefined target site: Nerve action
- UN Products with unknown or uncertain modes of action
- M Miscellaneous

This list is from the U.S Environmental Protection Agency, in cooperation with the Insecticide Resistance Action Committee (IRAC). IRAC is a technical working group within the Global Crop Protection Federation (GCPF). More information on the Insecticide Resistance Action Committee and the Mode of Action Classification is available from: www.irac-online.org.

- * Depends on Greenhouse ventilation
- ** Greenhouse and/or nursery uses depend on the formulation. Check labels for uses.



















Insecticides & Miticides

1300 Orthene® TR Micro Insecticide by BASF Corp

Provides the effectiveness and convenience of a total release fogger, as well as reduced risk of phytotoxicity on greenhouse crops, even those in bloom. It's a proven performer on a broad range of greenhouse insect pests, including aphids, thrips, whiteflies, scale, mealybugs, fungus gnats and spider mites.

REI 24 Hrs

RATE 1 Can per 4,500sq ft

SIGNAL WORD Caution **CHEMICAL FAMILY** Organophosphate

ACTIVE INGREDIENT Acephate

CONTROLS Aphids, Caterpillars, Cutworms, Leafminers Mealybugs, Mites, Scale, Thrips, Weevils, Whiteflies

607

BAS59012589 Min. Buy 1 EA SHIPPING INFO ORM-D

Acelepryn[®] G Insecticide by Syngenta Crop Protection

Acelepryn turf insecticide provides season long grub control with a single application in April or May. Also controls many surface feeding pests including beetles and weevils.

REI 4 Hrs

RATE 50-100lbs per acre **SIGNAL WORD CHEMICAL FAMILY** Anthranillic Diamide

ACTIVE INGREDIENT Chlorantraniliprole **CONTROLS** White Grub, Caterpillars, Black Cutworms, Sod Webworms, Bluegrass Weevil.

25lb

SYN53199

Min. Buy 1 EA

Acephate® 97UP Insecticide

by UPL NA, Inc

Provides reliable contact and systemic control of a wide spectrum of sucking and chewing insects with low odor packaging. Labeled for use on ornamentals and a variety of agricultural crops.

REI 24 Hrs

RATE 1/4 to 1lb per Acre **SIGNAL WORD** Caution **CHEMICAL FAMILY** Organophosphate **ACTIVE INGREDIENT Acephate**

1lb

PROKZ742011 Min. Buy 1 EA

Adept[®] WSP Insecticide

by OHP, Inc. An effective tool for controlling fungus gnats, shore flies and foliar

feeding pests found in ornamental crops grown in greenhouses, shade houses and interiorscapes. REI 12 Hrs

RATE 2oz per 100gal. **SIGNAL WORD** Caution **CHEMICAL FAMILY Benzoylurea ACTIVE INGREDIENT Diflubenzuron CONTROLS** Armyworms, Leafminers, Fungus Gnats, Shore Flies.

16x1oz Packets OHP981012

Min. Buy 1 EA

Akari[®] 5SC Miticide / Insecticide by SePRO Corporation

A unique "stop-feeding action" not only stops further damage to your plants but also halts the laying of eggs immediately after application. Mites are dead in 4 to 7 days. Active on all life stages, but especially effective on the plant damaging larvae, nymph and adult stages, Akari provides residual action of 21-28 days.

REI 12 Hrs

RATE 16 to 24oz per 100gal.
SIGNAL WORD Warning
CHEMICAL FAMILY Phenoxypyrazole
ACTIVE INGREDIENT Fenpyroximate
CONTROLS Mites and Mealybugs

32oz **SEPROAKARI**

Min. Buy 1 EA

Altus[®] Insecticide

by Bayer CropScience, LP

Altus Insecticide is used for the control of insect pests in a wide variety of greenhouse vegetable and ornamental crops and in outdoor nursery and landscape ornamentals. A broad-spectrum insecticide that is acropetally systemic, moving from roots to the leaves in the case of soil applications. Moves translaminarly through the leaf tissue in the case of foliar applications and can provide control of pests on the underside of leaves.

REI 4 Hrs

RATE Foliar: 7 to 14oz per 100gal. Drench: 21-28oz/acre	
SIGNAL WORD Caution	
CHEMICAL FAMILY Butenolides	
ACTIVE INGREDIENT Flupyradifurone	
CONTROLS Adolaids Anhids Loofhonnors Moolubu	

CONTROLS Adelgids, Aphids, Leafhoppers, Mealybugs, Scales and more.

64oz AGENCY

BYR84989509 Min. Buy 1 EA

Ancora® Microbial Insecticide

by OHP, Inc.

Ancora[™] contains a naturally occurring fungus that infects both foliage and soil insect pests. Ancora is compatible with beneficial arthropods and is labeled for use on herbs, vegetables and ornamentals. Ancora has a four hour REI and can be used in organic production. **REI 4 Hrs**

RATE 14 to 28 oz per 100gal

SIGNAL WORD Caution

CHEMICAL FAMILY Biopesticide

ACTIVE INGREDIENT Isaria fumosorosea Apopka strain 97

CONTROLS Aphids, Leafminers, Mealybugs, Thrips, Mites and more.

Min. Buy 1 EA

1lb OHP981070













Aria[®] Insecticide

Through contact and ingestion, the active ingredient in Aria stops both adult and immature aphids from feeding within one hour of treatment and eliminates them within three to five days as a result of dehydration and starvation. Effectively controls many species of aphids that attack greenhouse plant investments. Designed for minimized impact on birds and honeybees with no effect on coleopterans, lepidopterans or arachnids.

REI 12 Hrs RATE 80 to 100grams per 100gal.

SIGNAL WORD Caution CHEMICAL FAMILY Pyridine Carboxamides ACTIVE INGREDIENT Flonicamid CONTROLS Aphids, Thrips, Whiteflies, Mealybugs

and more.

160g

Crop Protection

FMC19-0303B

Min. Buy 1 EA

Astro[®] Insecticide

Astro insecticide controls insect pests on lawns, ornamental trees and shrubs, ornamental plants grown in greenhouses and perimeters of residential, industrial and commercial landscaped areas.

REI 12 Hrs

RATE 4 to 8oz per 100gal. SIGNAL WORD Caution

CHEMICAL FAMILY Pyrethroid ACTIVE INGREDIENT Permethrin

CONTROLS Aphids, Adelgids, Beetles, Leafhoppers and more.

1gal

FMC19-1001C Min. Buy 1 EA

Attain® TR Insecticide

by BASF Corp

A ready-to-use, ultra-low-volume insecticide fogger that controls a variety of greenhouse insect pests, including aphids, fungus gnats, mealybugs, mites, thrips and whiteflies, along with several other secondary insect pests.

REI 12 Hrs RATE 1 Can per 3,000sq ft SIGNAL WORD Warning CHEMICAL FAMILY Pyrethroid ACTIVE INGREDIENT Bifenthrin CONTROLS Aphids, Thrips, Caterpillars, Armyworms, Mealy bugs and more

2oz

BAS59011825 Min. Buy 1 EA



Avalon[®] GN Insecticide

Provides long-lasting residual control of aphids, black vine weevils, scale and other nursery and greenhouse pests without the risk of damaging sensitive plants. It is non-staining and contains no odorous or plant-damaging solvents, so it can be applied to open blooms and color bracts right up to the day of shipment.

REI 12 Hrs

RATE 5 to 10oz per 100gal.	
SIGNAL WORD Caution	
CHEMICAL FAMILY Pyrethroid	Contract I
ACTIVE INGREDIENT Bifenthrin	
CONTROLS Aphids, Black Vine Weevil, Lace Bugs, Fungus	100
Gnats and many more. See label for complete list.	-
	12
1gal	· 357
PROKZ10064852 Min. Buy 1 EA	3

Avid[®] .15EC Miticide / Insecticide

SHIPPING INFO RESTRICTED

For control of leaf miners and mites and suppression of aphids, whiteflies and thrips on ornamental plants. Rain fast within hours of application, offering outdoor application flexibility and is odorless. Also leaves no unsightly residue on plants.

REI 12 Hrs RATE 4 to 8oz per 100gal.

SIGNAL WORD Warning

CHEMICAL FAMILY Glycoside

ACTIVE INGREDIENT Abamectin

CONTROLS Leafminers, Mites and suppresses Aphids, Whiteflies and Thrips.

 8oz

 SYN25873
 Min. Buy 1 EA

 32oz
 SYN81141

 Igal AGENCY
 SYN15128





Avid[®] + Mainspring[®] GNL by Syngenta Crop Protection

Avid and Mainspring GNL Multipak offers a complete, non-neonic insecticide solution for nursery and greenhouse growers at a 20% savings over buying at the individual prices. Contains one gallon Avid 0.15EC and four pints of Mainspring GNL. Minimum buy – 1 case.

REI 12 Hrs

SIGNAL WORD

CHEMICAL FAMILY

ACTIVE INGREDIENT Avid - Abamectin, Mainspring GNL - Cyantraniliprole CONTROLS Aphids, Thrips, Whiteflies and more.

Multipack / Contains 1gal Avid® 0.15EC & 4ea 16oz Mainspring® GNL AGENCY

SYN60499 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ



Aza-Direct[®] Biological Insecticide by Gowan

Aza-Direct is a broad spectrum biological insecticide that controls key insect pests on greenhouse and outdoor food crops, ornamental plants and shrubs and nursery crops. Its primary mode of action is as an insect growth regulator which inhibits molting and the development of immature insects into healthy adults. Effective repellent and antifeedant thereby affecting both immature and adult insect pests.

KEI 4 Hrs			
RATE 16 to 32oz per acre			The second
SIGNAL WORD Caution			
CHEMICAL FAMILY Biopesticide			
ACTIVE INGREDIENT Azadirachtin			Ain-Drest
CONTROLS Aphids, Thrips, Fungus Gnat, Whitefly and			and and a second
more.			
			A LANSING MARKET
2.5gal		OMRI	
GOW14022	Min. Buy 1 EA	L I S T E D For Organic Use	

GOW14022

AzaGuard® Insecticide / Nematicide

by Biosafe Systems

An organic insecticide effective on more than 300 insect species. Labeled for use on all greenhouse crops including fruits, vegetables, herbs and turf grasses. Acts as an insect growth regulator, antifeedant and ovi-position deterrent. Has no mutational resistance and can be used indoors and outdoors.

REI 4 Hrs SIGNAL WORD Caution

CHEMICAL FAMILY Biopesticide

ACTIVE INGREDIENT Azadirachtin

CONTROLS Insects in the larval, pupal and nymphal stages.

3207

BSF7000-32OZ Min. Buy 1 EA 1aal **BSFTO70001** Min. Buy 1 EA



Azatin[®] O Insecticide

by OHP, Inc.

Azatin O is a biological insect growth regulator used to control the larval stage of a broad-spectrum of greenhouse and nursery pests. Azatin O is OMRI listed for organic production and is soft on beneficial insects. Suitable for use on crops such as ornamentals, vegetables, herbs and berries grown in the greenhouse, nurseries, interiorscapes, hydroponics and turf.

REI 4 Hrs RATE 4 to 16 oz per 100gal **SIGNAL WORD** Caution **CHEMICAL FAMILY Biopesticide ACTIVE INGREDIENT** Azadirachtin CONTROLS larval stages of many insect pests. See label.

32oz OHP981221

OMRI Min. Buy 1 EA

Beethoven®TR Miticide / Insecticide by BASF Corp

Beethoven TR provides control of mites including two-spotted spider mites and suppresses whiteflies. Beethoven offers quick and easy application, thorough coverage and excellent plant safety. REI 12 Hrs

RATE 1 Can per 3,000sq ft **SIGNAL WORD** Caution **CHEMICAL FAMILY** Biphenyl Oxaline **ACTIVE INGREDIENT Etoxazole CONTROLS** Mites, Whitefly (Supression)

2oz

BAS5902321



Benefit[®] 60WSP Insecticide by ICL/Specialty Fertilizers

A nursery and greenhouse insecticide in a wettable powder formula that controls the most common insect problems. Controls white grub larvae, aphids, mealybugs and other common insects and can be applied as a foliar spray or drench

Min. Buy 1 EA

REI 12 Hrs

RATE 20g per 100gal

SIGNAL WORD Caution **CHEMICAL FAMILY** Neonicotinoid

ACTIVE INGREDIENT Imidacloprid

CONTROLS Adelgids, Aphids, Japanese Beetles (adults), Fungus Gnat (larvae), Lacebugs, Leaf Beetles, (including Elm and Viburnum Leaf Beetles), Leafhoppers,

Leafminers, Mealybugs, Psyllips, Sawfly larvae, Soft Scale, Thrips

(suppression), whit	emes
100g	
EVR956601E	Min. Buy 1 EA



BioCeres® WP Insecticide by Biosafe Systems

Used for the biological control of numerous pests including Whitefly, Aphids and Thrips. BioCeres is soft on beneficial insects. It can be used on a wide range of crops as well as ornamental plants and edibles.

REI 4 Hrs
RATE 1 to3lbs per acre
SIGNAL WORD Caution
CHEMICAL FAMILY Biopesticide
ACTIVE INGREDIENT Beauveria bassiana
CONTROLS Whitefly, Aphid and Thrips.

BSF68001 Min. Buy 1 EA



OMRI



1lb

Insecticides & Miticides

BotaniGard® Mycoinsecticide by Bioworks Inc.

BotaniGard ES is a mycoinsecticide labeled for use on ornamentals and vegetables in greenhouses, nurseries, commercial landscapes, interiorscapes and turf. Liquid formulation.

REI 4 Hrs

rop Protection

RATE 32oz per 100gal **SIGNAL WORD** Caution **CHEMICAL FAMILY Biopesticide** ACTIVE INGREDIENT Beauvaria bassiana **CONTROLS** Aphids, Thrips, Whiteflies and more

BotaniGard® 22WP

Wettable powder formulation. 1lb

BW1B15A02

Min. Buy 1 EA

BotaniGard® ES

Liquid formulation. 32oz BW1B14A22 Min. Buy 1 EA 1gal **BWB14A23** Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

BotaniGard® Maxx Insecticide

by Bioworks Inc.

BotaniGard Maxx is an insecticide labeled for use on ornamentals and vegetables in greenhouses, nurseries, commercial landscapes, interiorscapes and turf. Emulsifiable dispersible oil formulation of Beauveria bassiana and natural pyrethrins.

REI 12 Hrs

RATE 32oz per 100gal SIGNAL WORD Danger **CHEMICAL FAMILY** Biopesticide, Pyrethrins **ACTIVE INGREDIENT** Beauvaria bassiana

and natural pyrethrins **CONTROLS** Aphids, Thrips, Whiteflies and more

Min. Buy 1 EA

32oz

BW1B103A22 **SHIPPING INFO**

1aal

BW1B103A23 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

2.5gal

BW1B103A24 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Captiva Prime[®] Botanical Insecticide by Gowan

Captiva Prime botanical insecticide agitates Mites and Thrips, flushing them from cover and enhancing contact with the pest. Captiva® Prime can be used as a stand-alone product to repel thrips and mites, stop their feeding and inhibit ovipositioning. When used as a tank mix partner with traditional insecticides, it will enhance their activity. REI 4 Hrs

RATE 16 to 32oz per acre

SIGNAL WORD Caution

CHEMICAL FAMILY Botanical Oils ACTIVE INGREDIENT Capsicum extract, Garlic Oil, Canola Oil

CONTROLS Thrips, mites, whitefly

32oz

GOW65700



Citation® 75W Insect Growth Regulator by Syngenta Crop Protection

Citation is an insect growth regulator that is highly effective against major dipterous pests in ornamentals. Labeled for use on greenhouse crops including ornamentals and vegetable transplants, landscape and container grown ornamentals and bedding plants. F

REI 12 Hrs
RATE 2.66oz per 100gal
SIGNAL WORD Caution
CHEMICAL FAMILY Insect Growth Regulator
ACTIVE INGREDIENT Cyromazine
CONTROLS Loofminger, Europus Charts, Shoreflies

ONTROLS Leafminers, Fungus Gnats, Shoreflies

1lb

SYN52855

Min. Buy 1 EA

Conserve® SC Insecticide

by Corteva Agriscience

A turf and ornamental insect control with a unique mode of action derived from a naturally occurring organism. Makes a great rotational insecticide and is highly active at very low use rates. Great for control of thrips and lepidopterans larvae on herbaceous and woody ornamentals grown outdoors, in nurseries or in greenhouses; tree farms or plantations; and turf grass.

REI 4 Hrs

SIGNAL WORD Caution **CHEMICAL FAMILY Spinosyn ACTIVE INGREDIENT Spinosad**

CONTROLS Thrips, lepidopterous larvae, foliage feeding worms and many more. See label for complete list.

3207

DOW19-0007Z Min. Buy 1 EA



by Bayer CropScience, LP

CoreTect Tree and Shrub Tablets Insecticide will control or significantly reduce populations of insects that attack containerized, newly planted or established trees and shrubs. For use in landscape, interiorscapes and forested areas.

REI 12 Hrs

RATE One to two tablets per gallon container.

SIGNAL WORD Caution

CHEMICAL FAMILY Neonicotinoid

ACTIVE INGREDIENT Imidacloprid

CONTROLS Adelgids, Aphids, Leafhoppers, Mealybugs, Scales and more.

250ct Tablets per Bottle BYR79283261 Min. Buy 1 EA



Decathlon® 20WP Insecticide

by OHP, Inc.

A wettable powder insecticide effective for broad spectrum control of crawling and flying insect pests on ornamental and nursery stock. Will not stain

REI 12 Hrs

RATE 1.3 to 1.9 oz per 100gal **SIGNAL WORD** Caution

CHEMICAL FAMILY Pyrethroid **ACTIVE INGREDIENT Cyfluthrin**

CONTROLS Aphids, Armyworms, Bagworms, Beetles, Caterpillar, Cutworm, Fungus Gnats, Gypsy Moths, Lace Bugs, Leaf Hopper; Mealybugs, Scales, Thrips, Webworm, Whiteflies

Min. Buy 1 FA

8oz OHP981789













Dimilin[®] 25W Insect Growth Regulator by OHP, Inc.

Offers control of a variety of insect pests found on trees and shrubs grown in public and private forests, forest plantings and forest nurseries and Christmas tree and conifer nurseries. Dimilin is effective on foliar feeding insects like armyworms and lepidopterous leafminers

REI 12 Hrs

RATE 2 to 8 oz per acre

SIGNAL WORD Caution

CHEMICAL FAMILY Benzovlurea Insect Growth Regulator **ACTIVE INGREDIENT Diflubenzuron**

CONTROLS Fungus Gnat, Shorefly, Sciarid Fly and more.

5LB

OHP982380

Min. Buy 1 EA

DIPel[®] PRODE Biological Insecticide by Nufarm Americas Inc.

Dipel Pro is a biological insecticide for control of lepidopterous worms in greenhouse vegetables and ornamentals and landscape plantings. **REI 4 Hrs**

SIGNAL WORD Caution

CHEMICAL FAMILY Biological

ACTIVE INGREDIENT Bacillus thuringiensis

CONTROLS Armyworms, Loopers, Budworms and many more.

Min. Buy 1 EA

1lb

VAL89030.169



Discus[®] L Insecticide

by OHP, Inc. Discus L Insecticide's two active ingredients provide fast knockdown and broad-spectrum control on ornamentals and non-bearing fruit and nut trees in greenhouses and nurseries.

REI 12 Hrs

RATE 25 to 50oz per 100gal

SIGNAL WORD Caution

CHEMICAL FAMILY Pyrethroid + Neonicotinoid **ACTIVE INGREDIENT** Cyfluthrin and Imidacloprid

CONTROLS Armyworms, Japanese beetles, Ticks, Aphids,

Thrips, Whitefly and more.

1gal

OHP982420 Min. Buy 1 EA

Distance[®] Insect Growth Regulator

by Nufarm Americas Inc.

Distance insect growth regulator controls whiteflies, fungus gnats, scales and other insects by preventing eggs, larvae and pupae from maturing into adults. Labeled for use on greenhouse and outdoor ornamentals, groundcovers, shrubs and ornamental trees.

REI 12 Hrs

RATE 6 to 8oz per 100gal **SIGNAL WORD** Caution

CHEMICAL FAMILY Pyridine Insect Growth Regulators

ACTIVE INGREDIENT Pyriproxyfen

CONTROLS Fungus Gnat, Leafminers, Scales,

Shore flies, Whitefly.

3207

VAL69730.915 Min. Buy 1 EA

Duraguard[®] ME Insecticide by BASF Corp

Broad spectrum insecticide for control of many greenhouse pests. Microencapsulated formulation gives a timed release action that can last up to 30 days. Labeled for use on bedding plants, cut flowers, blooming hanging baskets, foliage and ornamentals.

REI 24 Hrs

RATE 25 to 50oz per 100gal **SIGNAL WORD** Caution

CHEMICAL FAMILY Organophosphate

ACTIVE INGREDIENT Chlorpyrifos

CONTROLS Ants, Aphids, Beetles, Caterpillars, Flies, Fungus

Gnat, Leafhoppers, Leaf Miner, Mealybugs, Shore Flies, Spider Mites, Thrips and more

laa

BAS59011817 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ, RESTRICTED

DuraPlex®TR Insecticide



ready-to-use, ultra-low-volume insecticide fogger that helps А commercial ornamental greenhouse growers cost-effectively control a wide variety of greenhouse insects, including aphids, caterpillars, fungus gnats, mealybugs, mites, scale, shore flies, thrips and whiteflies. REI 12 Hrs

RATE One can covers up to 3,000sq ft. Must be used in a closed greenhouse. SIGNAL WORD Warning

CHEMICAL FAMILY Organophosphate + Pyrethroid **ACTIVE INGREDIENT** Chlorpyrifos

CONTROLS Many pests, see label.

207 BAS59011819 Min. Buy 1 EA SHIPPING INFO RESTRICTED

Dursban® 50W Insecticide

by Corteva Agriscience

An insecticide in water soluble packets designed for use as a spray to control insect pests on trees, turf and ornamental plants. Long-lasting control on over 280 pests on ornamentals and nursery crops.

REI 12 Hrs

RATE 2 to 4 (4.4oz) water soluble packets per 100gal SIGNAL WORD Danger CHEMICAL FAMILY Organophosphate **ACTIVE INGREDIENT** Chlorpyrifos

CONTROLS Aphids, Adelgids, Beetles, Leafhoppers and more.

7 x 4oz Packets

DOW19-0079B Min. Buy 1 EA SHIPPING INFO RESTRICTED

BRANDT Ecotec Plus Botanical Insecticide by **BRANDT**

A botanical insecticide. That offers broad spectrum control of many greenhouse pests. Suitable for use on ornamental and vegetable crops, herbs, fruit and berries and plants grown for medicinal purposes. REI

RATE 16 to 64oz per 100gal.

SIGNAL WORD **CHEMICAL FAMILY Botanical Oils ACTIVE INGREDIENT** Rosemary Oil, Geranoil

and Peppermint Oil

CONTROLS Aphids, beetles, mites, mealybugs, thrips, whitefly and many more.

2.5aal BRANDT102601101 Min. Buy 1 EA



Crop Protectio





Insecticides & Miticides

Endeavor® 50WSP Insecticide by Syngenta Crop Protection

Safely eliminates sap-sucking aphids and whiteflies with its unique mode of action. When sprayed on the plant, there is some initial contact activity, but the primary mode of action and residual control occurs through insect feeding inhibition. Works in tandem with biological pest control programs to further protect plants

REI 12 Hrs

RATE 3 to 5oz per 100gal.

SIGNAL WORD Danger **CHEMICAL FAMILY Pyridine ACTIVE INGREDIENT Pymetrozine**

CONTROLS Aphids and Whiteflies.

6 x 2.5oz Packets SYN36224

Min. Buy 1 EA

Enstar® AQ Insect Growth Regulator

by Central Life Sciences

Enstar AQ insect growth regulator offers broad-spectrum control of many insect pests. For use on ornamental plants in greenhouses, shade houses and interiorscapes.

REI 4 Hrs

RATE 16 to 32fl oz per 100gal

SIGNAL WORD Caution

CHEMICAL FAMILY Insect Growth Regulator

ACTIVE INGREDIENT S-Kinoprene

CONTROLS Aphids, Fungus gnats, Beetles, Mites, Thrips,

Whitefly and more.

32oz

WLMK100502416 Min. Buy 1 EA

1gal WLMK100502900

Min. Buy 1 EA

Entrust[®] SC Insecticide

by Corteva Agriscience

Entrust SC insecticide provides control of lepidopterous larvae, leafminers, thrips and fire ants. Labeled for use on vegetable crops, fruit, herbs, turf, ornamentals and more.

REI 4 Hrs

RATE 4 to 8oz per acre. **SIGNAL WORD** Caution

CHEMICAL FAMILY Spinosyn

ACTIVE INGREDIENT Spinosad

CONTROLS Caterpillars, worms, leafminers, thrips and more.

Min. Buy 1 EA

32oz SA33253

Hagship[®] 25WG Insecticide by Syngenta Crop Protection

A broad spectrum insecticide that is effective against many sucking and chewing insects when applied to the foliage and soil. Flagship has rapid translaminar movement and is readily taken up by the plant roots.

OMRI

REI 12 Hrs RATE 4 to 8oz per 100gal.

SIGNAL WORD Caution

CHEMICAL FAMILY Neonicotinoid

ACTIVE INGREDIENT Thiamethoxam

CONTROLS Ants, Aphids, Thrips, Whiteflies, Leaf Beetles and many more.

216 AGENCY SYN27748

Min. Buy 1 EA

Floramite® SC Miticide by OHP, Inc.

Produces guick knockdown through contact activity and long residual control of more than 21 days. Soft on predacious mites and beneficial insects. Provides outstanding control of a variety of mite pests on ornamental plants. Labeled for commercial greenhouses and nurseries

REI 12 Hrs

RATE 4 to 8oz per 100gal		
SIGNAL WORD Caution		
HEMICAL FAMILY Carbazate		
ACTIVE INGREDIENT Bifenazate		
CONTROLS Spider mites		

32oz OHP982718

Min. Buy 1 EA

Floramite® SC/LS Miticide by OHP, Inc.

Produces quick knockdown through contact activity and long residual control of more than 21 days. Soft on predacious mites and beneficial insects. Provides outstanding control of a variety of mite pests on ornamental plants. Labeled for interiorscapes, landscapes and residential (not for plants grown for resale)

REI 12 Hrs

RATE 4 to 8oz per 100gal SIGNAL WORD Caution **CHEMICAL FAMILY Carbazate ACTIVE INGREDIENT Bifenazate CONTROLS** Spider mites

807

OHP982714

Forbid® 4F Miticide by Bayer CropScience, LP

Offers outstanding knockdown and residual control of mites and all stages of whiteflies for four to eight weeks. Excellent translaminar activity for easier coverage and has minimal effects on beneficial insects when used according to label directions.

REI 12 Hrs

8oz

RATE 1.4 to 4oz per 100gal SIGNAL WORD Caution **CHEMICAL FAMILY** Tetronic Acid **ACTIVE INGREDIENT** Spiromesifen **CONTROLS** Spider mites, Tarsonemid mites, Whiteflies.

PROKZ19-0522W Min. Buy 1 EA

Fulcrum® Insect Growth Regulator by OHP, Inc.

Fulcrum Insecticide is highly effective against a broad-spectrum of greenhouse and nursery insects. Fulcrum controls nymphs/larvae and pupae and negatively affects development of viable eggs. Use sites include: shrubs, ornamentals, flowering and foliage plants, ground covers and non-bearing fruit and nut trees.

REI 12 Hrs RATE 2 to 8oz per 100gal

SIGNAL WORD Caution **CHEMICAL FAMILY** Pyridine Insect Growth Regulators

ACTIVE INGREDIENT Pyriproxyfen

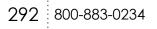
CONTROLS Aphids, Fungus Gnats, Leafminers, Whiteflies

Min. Buy 1 EA

and more.

320z OHP982840

















Gnatrol® WDG Insecticide by Nufarm Americas Inc.

Gnatrol biological insecticide offers effective control of fungus gnat larvae in greenhouse ornamentals and vegetable plants and nurseries. Gnatrol is OMRI listed for organic production.

REI 4 Hrs			
RATE 3.2 to 26oz per 10	0gal		
SIGNAL WORD Caution	ı		
CHEMICAL FAMILY Bio	logical		
ACTIVE INGREDIENT B	acillus thuringiensi	S	Annual William
CONTROLS Fungus Gna	at larvae.		
16lb		OMPI	
VAL60215.146	Min. Buy 1 EA		

VAL60215.146

Grandevo® Insecticide / Miticide

by Marrone Bio Innovations

Grandevo® is a microbial-based insecticide. Grandevo contains several active compounds that repel, stop feeding, reduce reproduction and induce mortality to prevent the development of damaging populations of sucking and chewing insects, flies and mites. Grandevo can be used on a wide range of organic and conventional crops, including fruits, vegetables, nuts and turf and ornamentals.

REI 4 Hr

RATE 1 to 3lbs per 100gal



SIGNAL WORD Caution

CHEMICAL FAMILY Bioinsecticide

ACTIVE INGREDIENT Chromobacterium subtsugae strain PRAA4-1 CONTROLS Mites, whitefly, mealybug, thrips, aphids

Min. Buy 1 EA

Min. Buy 1 EA

Grandevo® CG

1lb MB10085

Grandevo® WDG

6lb

MB10047

Hachi-Hachi[®] SC Insecticide by SePRO Corporation

Hachi-Hachi SC provides superior thrips and aphid control with no known resistance and excellent efficacy on scale, leafhoppers and early instar lepidopteran insects.

REI 12 Hrs

RATE 14 to 32oz per 100gal. SIGNAL WORD Warning **CHEMICAL FAMILY Metiacaricide ACTIVE INGREDIENT Tolfenpyard CONTROLS** Thrips, Aphids, Scale, Leafhoppers, Lepidopteran Insects, Whiteflies

64oz AGENCY SEPRO1159.464

Min. Buy 1 EA





long-lasting miticide with ovicidal activity that provides Δ unsurpassed plant safety and control of a wide variety of spider mites. Is active on all immature mite stages and affects the fertility of adult female mites. Does not affect beneficial mites and insects. Labeled for use on greenhouse grown tomato, pepper and eggplant.

REI 12 Hrs RATE 1 to 2oz per 100gal. SIGNAL WORD Caution **CHEMICAL FAMILY Thiazolidinone ACTIVE INGREDIENT Hexythiazox CONTROLS** Many species of spider mite.

607 GOW16724

Min. Buy 1 EA

Kontos® Insecticide

by Bayer CropScience, LP

Highly effective control of sucking pests including Adelgids, Aphids, Leafhoppers, Mealybugs, Psyllids, Scales, Thrips and Whiteflies. Up to 30 days of residual control. Can be applied by spray or drench application. For use in nurseries, greenhouses and interior plantscapes on ornamentals, vegetable transplants and non-bearing fruit trees. REI 24 Hrs

IN II

RATE 1.7 to 3.4 oz per 100 gal SIGNAL WORD Warning

CHEMICAL FAMILY Tetramic Acids **ACTIVE INGREDIENT** Spirotetramat

CONTROLS Adelgids, Aphids, Leafhoppers, Mealybugs, Scales and more.

250ml (8.45oz) AGENCY BYR84915440 Min. Buy 1 EA

Kopa® Insecticidal Soap

by OHP, Inc.

Kopa insecticidal soap for control of insect and mite pests on vegetables, fruits and ornamental plants grown in greenhouses and outdoors.

REI 12 Hrs RATE 1 to 3gal per 100gal SIGNAL WORD Warning **CHEMICAL FAMILY Soaps ACTIVE INGREDIENT** Potassium salts of fatty acids **CONTROLS** Wide variety of soft bodied insects

2.5gal OHP985025 Min. Buy 1 FA

OMRI

Magus[®] Miticide by Gowan

A highly effective broad-spectrum miticide with excellent contact and ingestion activity against tetranychid, eriophyid and other key mite pests. It provides quick knockdown and residual activity against mites on a wide range of ornamental crops. Magus is also highly effective at controlling powdery mildew in susceptible crops. REI 12 Hrs

RATE 12 to 24oz per 100gal. SIGNAL WORD Warning **CHEMICAL FAMILY** Quinazoline **ACTIVE INGREDIENT** Fenazaguin **CONTROLS** Mites and Whitefly.

3207 GOW54293 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ







Mainspring" GNL Insecticide by Syngenta Crop Protection

Provides extended insect control protection through its systemic and translaminar movement. Can be applied as a spray or a drench. A neonicotinoid alternative with the novel active ingredient cyantraniliprole. Labeled for use in greenhouses, nurseries and residential and commercial landscapes.

REI 4 Hrs

RATE 4 to 8oz per 100gal

SIGNAL WORD Warning **CHEMICAL FAMILY** Anthranillic Diamide ACTIVE INGREDIENT Cyantraniliprole

CONTROLS Leafminers, Thrips, Whiteflies, Beetles and more.

16oz AGENCY SYN58664

Min. Buy 1 EA

Mallet[®] .5G Insecticide by Nufarm Americas Inc.

Mallet 0.5G Insecticide protects plants from within, providing fast knock-down, broad-spectrum control, long-lasting grub and insect control with preventive and curative properties. Labeled for use on greenhouse ornamentals, nursery, landscape and turfgrass.

REI 12 Hrs

RATE varies based on container size, see label

SIGNAL WORD Caution

CHEMICAL FAMILY Neonicotinoid

ACTIVE INGREDIENT Imidacloprid

CONTROLS Aphids, fungus gnats, beetles, leafhoppers, leafminers, mealybugs, whiteflies and more

Min. Buy 1 EA

301h

NTS10176032

Mallet® 2FT&O Insecticide by Nufarm Americas Inc.

Mallet 2F Insecticide is a liquid concentrate for the contact and systemic control of insect pests in nearly all residential and commercial settings. Mallet 2F is a neonicotinoid insecticide with long-lasting, residual control in ornamentals, turfgrass, nurseries, vegetable plants in greenhouses and more.

REI 12 Hrs

RATE 2oz per 100gal **SIGNAL WORD** Caution **CHEMICAL FAMILY** Neonicotinoid

ACTIVE INGREDIENT Imidacloprid CONTROLS Aphids, Lace bugs, Mealybugs, Thrips,

Whitefly and more.

1gal

2.5gal

NTS10432225

NTS10432041

Min. Buy 1 EA Min. Buy 1 EA



Marathon® G Insecticide by OHP, Inc.

A highly-active insecticide that demonstrates systemic activity in plants and offers residual control on ornamental plants. A granular formula when applied to the soil surface or incorporated into the media offers up to 12 weeks of residual control.

REI 12 Hrs **SIGNAL WORD** Caution **CHEMICAL FAMILY Neonicotinoid ACTIVE INGREDIENT Imidacloprid CONTROLS** Aphids, Fungus Gnat, Whitefly and more.

50lb OHP985350

5lb OHP985495

Min. Buy 1 EA

Min. Buy 1 EA

Marathon[®] II Insecticide

by OHP, Inc.

A highly-active insecticide that demonstrates systemic activity in plants and offers residual control on ornamental plants for resale grown in the greenhouse, nursery, and interior plantscapes.. A flowable formulation that allows for a foliar spray application. At very low rates Marathon II as a spray offers 3 to 4 weeks of control on sucking and piercing insects.

REI 12 Hrs RATE 50ml per 100gal SIGNAL WORD Caution **CHEMICAL FAMILY** Neonicotinoid **ACTIVE INGREDIENT Imidacloprid CONTROLS** Aphids, Fungus Gnat, Whitefly and more.

250 ml (8.45oz)

OHP985250

Mavrik Aquaflow® Insecticide / Miticide

Min. Buy 1 EA

by Central Life Sciences

The fast-acting formulation kills a broad-spectrum of greenhouse and nursery pests on contact or through ingestion. It is non-phytotoxic, even on open blooms, which makes it ideal for all plants.

REI 12 Hrs RATE 4-10oz per 100gal SIGNAL WORD Caution **CHEMICAL FAMILY** Pyrethroid

ACTIVE INGREDIENT Tau-fluvalinate CONTROLS Aphids, Fungus gnats, Beetles, Mites, Thrips,

Whitefly and more.

3207

WLMK38060A Min. Buy 1 EA

1gal WLMK38040A Min. Buy 1 EA

Mesurol® 75WSP Insecticide / Molluscicide

by Gowan

A time tested insecticide and molluscicide for nursery and greenhouse ornamentals. Offers effective, reliable, long-lasting control of Western Flower Thrips, Snails and Slugs.

REI 24 Hrs RATE 1 to 2oz per 100gal SIGNAL WORD Warning **CHEMICAL FAMILY Carbarnate ACTIVE INGREDIENT Methiocarb** CONTROLS Aphids, Mites, Thrips, slugs, snails.

2lb GOW30663 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ, RESTRICTED













Minx 2[®] Insecticide

by Nufarm Americas Inc.

Delivers quick and broad-spectrum mite and leafminer control in a new low volatile organic compound (VOC), water-based formula. It also works to suppress aphids, whiteflies and thrips. Compared to many other Abamectin products, Minx 2 offers added application flexibility and applicator comfort.

REI 12 Hrs RATE 4 to 8oz per 100gal SIGNAL WORD Warning **CHEMICAL FAMILY Glycosides ACTIVE INGREDIENT Abamectin CONTROLS** Mites, Leafminers, Thrips, Aphids, Whiteflies



32oz NTS10666432 1gal

Min. Buy 1 EA

NTS10666041

Min. Buy 1 EA

Molt-X[®] Insect Growth Regulator

by Bioworks Inc. Molt-X is an insect growth regulator for control of a wide variety of greenhouse pests. Safe for beneficial insects. Use sites include: greenhouse vegetable and ornamental crops, nursery, turf, trees and shrubs.

REI 4 Hrs RATE 8 to 10oz per 100gal **SIGNAL WORD** Caution **CHEMICAL FAMILY Biopesticide ACTIVE INGREDIENT Azadirachtin CONTROLS** Aphids, Thrips, Whiteflies and more

3207 BW1MX27A22



M-Pede® Insecticide / Miticide / Fungicide by Gowan

Min. Buy 1 EA

Natural, safe, insecticide, miticide and fungicide that provides excellent contact control of various soft bodied insects, mites and powdery mildew throughout their life cycles.

REI 12 Hrs

SIGNAL WORD Warning

CHEMICAL FAMILY Soaps ACTIVE INGREDIENT Potassium Salts of Fatty Acids

CONTROLS Aphids, Thrips, Fungus Gnat, Whitefly and more. Effective against Powdery Mildew.

2.5gal GOW52822

OMRI Min. Buy 1 EA







A mycoinsecticide for the control of Whitefly, Aphids, Thrips and more. Labeled for use on ornamentals and vegetables in greenhouses, nurseries, commercial landscapes, interiorscapes and turf. Organic version of BotaniGard.

REI 4 Hrs RATE 32oz per 100gal SIGNAL WORD Danger **CHEMICAL FAMILY Biopesticide** ACTIVE INGREDIENT Beauvaria bassiana

CONTROLS Aphids, Thrips, Whiteflies and more

BO Mycoinsecticide

3207

BW1B16A22 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

1gal

BA1B16A23 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP



OMRI

OMRI



Wettable powder formulation.

1lb BW1B16A02



SHIPPING INFO DIRECT SHIP

Min. Buy 1 EA

NemaShield® Steinernema Beneficial Nematodes by Bioworks Inc.

Provides excellent biological control of fungus gnats by eliminating damaging fungus gnat larvae. A single application is sufficient for preventing fungus gnat outbreaks or for control in the beginning phase of an outbreak. Effective in a Western Flower Thrips control program for treatment of pupae and pre-pupae. It will also control thrips species that spend a portion of their life cycle in the soil or potting media.

REI 0 Hrs

CHEMICAL FAMILY Biological ACTIVE INGREDIENT Steinernema feltiae **CONTROLS** Fungus Gnat, Thrips.

100 Million Pack BW1N20A26 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

250 Million Pack

BW1N20A27 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

500 Million Pack

BW1N20A28 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

2 Billion Pack BW1N20A36

SHIPPING INFO DIRECT SHIP









NoFly® WP Biological Pesticide by Blacksmith Bioscience

NoFly WP is a biological pesticide for the control of many early stage greenhouse insect pests. Labeled for use on greenhouse and indoor crops, both food and ornamental.

REI 4 Hrs

rop Protection

RATE 1 to 4lbs per acre

SIGNAL WORD Caution

CHEMICAL FAMILY Biological

ACTIVE INGREDIENT Isaria fumosoroseus

CONTROLS Eggs and larvae of Whiteflies, Aphids, Thrips and Mealy bugs.

2lb

BBSLGNF0022 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP



Notavo® Miticide by OHP, Inc.

Notavo Ovicide/Miticide is highly effective at controlling eggs and early instar mite stages. Notavo may be used for mite management on commercial ornamental plants grown in greenhouses, saran and shade houses, outdoor containers and field-grown nursery stock.

REI 12 Hrs

RATE 2 to 8oz per 100gal **SIGNAL WORD** Caution **CHEMICAL FAMILY Tetrazines ACTIVE INGREDIENT Clofentezine CONTROLS** Spider mites

160z

OHP981081

Onyx Pro[®] Insecticide

Onyx Pro insecticide prevents beetles and borers in Christmas trees and nursery grown trees. Also labeled for use on outdoor ornamentals, lawns, sod farms and golf courses to control a wide range of insect pests. Application can be made as a foliar spray or media drench. REI 12 Hrs

SIGNAL WORD Caution

CHEMICAL FAMILY Pyrethroids **ACTIVE INGREDIENT Bifenthrin**

CONTROLS Beetles and borers plus a wide range of other turf and ornamental insect pests.

Min. Buy 1 EA

32oz

FMC19-0032 Min. Buy 1 EA SHIPPING INFO RESTRICTED

Overture® 35WP Insecticide

by Nufarm Americas Inc.

A wettable powder that fights resistance and controls thrips at all life stages, including tough western flower thrips, while also controlling lepidopterans insects. Safe on most beneficial insects.

REI 12 Hrs

RATE 8oz per 100gal **SIGNAL WORD** Caution **CHEMICAL FAMILY Pyridalyl**

ACTIVE INGREDIENT Pyridalyl

CONTROLS Thrips, Budworm and Cabbage Looper larvae and more.

1lb VAL62120.084

Min. Buy 1 EA



Effective in controlling a variety of insect pests on ornamental plants. Provides an effective means for controlling whiteflies, thrips, leaf miners, armyworms and certain other foliar feeding insects on container and field grown ornamentals in greenhouses, shade houses and nurseries. Applied as a foliar spray to control immature stages of the target pests

REI 12 Hrs RATE 6 to 8oz per 100gal SIGNAL WORD Caution **CHEMICAL FAMILY** Insect Growth Regulator **ACTIVE INGREDIENT Novaluron CONTROLS** Whiteflied, Thrips, Leafminers, lepidoptera

32oz OHP986195

Min. Buy 1 EA

Pro-Control® TR Formula 2 Insecticide by BASF Corp

Total release aerosol insecticide provides guick knockdown and kill of crawling and flying insects. Use as space treatment in residential, commercial, truck trailers and USDA facilities. Convenient, easy-touse and effective against a wide variety of pests.

REI 4 Hrs

RATE 1 Can per 5,000sq ft **SIGNAL WORD** Caution

CHEMICAL FAMILY Piperonyl Butoxide + Pyrethrins **ACTIVE INGREDIENT** Piperonyl butoxide and Pyrethrins

CONTROLS Ants, Crickets, Earwigs, Fleas, Flies, Gnats, Hornets, Mosquitoes, Roaches, Silverfish, Small Flying Moths, Spiders, Ticks, Wasps and Yellowjackets

BAS59012289

60Z

Min. Buy 1 EA

Pycana® Insecticide / Miticide by OHP, Inc.

Pycana[™] is a OMRI Listed Insecticide/Miticide combination product containing pyrethrins and canola oil. Pycana provides quick knockdown of many insects and mites including aphids, leafhoppers, earwigs, plant bugs, psyllids, mealybugs, thrips, whiteflies and spider mites. May be used on ornamentals, fruits,

vegetables and herbs grown in greenhouses, shade houses, hoop houses and container grown nurseries.



Mites and more.

1aal OHP986400

OMRI Min. Buy 1 EA LIST



New







Dyerture



PyGanic[®] Specialty Insecticide by Mycorrhizal Applications LLC

Pyganic Specialty is a professional botanical insecticide that rapidly knocks down and kills pests in greenhouses and nurseries. Labeled for use on ornamental plants, vegetables, fruit and nut trees. REI 12 Hrs

RATE 16 to 32oz per 100gal

SIGNAL WORD Warning **CHEMICAL FAMILY** Pyrethrins

ACTIVE INGREDIENT Pyrethrins

CONTROLS Beetles, Caterpillars, Weevils, Moths, borers,

Aphids, Thrips, Mealy Bugs, Whiteflies

32oz

1aal MGK19-0545M

MGK7444-D30A





Pylon® Insecticide/ Miticide

by BASF Corp A broad-spectrum miticide / insecticide that provides control of mites, thrips and adult fungus gnats. Controls the target insect or mite by interfering with energy production of the pests. Its translaminar movement and mode of action results in mortality of most pests in

72 hours. REI 12 Hrs

RATE 2 to 10oz per 100gal **SIGNAL WORD** Caution **CHEMICAL FAMILY Pyrrole ACTIVE INGREDIENT** Chlorfenapyr **CONTROLS** Mites, Thrips, Foliar Nematodes, Caterpillars, Fungus Gnats

160z

BAS59012156 Min. Buy 1 EA

64oz AGENCY BAS59012566

Min. Buy 1 EA



Easy to use total release fogger for enclosed areas including greenhouses, shade houses and truck trailers. RATE One can treats up to 3,000sq ft.

Min. Buy 1 EA

SIGNAL WORD Warning

BAS59012595

207

Pyrethrum® TR Insecticide

by BASF Corp

Total release insecticide fogger for indoor use in Garden Centers, Greenhouses and Nurseries. Fast and easy control of many pests including Aphids, Beetles, Fungus Gnats, Caterpillars and many more. For use on ornamentals, flowering plants, vegetables, hanging baskets, bedding plants and more.

REI 12 Hrs RATE One can treats up to 3,000sq ft. **SIGNAL WORD** Caution CHEMICAL FAMILY Piperonyl Butoxide + Pyrethrins **ACTIVE INGREDIENT** Piperonyl butoxide and Pyrethrins **CONTROLS** Aphids, Caterpillars, Beetles, Fungus Gnats and more.

2oz BAS59011861

Min. Buy 1 EA

Pyronyl[™] Crop Spray by Central Life Sciences

Pyronyl Crop Spray Is approved for many vegetables, herbs, fruit and nut trees, flowering and foliage plants. It provides a guick knockdown and broad-spectrum control of damaging insects and mites. REI 12 Hrs

RATE 12 to 24fl oz per 100gal **SIGNAL WORD** Caution

CHEMICAL FAMILY Pyrethrins

ACTIVE INGREDIENT Pyrethrins and Piperonyl butoxide CONTROLS Aphids, Fungus gnats, Beetles, Mites, Thrips, Whitefly and more.

32oz WLMK100208914 Min. Buy 1 EA

1gal

WLMK100208715 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

Rycar[®] Insecticide by SePRO Corporation

Excellent for controlling whiteflies and aphids. It also has extremely good activity on chili thrips, mealybugs and leafhoppers. Perfect alternative to traditional neonicotinoids. Rycar is very gentle on both beneficial insects and pollinators.

REI 12 Hrs

RATE 1.6 to 6.4 fl oz per 100gal SIGNAL WORD Caution **CHEMICAL FAMILY** Pyridine Azomethine **ACTIVE INGREDIENT** Pyrifluquinazon **CONTROLS** Mealybugs and Leafhoppers

8oz AGENCY

SEPRO1056.128

Min. Buy 1 EA









Safari® 20SG Insecticide by Nufarm Americas Inc.

A super-systemic insecticide with quick uptake and knockdown. Controls a broad spectrum of pests including Q- and B-biotype whitefly. Used for indoor and outdoor ornamentals. Can be applied by foliar spray, soil drench, soil injection, or bark application.

REI 12 Hrs

SIGNAL WORD Warning **CHEMICAL FAMILY Neonicotinoid ACTIVE INGREDIENT Dinotefuran**

CONTROLS Aphids, Glassy-winged sharpshooters, Mites,

Whitefly, Scale and more.

1207

VAL69712.261 Min. Buy 1 EA

3lb

Min. Buy 1 EA

VAL69712.430

Sanmite[®] SC Insecticide

by Gowan

A broad spectrum control of pests on ornamental plants, flowers and foliage crops. Also labeled for use on greenhouse tomatoes and cucumbers. Sanmite provides residual control for 30-45 days. REI 12 Hrs

RATE 6 to 9oz per acre

SIGNAL WORD Caution

CHEMICAL FAMILY METI Acaricides + Insecticides

ACTIVE INGREDIENT Pyridaben CONTROLS Aphids, Thrips, Fungus Gnat, Whitefly,

Leafhoppers and more.

32oz

GOW76279 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

Savate[®] Insecticide / Miticide

by Bayer CropScience, LP

Savate is a staple in a spider mite rotational program and controls all stages of Mites and Whiteflies including eggs and immature stages. The translaminar movement protects upper and lower leaf surfaces and Savate's unique mode of action group (23) makes it a great rotational tool to combat resistance. Up to 30 days of residual control. REI 12 Hrs

RATE 1 to 4 oz per 100 gal

SIGNAL WORD Caution CHEMICAL FAMILY Tetronic Acid **ACTIVE INGREDIENT Spiromesefen**

CONTROLS Whiteflies and mites.

807 AGENCY BYR84907898

Scimitar® GC Insecticide

by Syngenta Crop Protection

A microencapsulated pyrethroid formulation that provides time-release control on both surface and subsurface insects. Labeled for use on turf, greenhouse grown ornamentals and outdoor landscapes and ornamentals.

Min. Buy 1 EA

REI 24 Hrs RATE 3 to 5oz per 100gal **SIGNAL WORD** Caution **CHEMICAL FAMILY Pyrethroid ACTIVE INGREDIENT** Lambda-cyhalothrin

CONTROLS Ants, Aphids, Leafminers and many more.

32oz

SYN73419 Min. Buy 1 EA SHIPPING INFO RESTRICTED



Sevin® 4SL Insecticide by Bayer CropScience, LP

Sevin 4SL insecticide is a fast-acting, broad-spectrum, contact insecticide for use on ornamentals, vegetable and fruits. Controls more than 80 ornamental pests.

REI 12 Hrs RATE 24oz per 100gal

SIGNAL WORD Caution **CHEMICAL FAMILY** Carbamates ACTIVE INGREDIENT Carbary **CONTROLS** Over 80 key ornamental insect pests

2.5aal PROKZ3636589 Min. Buy 1 EA



Shuttle O[®] Miticide by OHP, Inc.

An excellent choice as a rotational tool for control of two-spotted spider mites, spruce spider mites and other mites. For use on ornamentals grown in greenhouses, container and field nurseries, lath and shade houses, arboretums, interiorscapes and on greenhouse grown fruiting vegetables.

REI 12 Hrs

RATE 6 to 12oz per 100gal SIGNAL WORD Caution

CHEMICAL FAMILY Napthoguinone Derivative

ACTIVE INGREDIENT Acequinocyl

CONTROLS Two spotted spider mites, Spruce spider mites, Strawberry spider mites and more.

Min. Buy 1 EA

1607

OHP987400

Sirocco® Miticide

by OHP, Inc.

Provides guick knockdown and long residual control of a wide variety of insects and pests such as thrips and mites. May be used in greenhouse, shade houses, nurseries including Christmas tree and conifer plantations, landscapes and interiorscapes.

REI 12 Hrs

RATE 3 to 4oz per 100gal. SIGNAL WORD Warning

CHEMICAL FAMILY Glycoside + Carbazate ACTIVE INGREDIENT Bifenazate

CONTROLS Mites, thrips, aphids, whiteflies

807

OHP987832 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

Spear-T[®] Insecticide / Miticide

by Vestaron

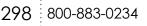
Spear-T[®] Liquid Concentrate is a biological insecticide/miticide for treatment of thrips, whiteflies, two spotted spider mites, broad mites and aphids in vegetables in greenhouses. It features a new mode of action, environmentally friendly, safe for honeybees. Can be sprayed or fogged, labeled for greenhouse use only

REI 4 Hr RATE 25% v/v **SIGNAL WORD** Caution **CHEMICAL FAMILY Bioinsecticide** ACTIVE INGREDIENT GS-omega/kappa-Hxtx-Hv1a CONTROLS Thrips, whiteflies, two-spotted spider mites, broad mites, aphids, spotted wing drosophila

Min. Buy 1 EA

1gal VESBT128









SuffOil-X[®] Insecticide / Miticide by Bioworks Inc.

Suffocates and kills eggs, larvae, nymphs and adult soft bodied insects and mites and controls fungi including powdery mildew. The unique spray oil emulsion formulation stays in suspension better than other oils and the smaller oil particles provide uniform coverage with less chance of phytotoxicity. Use on vegetables, nursery, landscape, ornamental and greenhouse crops.

REI 4 Hrs RATE 1 to 2gal per 100gal. **SIGNAL WORD** Caution **CHEMICAL FAMILY Oils ACTIVE INGREDIENT Mineral Oil** CONTROLS Many pests and diseases. See label.

2.5gal



BW1SX25A24

Min. Buy 1 EA

Sultan® Miticide by BASF Corp

Sultan is a contact miticide for rapid spider mite control on ornamentals grown in greenhouses, shade houses, nurseries and residential and commercial landscapes. Sultan has excellent plant safety has shown no adverse effects on beneficial insects.

REI 12 Hrs RATE 13oz per 100gal. **SIGNAL WORD** Caution **CHEMICAL FAMILY Beta-ketonitrile ACTIVE INGREDIENT Cyflumetofen CONTROLS** Spider mites

16oz AGENCY

BAS59013978

Min. Buy 1 EA

Talstar® Professional Insecticide

by FMC

Controls pests indoors and outdoors on residential, commercial and industrial buildings, greenhouses, lawns, ornamentals and more. Talstar Pro Insecticide provides broad-spectrum control of the toughest lawn and ornamental pests. Not labeled for outdoor nursery applications.

REI 12 Hrs

RATE 5.4 to 43.5oz per 100gal **SIGNAL WORD** Caution **CHEMICAL FAMILY Pyrethroid ACTIVE INGREDIENT Bifenthrin** CONTROLS Aphids, caterpillars, scale, mites, fungus gnats, mealybugs, thrips, whiteflies and many more

3207

FMC19-0303F Min. Buy 1 EA 1gal

FMC10056776 Min. Buy 1 EA

> Don't See What You Need? Use the BFG Mobile App or visit www.bfgsupply.com to see a much larger selection of Biological Insect Control

Talstar[®] Select Insecticide

Talstar Select provides long-lasting residual control of aphids, black vine weevils, scale and other nursery pests without the risk of damaging sensitive plants. It is non-staining and contains no odorous or plant-damaging solvents, so it can be applied to open blooms and color bracts right up to the day of shipment. 100

REI 12 Hrs

NET 12 TH3	The second se
RATE 5 to 40oz per acre	
SIGNAL WORD Caution	
CHEMICAL FAMILY Pyrethroid	
ACTIVE INGREDIENT Bifenthrin	-
CONTROLS Aphids, caterpillars, scale, mites, fungus gnats,	9826
mealybugs, thrips, whiteflies and many more	100 - 1
	100

1aal FMC19-0303G Min. Buy 1 EA SHIPPING INFO RESTRICTED

Talus® 70DF Insect Growth Regulator by SePRO Corporation

Talus delivers toxicity to pests via contact, ingestion and vapor activity. There is little or no systemic movement of Talus in plants, but its vapor activity allows it to reach leaf undersides where many pest species dwell and it helps protect new growth. In addition to its primary mode of action, Talus also suppresses egg-laying and causes egg sterility in treated adults through secondary hormonal activity. REI 12 Hrs

RATE 6 to 14oz per 100gal **SIGNAL WORD** Caution **CHEMICAL FAMILY Buprofezin ACTIVE INGREDIENT Buprofezin CONTROLS** Whiteflies, Mealybugs, Leafhoppers, Planthoppers, Scales

3lb

SEPRO19-0307B

Min. Buy 1 EA







TetraSan® WDG Insecticide

by Nufarm Americas Inc.

With contact and WDG translaminar movement, TetraSan controls spider mites on the underside of leaves, even when it's difficult to get good under-leaf spray coverage. Formulated to affect all stages of the mite life cycle, offers residual control up to five weeks and is safe to most beneficials. REI 12 Hrs

RATE 8 to 16oz per 100gal.

SIGNAL WORD Caution

CHEMICAL FAMILY Biphenyl Oxaline ACTIVE INGREDIENT Etoxazole CONTROLS Mites

1lb

Crop Protection

VAL69760.084 Min. Buy 1 EA

Thuricide N/G[®] Insecticide

by OHP, Inc.

A naturally occurring bacteria that infects lepidopteran larvae and other insect larvae. It target the gut of insect larvae. Once eaten the insect dies in several days but usually stops feeding in a few hours.

REI 4 Hrs

RATE 1/4 to 1lb per acre

SIGNAL WORD Caution

CHEMICAL FAMILY Biological ACTIVE INGREDIENT Bacillus thuringiensis kurstaki strain SA-12

Min. Buy 1 EA

CONTROLS Lepidopteran larvae

807

OHP988490

Triact 70® Botanical Oil

by OHP, Inc.

A broad-spectrum fungicide, miticide and insecticide. Highly effective and economical botanical oil that may be used indoors as well as outdoors. As a fungicide, it is a preventative as well as a curative. It coats fungal spores and then dehydrates them to stop the disease cycle.

OMRI

OMRI

REI 4 Hrs

RATE .5 to 2gal per 100gal **SIGNAL WORD** Caution **CHEMICAL FAMILY Oils ACTIVE INGREDIENT Neem oil CONTROLS** Wide range of insect pests.

2.5gal OHP988500

Min. Buy 1 EA

TriStar® 8.5SL Insecticide

by Nufarm Americas Inc.

An odorless, water-based formulation that mixes easily and works with contact, systemic and translaminar activity to protect plants. Absorbs and spreads within the plant to provide guick knockdown of a wide spectrum of insects, in as little as 15 minutes as a direct spray. Up to 4 weeks residual control on bedding plants, 4 to 6 weeks on woody ornamentals and trees. REI 12 Hrs

RATE 8 to 16oz per 100gal SIGNAL WORD Warning **CHEMICAL FAMILY** Neonicotinoid **ACTIVE INGREDIENT** Acetamiprid

CONTROLS Aphids, Lace bugs, Mealy bugs, Thrips, Whitefly and more.

32oz

NTS10520432 Min. Buy 1 EA 1aal

NTS10520041

Min. Buy 1 EA



Ultra Pure Oil is a year round spray oil for control of insects, mites and fungus. 98% mineral oil labeled for use on fruit and nut crops, outdoor and greenhouse vegetables, flowering and foliage ornamentals, trees and shrubs.

REI 4 Hrs

RATE 0.5 to 2gal per 100gal SIGNAL WORD Caution CHEMICAL FAMILY Oils

ACTIVE INGREDIENT Mineral Oil

CONTROLS Adult, larval and egg stages of soft-bodied

insects and mites. Effective on powdery mildew.

2.5gal BAS59011962

BAS59011963

30gal Drum

Min. Buy 1 EA

Min. Buy 1 EA

Venerate® CG Insecticide / Miticide

by Marrone Bio Innovations

Venerate bioinsecticide features multiple modes of action is effective against a wide variety of chewing and sucking insects and mites, yet easy on beneficials. The unique and novel modes of action will complement and improve integrated pest management and insect resistancemanagement programs.

REI 4 Hr RATE 0.5 to 1gal per 100gal

SIGNAL WORD Caution **CHEMICAL FAMILY Bioinsecticide**

ACTIVE INGREDIENT Burkholderia strain A396 CONTROLS Aphids, white grubs, mites, leafhoppers, whiteflies, caterpillars

lqf MB10086	Min. Buy 1 EA	
1gal		OMRI
MB10083	Min. Buy 1 EA	LISTED For Organic Use



Granular insecticide is formulated specifically for control of Black Vine Weevils and White grubs (including Japanese Beetle and European Chafer) in containerized nursery stock. Wisdom is also an effective quarantine treatment for Fire Ants. Granular formulation for easy mixing with potting media.

REI 12 Hrs SIGNAL WORD Caution **CHEMICAL FAMILY** Pyrethroids **ACTIVE INGREDIENT Bifenthrin CONTROLS** Fire Ants, Mealybugs, Fungus Gnat larvae,

Balck Vine Weevil, Japanese Beetles, White Grubs and more.

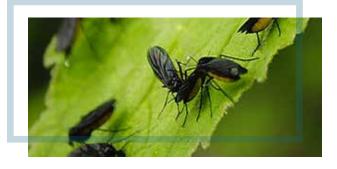
50lb

AMVC11857 Min. Buy 1 EA



New

EVENERATE #





TriStar





Biological Pest Control Is It Right for You?



Q: Who is a good candidate to use biologicals for pest control?

A: Any grower can implement beneficial insects into their pest control program if they are so motivated. Many growers consider using beneficial insects when they start to see pest resistance in their spray rotations, want to reduce worker exposure and lower pesticide residues in their crops, or are looking for a more sustainable approach. Start small, focus on a particular crop or pest to learn how an integrated program works.

Q: What is a realistic expectation when I use biological?

A: Beneficial insects and mites are another tool for your integrated crop management (ICM) program. They are not a "silver bullet", but do allow you an added dimension of flexibility. By utilizing beneficials along with compatible chemicals you have an expanded arsenal for your pest control program. There will be a learning curve when implementing a new approach, but once you begin to understand the program you will see positive results such as better looking crop, no REI issues, not spraying as often after work hours and improved pest control.

Q: How do biologicals and traditional chemistry work together or conflict?

A: For today's growers, there are an array of chemicals that are compatible with the various beneficial insects and mites. These compatible chemistries work well with the beneficials and allow the grower to spray if the pest population begins to multiply at a faster rate, without harming the beneficial population that is already established in the crop. There are also pesticides that need to be avoided when using beneficials due to incompatibility and long residuals on the crop. At the end of the program prior to shipping, the use of the harsher chemicals may be employed to clean the crop if necessary.

Bioline Pest Control Chart

	Aphids	Fungus Gnat	Leafminer	Shore Fly	Spider Mites	Thrips	Whitefly
Amblyseius andersoni					Х		
Aphidoletes aphidimyza	Х						
Amblyseius californicus					Х		
Amblyseius cucumeris						Х	
Amblyseius swirskii						Х	Х
Aphidius colemani	Х						
Aphidius ervi	Х						
Atheta coriaria		X (larvae)		X (larvae)			
Diglyphus isaea			Х				
Encarsia formosa							Х
Eretmocerus eremicus							Х
Hypoaspis miles		X (larvae)				X (larvae)	
Orius insidiosus						Х	
Phytoseiulus persimilis					Х		
Steinernema feltiae		X (larvae)	Х			Х	



BIOLOGICAL CONTROL STRATEGY FOR CHRYSANTHEMUM PRODUCTION

The most common pests that affect chrysanthemum crops are thrips, but spider mites, aphids and leafminers can also be problematic. Incorporating biological control agents (BCAs) into chrysanthemum production has been very successful for the last decade in Europe. However, new developments in biocontrol have increased the use of BCAs in chrysanthemum crops in North America.

			Appli Ra	cation ate		
Pest	ВСА	Product	m²	sq. ft.	Timing	Comments
		Amblyline - loose	100	10	Apply weekly during propagation.	Broadcast evenly or use a battery- operated blower.
Thrips	Amblyseius cucumeris	Amblyline Stick- mini sachet	propaga shutt	net per ation tray, :le tray Pot.	Place sachet at sticking/seeding and again during transplanting into pots or hanging baskets.	Place a minimum of 1 Amblyline Stick per 4, 5 or 6-inch shuttle tray. Larger pots that are individually placed need 1 sachet per pot.
(Frankliniella occidentalis)	Orius insidiosus	Oriline	5 to 10	0.5 to 1	Release in hot spots.	Consider using pepper banker plants.
	Stratiolaelaps scimitus (Hypoaspis miles)	Hypoline	100	10	Apply at sticking and at transplanting.	If applied at rooting stage, second application should be half rate
	Dalotia coriaria (Atheta coriaria)	Staphyline	2	0.2	transplanting.	at transplanting.
Two-spotted spider mites	Amblyseius andersoni	Anderline	4 to 6	0.4 to 0.6	Release together as mixed application with Amblyseius cucumeris in propagation.	
(Tetranychus urticae)	Phytoseiulus persimilis	Phytoline	6 to 8	0.6 to 0.8	Start when first mites are detected. Repeat weekly for 3 to 4 weeks until Phytoseiulus is established and mites are controlled.	Early detection improves results. Consider using indicator plants (bush beans).
	Stratiolaelaps scimitus (Hypoaspis miles)	Hypoline	100	10	Apply at sticking and at transplanting.	If applied at rooting stage, second application should be half rate
Fungus gnats (Bradysia spp)	Dalotia coriaria (Atheta coriaria)	Staphyline	2	0.2	transplanting.	at transplanting.
(braaysia spp)	Steinernema feltiae	Exhibitline Sf	250,000	25,000	Apply at sticking and repeat twice during rooting stage. Reapply immediately after transplanting.	Correct application is critical for efficacy. Make sure solution is agitated, fine filters are removed and pressure is kept low.
Leafminers (Liriomyza trifolii)	Diglyphus isaea	Digline	0.25 to 1	0.025 to 0.1	Release weekly for 3 to 4 weeks until sufficient parasitism has been established.	Start releasing at first signs of leafminer (feeding and oviposition spots).
	Aphidius colemani	Aphiline	0.25 to 1	0.025 to 0.1	Release weekly and/or use in combination with aphid banker plants.	Aphidius matricariae is more aggressive towards Myzus nicotianae ('red' aphid).
Aphids (Aphis gossypii,	Rhopalosiphum padi	Aphid banker plant		(2.5 / ha) mum	Apply every other week.	Initial introduction is 2 per acre.
Myzus persicae, Myzus nicotianae)	Aphidoletes aphidimyza	Aphidoline	1	0.1	Release at first signs of aphids. Continue weekly releases until control has been achieved.	
	Chrysoperla spp	Chrysoline	10 to 20	1 to 2	Use as hot spot treatment only for quick knock down.	
Caterpillars/ loopers (several spp)	Bacillus thuringiensis	For example, DiPel WP biological insecticide	Follov	v label.	Apply at first signs.	

Dipping at	sticking and/or planting:	per 12 to 15 gallons		
Thrips,	Beauveria bassiana (strain GHA) - Use WP formulation	See label	Keep solution in	
fungus gnats and	Trichoderma harzianum strain T-22 and Trichoderma virens strain G-41	See label	agitation. Refresh dipping solution as	
others	Exhibitline Sf biological control agent	50 million	often as needed.	



BIOLINE BIOLOGICAL CONTROL AGENTS FOR SPRING ORNAMENTALS & HANGING BASKET

		Application Rate		cation ate		
Pest	ВСА	Product	m²	sq. ft.	Timing	Comments
	Amblyline - loose		100	10	Apply weekly during propagation.	Broadcast evenly or use a battery- operated blower.
Western Flower Thrips, Chili Thrips and other species	Amblyseius cucumeris	Amblyline Stick - mini sachet	1 sachet per propagatior tray or hang	n tray, shuttle	Place sachet at sticking/seeding and again during transplanting into pots or hanging baskets.	Place a minimum of 1 Amblyline Stick per 4, 5 or 6-inch shuttle tray. Larger pots that are individually placed need 1 sachet per pot.
(Frankliniella occidentalis, Scirtothrips dorsalis)	Orius insidiosus	Oriline	5 to 10	0.5 to 1	Release in hot spots.	Consider using pepper banker plants. Consult with a Bioline specialist. Be aware of diapause until March 1st.
In areas where temperatures are consistently >75°F/24°C, replace Amblyseius cucumeris with Amblyseius swirskii.	Stratiolaelaps scimitus (Hypoaspis miles)	Hypoline	100	10	Apply at sticking/seeding and at	If applied at rooting stage, second application should be half rate at
	Dalotia coriaria (Atheta coriaria)	Staphyline	2	0.2	transplanting.	transplanting.
Fungus gnats and	Stratiolaelaps scimitus (Hypoaspis miles)	Hypoline	100	10	Apply at sticking and at	If applied at rooting stage, second application should be half rate at
shore flies (Bradysia spp., Scatella	Dalotia coriaria (Atheta coriaria)	Staphyline	2	0.2	transplanting.	transplanting.
spp.)	Steinernema feltiae and Steinernema carpocapsae	Exhibitline Sf Exhibitline Sc	250,000	25,000	Apply at sticking and repeat twice during rooting stage. Reapply immediately after transplanting.	Correct application is critical for efficacy. Make sure solution is agitated, fine filters are removed and pressure is kept low.
Anhide (cmall con)	Aphidius colemani	Aphiline	0.25 to 1	0.025 to 0.1	Release weekly and/or use in combination with aphid banker plants.	Ideal release method is Aphiline in blister packs. Hang in shady spot out of intense direct sunlight.
Aphids (small spp.): Green peach, black melon, tobacco aphid (Aphis gossypii, Myzus	Rhopalosiphum padi	Aphid banker plant	1/acre (2.5/ha) minimum		Release Aphiline weekly and/or use in combination with aphid banker plants. Initial introduction is 2 banker plants per acre.	
persicae, Myzus nicotianae)	Aphidoletes aphidimyza	Aphidoline	1	0.1	Release at first signs of aphids. Continue weekly releases until control has been achieved.	Be aware of diapause between October 15th and March 1st.
	Chrysoperla spp.	Chrysoline	10 to 50	1 to 5	Use as hot spot treatment only. Works for quick knock down.	
Aphids (larger spp.):	Aphidius ervi	Erviline	0.25 to 1	0.025 to 0.1	Release weekly before aphids become a problem.	
Potato, foxglove aphid (Macrosiphum euphorbiae, Aulacorthum solani)	Aphidoletes aphidimyza	Aphidoline	1	0.1	Release at first signs of aphids. Continue weekly releases until control has been achieved.	Be aware of diapause between October 15th and March 1st.
	Chrysoperla spp.	Chrysoline	10 to 50	1 to 5	Use as hot spot treatment only. Works for quick knock down.	
Two-spotted spider	Amblyseius andersoni	Anderline	4 to 6	0.4 to 0.6	Release in propagation.	Can be a mixed application with Amblyseius cucumeris in propagation.
mites (Tetranychus urticae)	Phytoseiulus persimilis	Phytoline	6 to 8	0.6 to 0.8	Start when first mites are detected. Repeat weekly for 3 to 4 weeks until Phytoseiulus is established and mites are controlled.	Early detection improves results. Consider using indicator plants (bush beans).
Leafminers (Liriomyza trifolii)	Diglyphus isaea	Digline	0.25 to 1	0.025 to 0.1	Release weekly for 3 to 4 weeks until sufficient parasitism has been established.	Start releasing at first signs of leafminer (feeding and oviposition spots).
Broad mites (Polyphagotarsonemus Iatus)	Amblyseius cucumeris	Amblyline Stick - mini sachet	propaga shuttle	net per ation tray, e tray or g basket.	Place sachet at sticking/seeding and again during transplanting into pots or hanging baskets.	Place a minimum of 1 Swirskiline Stick per 4, 5 or 6-inch shuttle tray. Larger pots that are individually placed need 1 sachet per pot.
Sweetpotato, greenhouse		Swirskiline - loose	100	10	Apply weekly during propagation.	Broadcast evenly or use a battery- operated blower.
whiteflies (Trialeurodes vaporariorum and/or Bemisia tabaci)	Amblyseius swirskii	Swirskiline Stick - mini sachet	propaga shuttle	net per ation tray, e tray or g basket.	Place sachet at sticking/seeding and again during transplanting into pots or hanging baskets.	Place a minimum of 1 Swirskiline Stick per 4, 5 or 6-inch shuttle tray. Larger pots that are individually placed need 1 sachet per pot.
If A. swirskii is released for whitefly, it will also control thrips larva, eliminating the need to release A. cucumeris. A. swirskii requires temperatures >68°F/20°C for good performance.	Encarsia formosa and Eretmocerus eremicus	Encarline Mix	3 to 6	0.3 to 0.6	Start at first signs of whitefly. Continue weekly releases until control has been achieved.	Optimal introduction method for wasps is blister packs. Keep blister packs (cards) out of direct sunlight. Open release flap on the back.
Caterpillars/loopers	Bacillus thuringiensis	For example, DiPel WP biological insecticide.	Follov	v label.	Apply at first signs.	



BIOLOGICAL CONTROL STRATEGY FOR POINSETTIA PRODUCTION

Using biological control agents (BCAs) to control pests in poinsettias has been successful for years. There are few pests that affect poinsettias; however, the discovery of the 'Q' Bio-type silver leaf whitefly has increased the use of BCAs because it is more resistant to traditional control products.Working with BCA's improves resistance management and can help increase plant quality. For more information, download the Bioline App from www.biolineapp.com

	K			lication Rate			
Pest	ВСА	Product	m²	sq. ft.	Timing	Comments	
	Eretmocerus eremicus	Eretline	10	1	Start second week after sticking cuttings or immediately after planting. Repeat weekly.	Optimal introduction method for Eretmocerus eremicus is blister packs. Eretmocerus is also available on cards. Keep blister packs (cards) out of direct sunlight.	
Whiteflies* (Trialeurodes vaporariorum and/or Bemisia tabaci)	Amblyseius swirskii	Swirskiline	50	5		Introduction of Amblyseius swirskii is timed to coincide with the maximum foliage cover to ensure the greatest number of mites get onto the plants.	
	SWIISKII	Swirskiline Stick - mini sachet	for large	for each 10" pot poinsettias or pot for all stock plants.	Place sachet at sticking/ seeding and again during transplanting into larger pots.	Larger pots that are individually placed need one Swirskiline Stick sachet per pot.	
	Stratiolaelaps scimitus (Hypoaspis miles)	Hypoline	100	10	Apply at sticking and at transplanting.	If applied at rooting stage, second application should be half rate at transplanting.	
Fungus gnats (Bradysia spp)	Dalotia coriaria (Atheta coriaria)	Staphyline	2 0.2		transplanting.	snouio de nail rate at transplanting.	
(Brauysia spp)	Steinernema feltiae	Exhibitline Sf	250,000	25,000	Apply at sticking and repeat twice during rooting stage. Reapply immediately after transplanting.	Correct application is critical for efficacy. Make sure solution is agitated, fine filters are removed and pressure is kept low.	
Two-spotted spider mites (Tetranychus urticea)	Phytoseiulus persimilis	Phytoline	6 to 8	0.6 to 0.8	Start when first mites are detected. Repeat weekly for 3 to 4 weeks until Phytoseiulus is established and mites are controlled.	Check mite species. Phytoseiulus does not work well on Lewis mite.	
Lewis mites (Eotetranychus lewisi)	Amblyseius andersoni	Anderline	4 to 6	0.4 to 0.6	Start when first mites are detected. Repeat weekly for 3 to 4 weeks until mites are controlled.		
	Amblyseius swirskii	Swirskiline	50	5	First introduce on rooted cuttings just before transplant. Second introduction just prior to spacing.	Western Flower Thrips (WFT) do not reproduce well on poinsettia. Typically WFT will decrease naturally in poinsettia crops. Echinothrips americanus can establish on poinsettia and requires a different approach.	
Thrips (Frankliniella occidentalis)		Swirskiline Stick - mini sachet	1 sache pot for la or for ea stoo	t for each 10" rge poinsettias ach pot for all ck plants.	Place sachet at sticking/ seeding and again during transplanting into larger pots.	Larger pots that are individually placed need one Swirskiline Stick sachet per pot.	
	Stratiolaelaps scimitus (Hypoaspis miles)	Hypoline	100 10		Apply at sticking and at transplanting.	lf applied at rooting stage, second application should be at half rate at	
	Dalotia coriaria (Atheta coriaria)	Staphyline	2	0.2		transplanting.	

Whitefly development relative to temperature		potato tefly	Green whit		
	60°F/16°C	80°F/27°C	60°F/16°C	80°F/27°C	
Egg	21	6	16	7	
Larvae 1 (L1)	12	4	8	4	
L2	9	3	5	2	
L3	10	3	5	2	
L4/pupa	18	6	15	7	
Total	70	22	49	22	



© 2019 Bioline AgroSciences Important: Always read and follow label instructions. Some products may not be registered for sale or use in all states or counties. Please check with your local Extension Service to ensure registration status. www.biolineagrosciences.com



Biological Insect Control Accessories



Bioline Release Boxes

by Bioline Agrosciences, Inc.

Keep beneficials insects safe from predators as they hatch. Suspend from a shaded location near your pest infestation and the beneficials will go where they are needed.

BIOLNP8042-01 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Ephestia Eggs (Benificial Predator Food) by Bioline Agrosciences, Inc.

Used as a supplemental food source to maintain predators such as Orius insidiosus, Chrysoperla rufilabris (larval stage) and Dicyphus hesperus when pest levels are low.

CHEMICAL FAMILY Biological

ACTIVE INGREDIENT Ephestia eggs CONTROLS Aphids

10g BIOLNP8141-01 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Biological Insect Control - Mealy Bug Control

Cryptoline Cryptolaemus montrouzierei Mealy Bug Control by Bioline Agrosciences, Inc.

The Cryptoline bottle contains 500 adult Cryptolaemus montrouzieri. Females can lay 10 eggs per day. Both the adults and larvae feed on Mealy bugs, their eggs and their larvae. The life cycle of the Cryptolaemus montrouzieri takes from 4 to 7 weeks depending on temperature. Release near Mealy bug infestations.

CHEMICAL FAMILY Biological

ACTIVE INGREDIENT Cryptolaemus montrouzieri **CONTROLS** Mealy bugs

Loose Beetles in Vial

500 Adult Beetles per Vial BIOLNP0351-03 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP





Biological Insect Control - Leaf Miner Control

Digline[™] Diglyphus Leaf Miner Control by Bioline Agrosciences, Inc.

Diglyphus isaea is a widespread parasitoid of leaf miner larvae. It is reported from a large number of host species, but commercially is of interest as a parasite of Liriomyza bryoniae, L. trifolii and L. huidobrensis, as well as of the Chrysanthemum Leaf miner Phytomyza syngenesiae. The adult wasps are very variable in size and are a dark

metallic green in color. They search for host larvae of suitable size within leaf tissue and sting them through the leaf cuticle. The sting paralyses the host larva within a short time and the female wasp then lays one or more eggs alongside it.

CHEMICAL FAMILY Biological ACTIVE INGREDIENT Diglyphus isaea **CONTROLS** Leaf Miners

Loose Larvae in Vial

250 Loose Larvae per Vial RATE Covers up to 5,000sq ft

BIOLNP0551-01 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Biological Insect Control - Leather Jacket & Cutworm

Exhibitline sc™ Steinernema carpocapsae Leather Jacket and Cutworm Control

by Bioline Agrosciences, Inc.

Steinernema carpocapsae beneficial nematodes protect plants from damage caused by shore flies (Scatella stanalis) and a variety of other soil-dwelling insects and borers. They also destroy the larvae of many turf, ornamental and tree pests including flea,

billbug and bluegrass weevil larvae as well as cutworm, armyworm, sod webworm, tropical sod webworms and chinch bugs. **CHEMICAL FAMILY Biological**

ACTIVE INGREDIENT Steinernema carpocapsae **CONTROLS** Leather Jackets and Cutworms.

Nematodes in Trays

250 Million Tray

RATE One 250 Million Tray Covers up to 5,000sq ft BIOLNP1012-01 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP





Biological Insect Control - Aphid Control

Chrysoline[™] Chrysoperla carnea Aphid Control by Bioline Agrosciences, Inc.

Chrysoperla carnea larvae are predators of aphids and other pests before developing into lacewing adults. Young larvae with full feeding potential, one larva can eat 200 aphids. As adults they disperse and hunt down aphid colonies. Easy to observe and monitor. CHEMICAL FAMILY Biological

ACTIVE INGREDIENT Chrysoperla carnea **CONTROLS** Aphids

Loose Larvae in Bag

2,500 Loose Larvae per Bag RATE Covers up to 2,500sq ft BIOLNP0301-07 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP









Biological Insect Control - Aphid Control

Aphiline™ Aphidius colemani Aphid Control by Bioline Agrosciences, Inc.

Aphiline biological control agent contains the Braconid wasp, Aphidius colemani. This wasp stings and parasitizes smaller aphid species, such as the melon or cotton aphid,

peach aphid and tobacco aphid. Suitable for all greenhouse crops. **CHEMICAL FAMILY Biological ACTIVE INGREDIENT** Aphidius colemani **CONTROLS** Aphids

Loose Larvae in Vials or Bottles

250 Loose Larvae per Vial RATE Covers up to 5,000sq ft BIOLNP0201-01 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

1,000 Loose Larvae per Vial RATE Covers up to 20,000sq ft BIOLNP0102-04 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

5,000 Loose Larvae per Bottle RATE Covers up to 100,000sq ft BIOLNP0102-05 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Larvae in Blister Packs

10ea of 100 Larvae per Controlled Released Blister Packs BIOLNP0102-09 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Erviline™ Aphidius ervi Aphid Control by Bioline Agrosciences, Inc.

Aphidius ervi females seek out and parasitize aphids. The main targets for this parasitoid in commercial crops are Macrosiphum euphorbiae

and Aulacorthum solani. Erviline is supplied as emerging adult parasites in vials with a feeding strip. Adults begin to emerge in transit, so they are ready for release directly onto identified aphid colonies. **CHEMICAL FAMILY Biological**

ACTIVE INGREDIENT Aphidius ervi **CONTROLS** Aphids

Loose Larvae in Bottles

250 Loose Adult Wasps per Bottle RATE Covers up to 5,000sq ft BIOLNP0103-01 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP







Aphidoline™ Aphidoletes aphidimyza Aphid Control by Bioline Agrosciences, Inc.

Aphidoletes aphidimyza is a curative treatment for aphid infestation; larvae reported as feeding on 60 species. The emerging midges mate and then lay eggs near aphid colonies. The eggs hatch into highly visible orange larvae which feed on the

colonies of all types of aphids. CHEMICAL FAMILY Biological **ACTIVE INGREDIENT** Aphidoletes aphidimyza **CONTROLS** Aphids

Loose Larvae in Bottles

1,000 Loose Midge per Bottle RATE Covers up to 1,000sq ft BIOLNP0151-01 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Larvae in Blister Packs









Aphiline[™] Aphidius colemani + Aphidius ervi Aphid Control by Bioline Agrosciences, Inc.

Aphid parasite mix, ideal for ornamental producers and professional nurseries, as well as hobby gardeners. Mix contains 2 parasites (Aphidius colemani and Aphidius ervi) in one pack providing multiple control of all important aphids. Adults begin to emerge in transit ready for action.

CHEMICAL FAMILY Biological **ACTIVE INGREDIENT** Aphidius ervi and Aphidius colemani

BIOLNP0182-01 Min. Buy 1 EA

Aphiline[™] Aphelinus abdominalis + Aphidius colemani + Aphidius ervi Aphid Control by Bioline Agrosciences, Inc.

Aphid parasite mix, ideal for ornamental producers and professional nurseries, as well as hobby gardeners. Mix contains 3 parasites (Aphelinus abdominalis, Aphidius colemani and Aphidius ervi) in one pack providing multiple control of all important aphids, more than 25 species of aphids targeted. Adults begin to emerge in transit ready for action.

CHEMICAL FAMILY Biological ACTIVE INGREDIENT Aphidius ervi, Aphidius colemani,

Aphelinus abdominalis **CONTROLS** Aphids

Loose Parasites in Bottles

500 Loose Parasites per Bottle BIOLNP0181-01 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

















CONTROLS Aphids

Loose Parasites in Bottles 500 Loose Parasites per Bottle

SHIPPING INFO DIRECT SHIP



Biological Insect Control - Spider Mite Control

Anderline[™] Amblyseius andersoni Spider Mite & Rust Russet Mite Control

by Bioline Agrosciences, Inc.

Amblyseius andersoni is a predatory mite that can be used in the control of a range of mite pests. This predatory mite is ideal for vegetables, hardy ornamentals and fruit crops, controlling red or

two-spotted spider mite, fruit-tree red spider mite and russet mites. It is active at lower temperatures than other predatory mites, which means that it can be introduced much earlier in the growing season than some other predators.



CHEMICAL FAMILY Biological ACTIVE INGREDIENT Amblyseius andersoni **CONTROLS** Mites

Mini Sachets with Hooks

200 Controlled Release Mini Sachets with Hooks RATE Covers up to 4,000sq ft BIOLNP0016-31 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Sachets on Sticks

200 Mini Sachets on Sticks **RATE** One per Tray or Pot BIOLNP0016-52 Min. Buy 1 EA

SHIPPING INFO DIRECT SHIP 1.000 Sachets on Sticks

BIOLNP0016-50 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Loose Mites in Tubes or Bags

25,000 Loose Mites per Tube RATE Covers up to 2,500sq ft BIOLNP0016-03 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP 125,000 Loose Mites per Bag RATE Covers up to 12,500sq ft BIOLNP0016-02 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP



Bugline (String of Sachets) 6ea of 328ft Buglines A Continuous String of Controlled Release Sachets RATE Covers up to 10,000sq ft BIOLNP0016-05 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Also Available in the Geminii Sachet As a Special Order. Contact Your BFG Sales Rep for Details.



New Packaging - Blister Packs

Californiline™ Amblyseius californicus Spider Mite Control by Bioline Agrosciences, Inc.

Amblyseius (Neoseiulus) californicus is an active predatory mite that has specialized in feeding on mites in the family Tetranychidae. This includes the common Red Spider Mite or Two-Spot Mite Tetranychus urticae and the Carmine Mite Tetranychus cinnabarinus. It is less specialized than Phytoseiulus persimilis and while it prefers to feed on spider mites, it can feed and reproduce on other arthropod prey or pollen. Where few spider mites are present, it is able to survive

by feeding on these alternative sources of food and so can persist in a crop longer than Phytoseiulus persimilis.

CHEMICAL FAMILY Biological

ACTIVE INGREDIENT Amblyseius californiline **CONTROLS** Spider Mites, Carmine Mites and other small arthropods.

Mini Sachets with Hooks

200 Controlled Release Mini Sachets with Hooks RATE One Sachet per sq yd BIOLNP0013-31 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Loose Mites in Bottles or Tubes

2.000 Loose Mites per Bottle RATE Covers up to 2,000sa ft BIOLNP0013-01 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

25,000 Loose Mites per Tube RATE Covers up to 10,000sq ft

BIOLNP0013-04 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP



Phytoline™ Phytoseiulus persimilis Mite Control

by Bioline Agrosciences, Inc.

Phytoline biological control agent contains the predatory mite, Phytoseiulus persimilis. This well-known predator will eat large numbers of two-spotted spider mite. Recommended for spider mite control in many crops, particularly tomatoes, cucumbers, strawberries and ornamentals.

CHEMICAL FAMILY Biological ACTIVE INGREDIENT Phytoseiulus persimilis **CONTROLS** Spider mites

Loose Mites in Bottles

2,000 per Bottle

RATE Covers up to 2,000sq ft BIOLNP1201-01 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

20,000 per Bottle RATE Covers up to 20,000sq ft

BIOLNP1201-21 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Loose Mites in Blister Packs

5 Blisters, 200 Mites Each RATE Covers up to 1,000sq ft BIOLNP1201-09 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Loose Mites in Hot Spot Vial

The 1oz Hot Spot Vials containing the same number of mites as the 2,000ct bottle but are used for treatment of hot spots. The hot spot vial comes with a cap designed for dosing specific areas of the crop. 2,000 per (1oz) Hot Spot Vial

RATE Varies Depending on Infestation Min. Buy 1 EA BIOLNP1201-02 SHIPPING INFO DIRECT SHIP















New Size









Amblyline[™] Amblyseius cucumeris Thrips Control

by Bioline Agrosciences, Inc.

Amblyseius cucumeris is a predatory mite that feeds on a wide range of small arthropod prey. Besides small thrips and mites it will prey on spider mites, but does not offer significant control. Because Amblyseius cucumeris is small, it feeds only on the smaller thrips larvae and cannot attack large larvae or adults. For best results it is necessary to have as many predatory mites present as possible to prevent thrips larvae reaching maturity.

AgroSciences

CHEMICAL FAMILY Biological ACTIVE INGREDIENT Amblyseius cucumeris

CONTROLS Thrips, Broad mites, Cyclamen mites.

Mini Sachets with Hooks

400 Controlled Release Mini Sachet with Hooks RATE 1 Mini Sachet per sq yd BIOLNP0011-31 Min. Buy 1 FA SHIPPING INFO DIRECT SHIP

1.000 Controlled Release Mini Sachet with Hooks RATE One Sachet Covers a sq yd Min. Buy 1 EA BIOLNP0011-33 SHIPPING INFO DIRECT SHIP

Sachets with Hooks

200 Controlled Release Sachets with Hooks RATE 3 to 5 Sachets per 10sq ft BIOLNP0011-01 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Bugline (String of Sachets)

6ea of 525ft Buglines A Continuous String of Controlled Release Sachets RATE Each Bugline Covers an Area 4ft W x 525ft L BIOLNP0011-30 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP







All Direct Ship



Mini Sachets on Sticks

500 Controlled Release Mini Sachet on Sticks **RATE** One per Tray or Pot BIOLNP0011-51 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

1,000 Controlled Release Mini Sachets on Sticks **RATE** One per Tray or Pot

BIOLNP0011-50 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

2,000 Controlled Release Mini Sachets on Sticks RATE One per Tray or Pot BIOLNP0011-49 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Loose Mites in Bags or Bottles

50,000 Loose Mites per Tube RATE Covers Approximately 2,000sq ft BIOLNP0011-19 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

50,000 Loose Mites per Bottle RATE Covers Approximately 2,000sq ft BIOLNP0011-04 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

100,000 Loose Mites per Bag

RATE Covers Approximately 4,000sq ft BIOLNP0011-12 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

250,000 Loose Mites per Bag RATE Covers Approximately 10,000sq ft BIOLNP0011-13 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

250,000 Loose Larvae per Bag (Bran/Vermiculite) RATE Covers Approximately 10,000sq ft BIOLNP0011-17 Min. Buy 1 FA SHIPPING INFO DIRECT SHIP















Biological Insect Control - Thrip Control

Oriline i[™] Orius insidiosus Thrip Control

by Bioline Agrosciences, Inc. Orius insidiosus is the only biological control agent that kills adult Thrips. A single Orius bug can kill up to 80 Thrips per day. Orius populations establish well on pollen rich crops. Feeding Ephestia eggs will enhance the establishment of Orius. It takes 4 to 6 weeks to

establish a population. RATE One Orius will cover a sq ft **CHEMICAL FAMILY Biological**

ACTIVE INGREDIENT Orius insidiosus **CONTROLS** Thrips and others.

500 per Bottle

BIOLNP1102-01 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

1.000 per Bottle

BIOLNP1102-06 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

2.000 per Bottle

BIOLNP1102-07 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Biological Insect Control - Fungus Gnats & Thrip Control

Exhibitline sf^m Steinernema feltia Fungus Gnat & Thrips Control by Bioline Agrosciences, Inc.

Harmless to the ornamental crops, humans, the environment and other beneficial insects, these nematodes actively seek out fungus gnat larvae by swimming in the thin film of water on soil particles. They locate hosts by detecting carbon dioxide and other waste products.

CHEMICAL FAMILY Biological

ACTIVE INGREDIENT Steinernema feltia **CONTROLS** Fungus Gnat and Thrips.

Nematodes in Trays

5ea of 50 Million per Tray

RATE One 50 Million Tray Will Cover 1,000sq ft BIOLNP1011-02 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

5ea of 250 Million per Tray RATE One 250 Million Tray Will Cover 5,000sq ft BIOLNP1011-03 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP





Biological Insect Control - Fungus Gnats Control

Hypoline™ Hypoaspis miles Fungus Gnat Control by Bioline Agrosciences, Inc.

Hypoaspis miles attacks and kills the larvae of sciurid flies and will also consume thrips larvae that drop to the growing medium to pupate, making it a useful addition to other Western Flower Thrips control products. Also attacks and kills larvae of Fungus Gnats, but not eggs or pupae. Up to eight, first instar larvae may be attacked

and consumed each day by adult Hypoaspis. Normally found within the top half inch of soil / growing media, females lay eggs which hatch after six days. The larvae activity feed for 10 days and continue to feed as an adult. Adults live for several months when food is readily available. feeding on a wide range of soil / growing media pests.



CHEMICAL FAMILY Biological **ACTIVE INGREDIENT** Hypoaspis miles **CONTROLS** Fungus Gnat, Shore Fly and Thrips pupae.

Loose Larvae in Tubes or Tubs

25,000 Loose Larvae per Tube RATE Covers up to 1,000sg ft.

BIOLNP0091-03 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

125,000 Loose Larvae per Tub RATE Covers up to 5,000sq ft BIOLNP0091-04 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP





Biological Insect Control - Fungus Gnats & Shore Fly Control

Staphyline[™] Atheta coriaria Fungus Gnats & Shore Fly Control by Bioline Agrosciences, Inc.

Staphyline biological control agent contains the predatory beetle, Atheta coriaria. It can be used in crops such as herbs and ornamentals to protect against soil and compost pests.

This rove beetle is a generalist arthropod feeder, but the adults and young stages are particularly good at feeding on the larvae of Fungus Gnat and Shore Flies. Formulation contains mixed life stages – adults, larvae, pupae and eggs, for a balanced population. CHEMICAL FAMILY Biological ACTIVE INGREDIENT Atheta coriaria

CONTROLS Fungus Gnat and Shore Flies.

Loose Larvae in Tubes or Tubs

500 Loose Larvae per Tube RATE Covers up to 500sq ft BIOLNP0061-01 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

3,000 Loose Larvae per Tub

RATE Covers up to 3,000sq ft BIOLNP0061-02 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Staphyline™ Breeder Kit

The Staphyline Breeder Kit comes complete with substrate and food for the beetles, Atheta coriaria beetles, a bucket and complete instructions. The breeder kit is a cost effective way to blanket the crop area with pest control. The Atheta will continue to breed and produce for up to 8 weeks.

Breeder Kit with 500 Beetles

RATE One Kit Will Cover 400sq ft BIOLNP0061-04 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP



Crop Protection









Biological Insect Control - Whitefly Control

Swirskiline™ Amblyseius swirskii Whitefly Control

by Bioline Agrosciences, Inc.

Swirskiline biological control agent contains the predatory mite, Amblyseius swirskii. It is primarily used to control whiteflies and thrips but it will provide some reduction in other small pest species. In the absence of prey it can survive by feeding on pollen, allowing

it to survive longer in the crop. They breed extremely quickly under warm, humid conditions. They will also survive in cooler night temperatures and through winter months in semi-protected crops.

CHEMICAL FAMILY Biological ACTIVE INGREDIENT Amblyseius swirskii CONTROLS Whitefly, Thrips and more.



Loose Larvae in Tubes or Bags

25,000 Loose Larvae per Tube RATE One Tube Covers up to 500sq yd Min. Buy 1 EA BIOLNP0015-03 SHIPPING INFO DIRECT SHIP

125,000 Loose Larvae per Bag

RATE Covers up to 2,500sq yd

BIOLNP0015-02 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Bugline (String of Sachets)

6ea of 328ft Buglines

A Continuous String of Controlled Release Sachets RATE One Bugline Sachets Covers an Area 4ft W x 328ft L BIOLNP0015-07 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP



Hesperusline™ Dicyphus hesperus Whitefly Control by Bioline Agrosciences, Inc.

Hesperusline biological control agent contains the predatory bug, Dicyphus hesperus. Dicyphus hesperus is a generalist predatory bug that is primarily released for whitefly control,

but will feed on other pests such as Thrips, moth eggs and mites. It is best to establish the Dicyphus population with the help of mullein banker plants.

CHEMICAL FAMILY Biological ACTIVE INGREDIENT Dicyphus hespurus



Swirskilline Aublyseius swirskii Sachets Amblyseius swirskii sachets allow you to establish a Amblyseius swirskii sachets allow you to establish breeding colony of mites on the plants before the arget pest is present. Mites emerge from the sachet arget pest is present. Mites emerge from the sachet arget pest is present. Mites emerge from the sachet than a single broadcast release.

Sachets with Hooks

200 Controlled Release Sachets with Hooks Each Sachet Contains Approximately 250 Mites BIOLNP0015-34 Min. Buy 1 EA

SHIPPING INFO DIRECT SHIP

1,000 Mini Sachets with Hooks Each Sachet Contains Approximately 125 Mites RATE One Sachet Covers up to 3sq ft BIOLNP0015-31 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

1,000 Controlled Release Sachets with Hooks RATE One Sachet Covers up to 6sq ft Min. Buy 1 EA

Sachets on Sticks

500 Controlled Release Mini Sachets on Sticks BIOLNP0015-50 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP



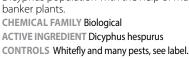


Loose Larvae in Bottles

250 per Bottle Adults & Late Instar Nymphs RATE 40 Banker Plants per Acre Min. Buy 1 EA BIOLNP0411-02 SHIPPING INFO DIRECT SHIP













Biological Insect Control - Whitefly Control

Eretline[™] Eretmocerus eremicus Whitefly Control by Bioline Agrosciences, Inc.

Eretmocerus eremicus is a parasitic wasp that attacks Greenhouse Whitefly and Sweet Potato Whitefly. Compared to Encarsia formosa, Eretmocerus is better adapted to high temperatures and those that flucuate from day to night and is likely to last

all season.

CHEMICAL FAMILY Biological

ACTIVE INGREDIENT Eretmocerus eremicus CONTROLS Whitefly

Larvae in Blister Packs

20 Blister Packes, 250 Adults per Blister RATE One Blister Pack Will Cover 250sq ft BIOLNP0821-02 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

20 Blister Packes, 500 Adults per Blister RATE One Blister Pack Will Cover 500sq ft BIOLNP0821-90 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Parasitized Scales Attached to Cards

200 Hanging Cards, 50 Wasps per Card

Min. Buy 1 EA

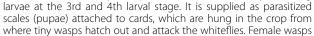
BIOLNP0821-07

SHIPPING INFO DIRECT SHIP



Bioline

Bioline



by Bioline Agrosciences, Inc.

Encarline[™] Encarsia formosa Whitefly Control

not insert an egg into the host, she feeds on it, which increases her longevity and the number of eggs she can lay during her life. CHEMICAL FAMILY Biological ACTIVE INGREDIENT Encarsia formosa CONTROLS Whitefly



Encarsia formosa is a hymenopterous parasite of whitefly, attacking

will kill more whiteflies than she parasitizes. In cases where she does

Parasitized Scales Attached to Cards

100 Cards, 60 Female Wasps per Card RATE Covers up to 2,500sq yd BIOLNP0801-13 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

250 Cards, 60 Female Wasps Card

RATE Covers up to 5,000sq yd BIOLNP0801-15 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP



Encarline™ Encarsia formosa + Eretline™ Eretmocerus eremicus Whitely Control

by Bioline Agrosciences, Inc. Encarline mix contains the hymenopterous parasites, Encarsia formosa and Eretmocerus eremicus. It controls the larvae of greenhouse whitefly and silverleaf / sweet potato whitefly. Using the two species in combination provides improved control of whitefly throughout the season.

CHEMICAL FAMILY Biological ACTIVE INGREDIENT Encarsia formosa and Eretmocerus eremicus CONTROLS Whitefly



Larvae in Blister Packs

40 Blister Packs, 250 Adults per Blister RATE Covers up to 3,000sq yd BIOLNP0831-02 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP



Don't See What You Need? Use the BFG Mobile App or visit www.bfgsupply.com to see a much larger selection of Biological Insect Control







🗆 = BASF

The Chemical Company

Biological Insect Control





All Direct Ship

For Control of Thrips and Fungus Gnats!



BASF® Nemasys® Beneficial Nematodes

Nemasys (steinernema feltiae)beneficial nematodes provide biological control of Thrips and the soil dwelling stages of Fungus Gnats. They attack and kill targeted pests without affecting any other organisms. **REI 0 Hrs**

CHEMICAL FAMILY Biological ACTIVE INGREDIENT Steinernema feltiae CONTROLS Thrips and Fungus Gnats

5 Trays of 50 Million RATE 50 Million Will Treat Approximately 1,100sq ft BAS59014493 Min. Buy 5 EA

SHIPPING INFO DIRECT SHIP

5 Trays of 250 Million

RATE 250 Million Will Treat Approximately 5,500sq ft
BAS59014486 Min. Buy 1 EA
SHIPPING INFO DIRECT SHIP



BASE® Millenium® Beneficial Nematodes by BASE Corp

Millenium (Steinernema carpocapsae) beneficial nematodes protect plants from damage from Shore flies and other soil dwelling insects. They attack and kill targeted pests without affecting any other organisms. Sold in a tray of 250 million nematodes. The minimum purchase is 5 trays.

REI 0 Hrs

RATE 250 million will treat 2,750 to 5,400sq ft SIGNAL WORD CHEMICAL FAMILY Biological ACTIVE INGREDIENT Steinernema carpocapsae CONTROLS Shore flies

5 Trays of 250 Million

BAS58067388 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP



BASF® Nemasys® G Beneficial Nematodes by BASF Corp

Nemasys G (heterorhabditis bacteriophora) beneficial nematodes provide biological control of the white grub stage of European chafers, Japanese beetles and Oriental Beetles. They attack and kill targeted pests without affecting any other organisms. **REI 0 Hrs**

RATE 1 to 2 Billion per Acre.

CHEMICAL FAMILY Biological

ACTIVE INGREDIENT Heterorhabditis bacteriophora

CONTROLS European chafers, Japanese beetles,

Oriental beetles.

2 Trays of 250 Million

BAS59014494 Min. Buy 2 EA SHIPPING INFO DIRECT SHIP



BASF® Nemasys® L Beneficial Nematodes by BASF Corp

Nemasys L (steinernema kraussei) beneficial nematodes provide biological control of the larval stage of Black Vine Weevil. Can be applied by spray or drench. They attack and kill targeted pests without affecting any other organisms.

REI 0 Hrs

RATE 250 Million Treats Approximately 5,500sq ft CHEMICAL FAMILY Biological ACTIVE INGREDIENT Steinernema kraussei

CONTROLS Black Vine Weevil.

2 Trays of 250 Million
BAS59014482 Min. Buy 2 EA
SHIPPING INFO DIRECT SHIP







Shield your greenhouse and nursery crops from chewing and sucking insect pests, including thrips, whiteflies, aphids, caterpillars and leaf-feeding beetles. As part of a preventive pest management strategy, put Mainspring® GNL insecticide on guard to keep pests out and crops clean.

- Systemic activity provides extended protection to save you time and labor on repeated applications
- Four-hour restricted-entry interval makes it less disruptive to work schedules
- Alternative to neonicotinoid chemistries
- Compatible with many biological control agents

Contact me to learn more.

Chris Threadgill | chris.threadgill@syngenta.com | 573-201-1483 GreenCastOnline.com/MainspringGNL



syngenta

Insecticide

All photos are the property of Syngenta unless otherwise noted.

©2017 Syngenta. Important: Always read and follow label instructions. Some products may not be registered for sale or use in all states or counties. Please check with your local Extension Service to ensure registration status. Mainspring[®], the Alliance Frame, the Purpose Icon and the Syngenta Logo are trademarks of a Syngenta Group Company. Syngenta Customer Center: 1-866-SYNGENT(A) (796-4368).

WISE TODAY. WOW TOMORROW.

At Nufarm, we're committed to your growing success. That's why we've made our plant protection product line better than ever.

Learn how we can help you grow a better tomorrow. NUFARM.COM/USTURF

OFFERING COMPLETE PLANT PROTECTION including

3336® • AFFIRM™ SAFARI® • SPIRATO® GHN TETRASAN® • TRISTAR®

©2019 Nufarm. Important: Always read and follow label instructions. 3336® and Spirato® are trademarks of Nufarm. Affirm[™] is a trademark of Cleary Chemical, ILC: Safari® and TetraSan® are trademarks of Valent U.S.A. LLC. TriStar® is a trademark of Nippon Soda Co. Ltd.

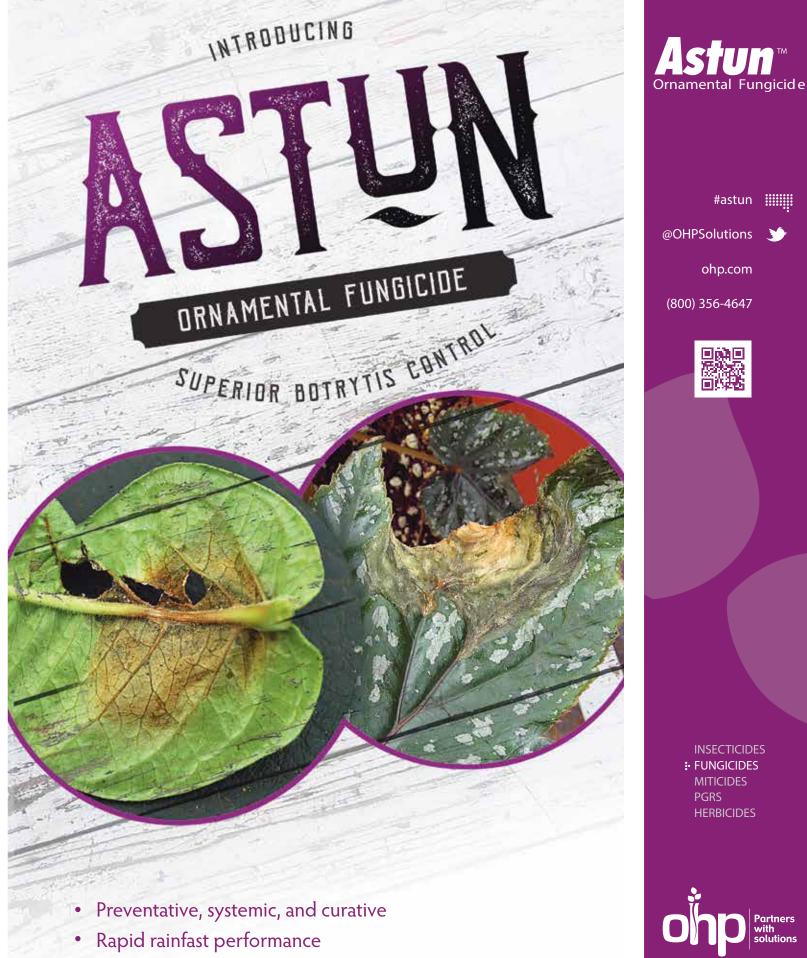


CROP PROTECTION: From Germination to Sanitation





1.888.273.3088 biosafesystems.com



© 2019 OHP, Inc. All Rights Reserved. Astun is a trademark of OHP, Inc.

•

Effective on field resistant strains



INSECTICIDES FUNGICIDES MITICIDES

> PGRS HERBICIDES

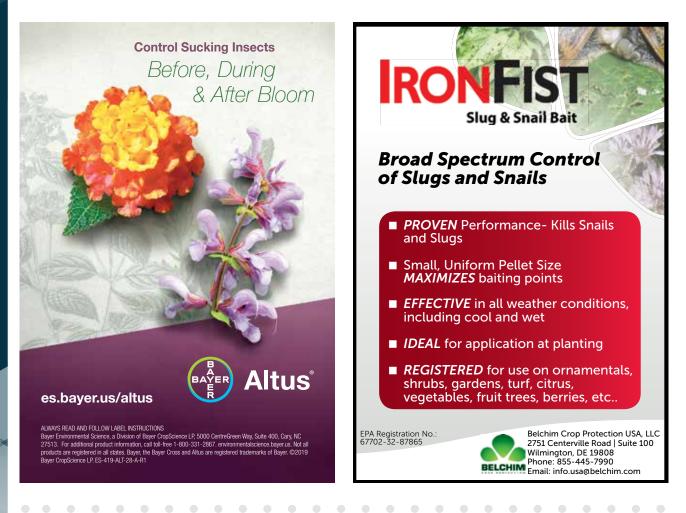
#astun

39

@OHPSolutions

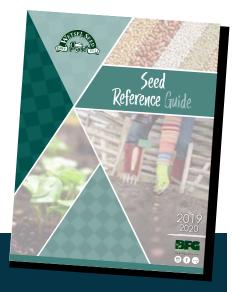
(800) 356-4647

ohp.com





Grab a copy of our latest Seed Reference Guide for a complete listing of Vegetable, Flower, Herb, Farm and Turf Seeds.



Seed Reference Guide Now Available





Mycorrhizae

MycoApply® Professional Products Mycorrhizal Applications formulated the NY COMPLEA APPRICATIONS FORMATED THE MycoApply® line of professional mycorrhizal MycoApply" line of professional mycorrnizal products to boost the performance and vitality of your plants, maximize the diversity of plant or your plans, maximize the unenity or plant, species that can benefit from this technology, species that can benefit from this technology, and provide unsurpassed value that translates into a favorable return on your investment.

MycoApply[®] Endo by Mycorrhizal Applications LLC

- 4 species Endomycorrhizae
 - Glomus intraradices, Glomus mosseae, Glomus aggregatum, Glomus etunicatum
 - 60,000 Endomycorrhizal Propagules per Ib.

40lb Granular

MAFMAEN40 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

MycoApply[®] Endo / Ecto by Mycorrhizal Applications LLC

4 species Endomycorrhizae

Glomus intraradices, Glomus mosseae, Glomus aggregatum,

- Glomus etunicatum
- 60,000 Endomycorrhizal Propagules per Ib.
- 7 species Ectomycorrhizae
 - Rhizopogon villosulus, Rhizopogon luteolus, Rhizopogon amylopogon, Rhizopogon fulvigleba, Pisolithus tinctorius, Scléroderma cepa, Scleroderma citrinum
 - 110 million Ectomycorrhizal Propagules per lb

40lb Granular

MAFMAENEC40 Min. Buy 1 EA

SHIPPING INFO DIRECT SHIP

MycoApply[®] Soluble MAXX by Mycorrhizal Applications LLC



OMRI

OMRI

- 9 species Endomycorrhizae Glomus intraradices, Glomus mosseae, Glomus aggregatum, Glomus etunicatum, Glomus deserticola, Glomus clarum, Glomus monosporum, Paraglomus brasilianum, Gigaspora margarita
 - 92,000 Endomycorrhizal Propagules per Ib.

10 species Ectomycorrhizae

- Rhizopogon villosulus, Rhizopogon luteolus, Rhizopogon amylopogon, Rhizopogon fulvigleba, Pisolithus tinctorius, Scleroderma cepa, Scleroderma citrinum, Suillus granulatus, Laccaria bicolor, Laccaria laccata
- 1.2 billion Ectomycorrhizal Propagules per Ib. Kelp, Humic Acids, and specially formulated amendments (1-0.5-5)

Case of 10 x 1lb Suspendable Powder Formulation

MAFMASOLMX10 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP





OMRI

OMRI

MycoApply[®] Ultrafine Endo by Mycorrhizal Applications LLC

4 species Endomycorrhizae

- Glomus intraradices, Glomus mosseae, Glomus aggregatum,
- Glomus etunicatum 130,000 Endomycorrhizal Propagules per Ib.

11b Suspendable Powder Formulation

MAAS1000304455 Min. Buy 10 EA SHIPPING INFO DIRECT SHIP

20lb Suspendable Powder Formulation

MAFMAUEN20 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

MycoApply[®] Ultrafine Endo / Ecto by Mycorrhizal Applications LLC

4 species Endomycorrhizae

- Glomus intraradices, Glomus mosseae, Glomus aggregatum, Glomus etunicatum
 - 130,000 Endomycorrhizal Propagules per Ib.
- 7 species Ectomycorrhizae
 - Rhizopogon villosulus, Rhizopogon luteolus, Rhizopogon amylopogon, Rhizopogon fulvigleba, Pisolithus tinctorius, Scleroderma cepa, Scleroderma citrinum
 - 110 million Ectomycorrhizal Propagules per lb

11b Suspendable Powder Formulation

MAAS1050204455 Min. Buy 10 EA SHIPPING INFO DIRECT SHIP

20lb Suspendable Powder Formulation

MAFMAUENEC20 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP





Resources Provided By

REFERENCE GUIDE for **GREENHOUSE** and **NURSERY** PRODUCTION

PLANT GROWTH REGULATORS

****Use Site(s) Key:** GH = Greenhouse N = Nursery

Plant Growth Regulators (PGRs)

		(By N	Aode of Actio	on Group a	nd C	lass)	
MOA Group	* Class	Activity Level**	Common Name	Trade Name	REI	Use Site(s)***	Company
1	Pyrimidine	Medium	Ancymidol	A-Rest [®]	12	GH/N	SePRO Corp.
			Flurprimidol	Topflor	12	GH/N	SePRO Corp.
	Quaternary Ammonium	Medium	Chlormequat chloride	Cycocel*	12	GH/N	OHP, Inc.
	Hydrazide	Low	Daminozide	B-Nine [®]	24	GH/N	OHP, Inc.
	Triazole	High	Paclobutrazol	PAC O™	12	GH/N	OHP, Inc.
				Bonzi	12	GH/N	Syngenta
			Uniconazole-p	Sumagic	12	GH	Nufarm
3	Fatty acid	Medium	Methyl esters of fatty acids	Off-Shoot-O	0	GH/N	Cochran Corp.
4	Gibberellin (GA)	High	Gibberellic acid (A3)	ProGibb [®] T&O	12	GH/N	Nufarm
	Synthetic Cytokinin/ Gibberellin	High	Cytokinin/ Gibberellic acid	Fascination	4	GH	Nufarm
	Synthetic Cytokinin	High	N-(phenylmethly)- IH-purine-6-amine	Configure [*]	12	GH	Fine Agrochemicals, LTD.
5	Organophosphorus	Medium	Ethephon	Florel Brand Pistill	48-72	GH/N	Monterey Chemical
				Florel Brand Ethephon	48-72	GH/N	Southern Agricultural Insecticides, Inc.
6	Rooting Hormones Synthetic Auxin		IBA	Hormodin ⁻	0	GH/N	OHP, Inc.
			IBA + NAA	Dip'N Grow	0-24	GH/N	Dip'N Grow, Inc.

** PGR activity varies greatly depending on product class; e.g. the triazole class is very active. The low, medium and high ratings are guides to product activity. The higher the level of activity the more care must be taken when using.

Thank you to Dr. Joyce Latimer, Virginia Tech, for help in preparing the PGR chart.

***Plant Growth Regulators Modes of Action**

- 1. Gibberellic Acid synthesis inhibitors
- 4. Growth promoter

2. DNA synthesis inhibitor 3. Chemical pincher

- 5. Ethylene generator
- 7. ABA abscisic acid UN. Unkown mode of action
- 6. Rooting hormones

A-Rest™ Plant Growth Regulator by SePRO Corporation

A-Rest provides just the right amount of growth regulation. Gentle enough on tender plugs and transplants yet strong enough to adequately regulate perennials. A-Rest reduces internode elongation resulting in a more compact plant with darker green leaves. A-Rest has no adverse affects to flowers including no flower delay, no residue and no phytotoxicity. A-Rest also strengthen and tones plants, readying them for transplanting and shipping.

REI 12 Hrs

SIGNAL WORD Caution **CHEMICAL FAMILY** Pvrimidine **ACTIVE INGREDIENT Ancymidol**

3207

SEPROA-REST 2.5gal AGENCY

Min. Buy 1 EA

Min. Buy 1 EA



Min. Buy 1 EA 30gal Drum AGENCY

SEPRO1012.30

B-Nine® WSG Plant Growth Regulator by OHP, Inc.

Reduces plant height in ornamental plants by reducing internode length. Other benefits include a deeper green color and reduced breakage during shipping. When applied to plant foliage is absorbed into the leaf, moves within the plant to the growing points to reduce internode elongation.

REI 24 Hrs

SIGNAL WORD Caution **CHEMICAL FAMILY Hydrazide ACTIVE INGREDIENT** Daminozide

1lb OHP981312 Min. Buy 1 EA 5lb

OHP981318 Min. Buy 1 EA

Bonzi® Plant Growth Regulator by Syngenta Crop Protection

The leading ornamental plant growth regulator (PGR), Bonzi® keeps plants uniformly compact, hardy and looking their best. It results in one consistent crop after another, with well-proportioned plants achieving identically ideal form and color. While a small amount may be taken in through leaves, it is primarily absorbed through the stems and roots.

REI 12 Hrs

SIGNAL WORD Caution **CHEMICAL FAMILY Triazole ACTIVE INGREDIENT** Paclobutrazol

32oz

SYN13869 2.5gal AGENCY

SYN27714

Min. Buy 1 EA Min. Buy 1 EA



Citadel[®] Plant Growth Regulator by Fine Americas, Inc.

Citadel is an effective growth regulator for use on a wide variety of ornamental crops. It reduces plant height by limiting internode elongation, resulting in more desirable, compact and marketable plants.

REI 12 Hrs

RATE Varies depending on application method. See label. SIGNAL WORD Caution

CHEMICAL FAMILY Quaternary Ammonium **ACTIVE INGREDIENT** chlormequat

1gal FINE19-0731A Min. Buy 1 EA

Collate® Plant Growth Regulator



Used to increase lateral branching in many popular ornamental varieties, including azaleas, chrysanthemums, geraniums, lantana, petunias and verbena. It is also ideal for controlling plant height and stem topple in daffodils and hyacinth, as well as delaying flowering in a wide range of ornamental crops.

REI 12 Hrs

SIGNAL WORD Danger **CHEMICAL FAMILY** Ethylene Generator **ACTIVE INGREDIENT** ethephon

1gal

FINE19-0638 Min. Buy 1 EA SHIPPING INFO ORM-D

Concise® Plant Growth Regulator by Fine Americas, Inc.

Concise is an effective growth regulator for use on a wide variety of ornamental crops. It reduces plant height by limiting internode elongation, resulting in more desirable, compact and marketable plants.

REI 12 Hrs **SIGNAL WORD** Caution CHEMICAL FAMILY Triazole **ACTIVE INGREDIENT Uniconazole**

1gal FINE19-0636C 15gal Drum FINE19-0636D









Configure® Plant Growth Regulator by Fine Americas, Inc.

Increases lateral branching and flowering in a number of popular ornamental species. Applications may reduce the height of treated plants, resulting in more compact and marketable crops. Labeled for use on containerized annual and perennial flowering and foliage crops as well as tropical plants.

REI 12 Hrs

Crop Protection

SIGNAL WORD Warning

CHEMICAL FAMILY Synthetic Cytokinin ACTIVE INGREDIENT Benzylaminopurine

6407

FINE19-0163D

15gal Drum FINE19-0163MID

Min. Buy 1 EA Min. Buy 1 EA

Cycocel[®] Plant Growth Regulator by OHP, Inc.

May be used on any crop in the greenhouse or nursery including but not limited to, poinsettias, hibiscus, azaleas and geraniums to reduce stem elongation, induce early flowering, improve flowering and to produce compact plants with multiple buds per shoots.

REI 12 Hrs

SIGNAL WORD Caution

CHEMICAL FAMILY Quaternary Ammonium

ACTIVE INGREDIENT Chlormeguat



Dazide® 85WSG Plant Growth Regulator

by Fine Americas, Inc.

Provides greener, stronger and more compact ornamental plants. Effective growth control that helps growers manage plant growth and development to ensure plants are more compact, stronger and better suited to cope with transportation and transplanting.

REI 12 Hrs

SIGNAL WORD Caution **CHEMICAL FAMILY Hydrazide ACTIVE INGREDIENT** Daminozide

5lb **FIN403**

Min. Buy 1 EA



Dip N' Grow[®] Liquid Rooting Concentrate by Dip'N Grow

Effective liquid rooting hormone that is economical and easier to use than rooting powders. It's as simple as 1, 2, 3. Mix Dip'N Grow concentrate with water in the dilution cup provided. Dip basal end of cutting into solution for 3 to 5 seconds. Place cutting in planting media with appropriate greenhouse-like environment.

REI 24 Hrs

SIGNAL WORD Caution **CHEMICAL FAMILY** Synthetic Auxin

ACTIVE INGREDIENT Indole-3-butyric Acid and

1-Napthaleneacetic Acid

160z DIPNDG01612 Min. Buy 1 EA

SHIPPING INFO ORM-D 1aal

DIPNDG12804 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

Fascination[®] Plant Growth Regulator by Nufarm Americas Inc.

Fascination plant growth regulator for Lilies, Poinsettias and other ornamentals. Fascination delays leaf yellowing, increases flower size and number and prolongs flowering.

REI 12 Hrs **SIGNAL WORD** Caution

CHEMICAL FAMILY Synthetic Cytokinin/Gibbrellin ACTIVE INGREDIENT Cytokinin/Giberrellic Acid

VAL89020.922 Min. Buy 1 FA

Florel[®] Growth Regulator by BRANDT

Applied as a foliar spray, Florel will increase lateral branching, prevent flower initiation and development and inhibit internode elongation on greenhouse ornamentals

REI 48 Hrs

6407

SIGNAL WORD Caution **CHEMICAL FAMILY** Organophosphorous **ACTIVE INGREDIENT Ethephon**

Florgib® 4L Plant Growth Regulator

by Fine Americas, Inc. Florgib enhances stem elongation and flowering in ornamental plants.

REI 4 Hrs SIGNAL WORD Warning **CHEMICAL FAMILY Gibberellin ACTIVE INGREDIENT Gibberellic Acid**

1aal FINE19-0760A Min. Buy 1 EA SHIPPING INFO SHIPS HAZ



Don't See What You Need? Use the BFG Mobile App or visit www.bfgsupply.com to see a much larger selection of Plant Growth Regulators





1gal

MLGNLG4110

Min. Buy 1 EA



Fresco® Plant Growth Regulator by Fine Americas, Inc.

Provides a reduction of lower leaf yellowing in lilies and promotes bract expansion on poinsettia. Maybe used to counteract Gibberellin inhibiting PGR applications if needed.

REI 4 Hrs

SIGNAL WORD Caution

CHEMICAL FAMILY Cytokinin / Gibberellin ACTIVE INGREDIENT Cytokinin/Gibberellic Acid

32oz

FINE19-0736A

Min. Buy 1 EA



Hormodin® Rooting Hormone

by OHP, Inc.

Hormodin enhances rooting, which reduces propagation bench time and plant loss. Hormodin is easy to use, yielding steadfast performance of rooted cuttings and zero disease migration. REI 0 Hrs

RATE 1lb treats 35,000 cuttings.

SIGNAL WORD Caution

CHEMICAL FAMILY Rooting Hormones, Synthetic Auxin ACTIVE INGREDIENT Indole-3-butyric acid

Hormodin[®] 1

Hormodin 1 rooting hormone is a general purpose powder designed for the grower who propagates plants such as roses, carnations, poinsettias, some shrubs and most soft herbaceous plants. (00.1% (IBA)

1lb

OHP983111

Hormodin[®] 2

Hormodin 2 rooting hormone is prepared specially for propagating many woody and semi-woody plants, including some of the evergreens. (00.3% (IBA)

1lb

OHP983221

Min. Buy 1 EA

Min. Buy 1 EA

Hormodin® 3

Hormodin 3 rooting hormone is prepared specially for propagating the more difficult to root varieties, including many of the evergreens and dormant leafless cuttings. (00.8% (IBA)



Hortus® IBA WSS Rooting Hormone by Phytotronics, Inc.

Plant rooting hormone that dissolves salt in water to make rooting solutions, no alcohol is required to dissolve. Can be used by basal dip and foliar total immerse or spray drip down methods. Use on annual, perennial and woody ornamental plant cuttings. For use in greenhouses and nurseries.

SIGNAL WORD Caution

CHEMICAL FAMILY Rooting Hormones, Synthetic Auxin **ACTIVE INGREDIENT IBA (Indole-butyric acid)**

1/4kg PHT0337	Min. Buy 1 EA	
1kg PHT0339	Min. Buy 1 EA	

Pac O[™] Plant Growth Regulator

Pac O plant growth regulator is for use on commercially grown ornamental plants grown in containers in greenhouses and nurseries. Long lasting plant growth regulator that can be

applied as a liner dip, spray, or drench REI 12 Hrs **SIGNAL WORD** Caution

CHEMICAL FAMILY Triazole ACTIVE INGREDIENT Paclobutrazol

1gal OHP986192 Min. Buy 1 EA



Piccolo® Plant Growth Regulator

by Fine Americas, Inc.

Brings out the best in ornamentals by producing compact, consistent quality plants. By delivering outstanding height and radius control, Piccolo enhances the quality of bedding plants, flowering and foliage crops, bulb crops, perennials and woody ornamentals, making them easier to market and more profitable to produce. As a spray or drench, Piccolo has been

proven in dozens of university trials and ranks among the most popular PGRs among quality-minded growers.

REI 12 Hrs **SIGNAL WORD** Caution CHEMICAL FAMILY Triazole ACTIVE INGREDIENT paclobutrazole

1gal FINE190636

Min. Buy 1 EA

Piccolo® 10XC Plant Growth Regulator

by Fine Americas, Inc. Brings out the best in ornamentals by producing compact, consistent quality plants. By delivering outstanding height and radius control, Piccolo enhances the quality of bedding plants, flowering and foliage crops, bulb crops, perennials and woody ornamentals, making them easier to market and more profitable to produce. As a spray or drench, Piccolo has been proven in dozens of university trials and ranks among the most popular PGRs among quality-minded growers. Plus, one quart of Piccolo 10 XC equals 2.5 gallons of regular Piccolo.

REI 12 Hrs SIGNAL WORD Danger **CHEMICAL FAMILY Triazole ACTIVE INGREDIENT** paclobutrazole

32oz - Equals 2.5gal of Regular Piccolo FINE19-0636E Min. Buy 1 EA





ProGibb® Plant Growth Regulator by Mycorrhizal Applications LLC

Progibb improves crop and fruit quality. Gibberellins can be applied to promote growth and stem elongation. Can be used to overcome an over application or gibberellin-inhibiting plant growth regulators. Also used to promote stem elongation of tree form plants.

REI 12 Hrs

Crop Protection

SIGNAL WORD Warning **CHEMICAL FAMILY Giberellin ACTIVE INGREDIENT Gibberellin Acid**

32oz

VAL22055.911 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

OMR

Sumagic[®] Plant Growth Regulator by Nufarm Americas Inc.

Offers a broad label for use on numerous plants, from bedding plants to woody ornamentals to poinsettias. Applications produce plants with denser, more consistent compact growth with increased plant shelf life and no phytotoxicity when used according to label directions

REI 12 Hrs

SIGNAL WORD Warning **CHEMICAL FAMILY Triazole** ACTIVE INGREDIENT Uniconzole-p

1gal

VAL85100.935

15gal Drum VAL85100.939

Min. Buy 1 EA

Min. Buy 1 EA

Topflor™ Plant Growth Regulator by SePRO Corporation

Topflor is a versatile PGR for ornamentals including bedding, annual and perennial plants, bulb crops and woody ornamentals. It has the strength to regulate vigorous species yet provides the proper amount of growth control for slower growing crops. Topflor can be applied using spray, drench, or pre-plant soak applications.

REI 12 Hrs

SIGNAL WORD Caution **CHEMICAL FAMILY** Pyrimidine **ACTIVE INGREDIENT Fluprimidol**

2 Liter (67.6oz) AGENCY

SEPRO1035.42

```
Min. Buy 1 EA
```

5gal AGENCY SEPRO1035.5

Min. Buy 1 EA



Untreated ALESCO



Ethylene Inhibitors

Chrysal Alesco® is a foliar spray to apply before shipping to avoid ethylene damage. It prevents shrinkage and premature dropping of buds, leaves and flowers. Ensures top quality plants throughout the chain. Ethylene sensitive potted plants that have been treated with Chrysal Alesco® have more blooms in retail.

CHEMICAL FAMILY Silver

ACTIVE INGREDIENT Silver nitrate

200ml (6.76fl oz) CHRYSALEB250 Min. Buy 1 EA



EthylBloc[™] Truck Kits Protects from Ethylene Damage A turnkey kit for truck or storage room use. The negative effects of ethylene are estimated to cause 30 percent of all floriculture crop losses, causing colors to dull, leaves and flowers to drop, and aging to accelerate.

Floralife EthylBloc[™] Ethylene Inhibitor</sup> by Smithers-Oasis USA

EthylBloc inhibits the negative effects of ethylene. For use by professional greenhouse and nursery growers and retail florists to protect crops from ethylene damage during handling, staging and shipping. Truck kits protect whole trailer shipments.

ACTIVE INGREDIENT Methylcyclopropene **CONTROLS** Ethylene

75g Truck Kit for 3,604cu ft SM5FL9075K Min. Buy 1 EA

Floralife EthylBLOCTH Ethylene Inhibitor by Smithers-Oasis USA

EthylBloc inhibits the negative effects of ethylene. For use by professional greenhouse and nursery growers and retail florists to protect crops from ethylene damage during handling, staging and shipping. Sachets are perfect for in-box use. ACTIVE INGREDIENT Methylcyclopropene **CONTROLS** Ethylene

Min. Buy 1 FA

1,000 Sachets SMO8109600

Herbicides Quick Reference Chart

oray (S) or Granular (G)

Product	Pre-Emergent	Post-Emergent	Broadleaves	Grasses	Sedges	Greenhouse Label	Spray (S) or Granular		erence Chart Always Refer To Product Labell
Axxe		Х	х	х		х	S	Ammonium Nonanoate	OMRI listed herbicide labeled for greenhouse use. Nonselective contact burndown of weeds
Barricade	Х		Х	Х			S	Prodiamine	Preemergent Sprayable herbicide for use in nurseries, turf, landscapes & noncrop areas
Basagran T&O		Х	Х		Х		S	Bentazon	Contact herbicide for use in turf, nurseries, ornamentals & noncrop areas
Biathlon	х		х	х			G	Oxyfluorfen, Prodiamine	2 Active ingredients that control broadleaf & grassy weeds in nurseries and noncrop areas
Broadstar G	х		Х	Х			G	Flumioxazin	Granular for use in nurseries and landscapes. Same active ingedient as Sureguard
Casoron G	х	Х	х	х	х		G	Dichlobenil	Controls tough weeds like Thistle, Horsetail, and Nutsedge. For use on woody ornamentals and noncrop areas
Confront		Х	Х				S	Clopyralid, Triclopyr	Broadleaf turf herbicide
Dimension	Х		Х	Х			S	Dithiopyr	Sprayable for use in nurseries, turf, landscapes & noncrop areas
Double O	Х		Х	Х			G	Oxyfluorfen, Oryzalin	Combination preemergence product for use on container and field grown ornamentals
Envoy Plus		Х		Х		Х	S	Clethodim	Postemergence control of annual & perennial grasses
Finale		Х	Х	Х	Х	Х	S	Glufosinate-Ammonium	Nonselective Sprayable herbicide for use in noncrop areas
Fortress	х		х	х			G	lsoxaben, dithiopyr	Combination product with the active ingredients from Gallery and Dimension. Broad spectrum control of weeds, but with a safe profile for sensitive shrubs and perennials
Freehand G	Х		Х	Х	Х		G	Dimethenamid-P, Pendimethalin	2 Active ingredients that control broadleaf & grassy weeds and yellow nutsedge
Fusilade II		Х		Х			S	Fluazifop	Postemergence control of annual & perennial grasses
Gallery SC	х		Х				S	Isoxaben	Sprayable for use in nurseries, turf, landscapes & noncrop areas. Excellent crop safety
Gemini SC	Х		Х	Х			S	Isoxaben, Prodiamine	Combination product to control wide array in containers and field ornamentals.
Goal 2XL	Х	Х	Х	Х			S	Oxyfluorfen	For use on conifers & certain woody ornamentals. Contact burn and preemergence control
Lontrel T&O		Х	Х				S	Clopyralid	Excellent on thistle. Sprayable for use in landscapes, nurseries & turf
Marengo SC	Х		Х	Х		Х	S	Indaziflam	Long lasting preemergent control of weeds in nurseries and greenhouses.
Marengo G	х		Х	Х			G	Indaziflam	Long lasting herbicide for broadcast applications in nurseries
OH2	Х		Х	Х			G	Oxyfluorfen, Pendimethalin	Granular for container and field grown ornamentals
Pendulum Aquacap	Х		Х	Х			S	Pendimethalin	Sprayable for use in landscapes, nurseries & noncrop areas
Pennant Magnum	х		Х	Х	Х		S	Metolaclhor	Sprayable for use in nurseries, landscapes & noncrop areas. Preemergent control of yellow nutsedge
Pramitol 25E	х	Х	Х	Х			S	Prometon	Long lasting vegetation management. Residual control of most weeds for 1+ years
Preen Plus	Х		Х	Х			G	lsoxaben, Trifluralin	Granular herbicide with 2 active ingredients. Labeled for use in nurseries, landscapes
Prosedge		Х			Х		S	Halosulfuron	Postemergence control of Nutsedge for use in turf, landscapes and noncrop areas
Ranger Pro		Х	Х	Х	Х	Х	S	Glyphosate	Sprayable nonselective systemic postemergent control of most weeds. Roundup equivalent.
RegalStar	х		х	Х			G	Oxadiazon, Prodiamine	Can be applied to woody ornamental shrubs, vines, trees,and evergreens in field and container nurseries and landscapes
Resolute	Х		Х	Х			S	Prodiamine	Preemergent Sprayable herbicide for use in nurseries, turf, landscapes and noncrop areas
Reward		Х	Х	Х		Х	S	Diquat	Sprayable non-selective contact control of most weeds. Rapid burndown
Ronstar FLO	Х		Х	Х			S	Oxadiazon	Active on shoots only with no root activity
Roundup ProMax		Х	Х	Х	Х	Х	S	Glyphosate	Improved formulation of glyphosate with concentrated surfactant
Roundup QuikPro		Х	Х	Х			S	Glyphosate, Diquat	Contains Roundup for systemic control and diquat to deliver rapid burndown
Rout	Х		Х	Х			G	Oxyfluorfen, Oryzalin	Granular for use in field and container grown ornamentals & landscapes
Scythe		Х	Х	Х		Х	S	Pelargonic acid	Sprayable non-selective contact control of most weeds
Sedgehammer Plus		Х			Х		S	Halosulfuron-methyl	Postemergence control of Nutsedge for use in turf, landscapes, & noncrop areas
Segment		Х		Х			S	Sethoxydim	Selective control of grassy weeds in nursery and landscape crops
Snapshot TG	Х		Х	Х			G	Isoxaben, Trifluralin	Granular for use in nurseries, landscapes and noncrop areas
Sureguard	х	Х	Х	Х			S	Flumioxazin	Labeled for use in nurseries, landscapes and noncrop areas. Contact burndown and preemergence control
Surflan	Х		Х	Х			S	Oryzalin	Preemergent herbicide for use in nurseries, landscapes and noncrop areas
Terracyte		Х					G	Sodium Carbonate Peroxyhydrate	Kills Liverwort, Moss, and Algae in and around potted plants
Tower	Х		Х	Х	Х		S	Dimethenamid-P	Controls broadleaf & grassy weeds and sedges in nurseries and landscapes
Treflan G	Х		Х	Х			G	Trifluralin	Granular for use in nurseries, landscapes and noncrop areas
Vessel		Х	Х				S	2,4-D, Dicamba	3-Way boradleaf herbicide for turf and noncrop sites

REFERENCE GUIDE for GREENHOUSE and NURSERY PRODUCTION HERBICIDES

RESISTANCE MANAGEMENT

Herbicide rotation is just as important as the rotation of other pest control products. Herbicide mode of action (MOA) groups are listed by the Herbicide Resistance Action Committee (HRAC). Rotating MOAs on a regular basis is key to controlling weeds and maintaining the effectiveness of herbicides.

Please read and follow all label directions and precautions.

**Use Site(s) Key:

PO = post emergence

A = Annual Grasses S = Sedges PR = pre emergence BW = Broadleaf Weeds WO = Certain Woody Ornamentals SF = Soil fumigant P = Perennials GH = registered for use in greenhouses MA = Most annuals

Resources Provided By

Herbicides

(By Mode of Action Group and Class)

IOA Co Grou		Common Name	Trade Name	REI	Use Site(s)*	* Company
1	Aryloxyphenoxy propionate 'FOPs'	Fenoxaprop-p-ethyl	Acclaim ⁻ Extra	24	PO; A, P	Bayer Cropscience
		Fluazifop-P-butyl	Fusilade [*] II	12	PO; A, P	Syngenta
	Cyclohexanedione 'DIMs'	Clethodim	Envoy Plus [*]	24	PO; A, P	Nufarm
		Sethoxydim	Segment™	12	PO; A, P	BASF
2	Imidazolinone	Imazaquin	Image	12	PR/PO; A, P, BW, S	BASF
3	Pyridine	Dithiopyr	Dimension	12	PR;A,BW	Corteva Agriscience
	Benzamide	Pronamide	Kerb [.]	24	PR/PO; A, BW	Corteva Agriscience
	Dinitroaniline	Pendimethalin	Pendulum	24	PR; A, BW	BASF
			Corral	24	PR; A,BW	ICL Specialty Fertilizers
		Prodiamine	Barricade	12	PR; A, BW	Syngenta
		Oryzalin	Surflan ⁻ WDG	12	PR; A, BW	United Phosphorus
	Benzoic acid	DCPA	Dacthal	12	PR; A,BW	Amvac Chemical Corp.
4	Pyridine carboxylic acid	Clopyralid	Lontrel	12	PO; WO	Corteva Agriscience
5	Triazine	Simazine	Princep	12	PR; A, BW	Syngenta
6	Benzothiadiazinone	Bentazon	Basagran ⁻ T/O	48	PO; BW, S	BASF

Resources Provided By

Herbicides

continued

(By Mode of Action Group and Class)

MOA Co & Group		Common Name	Trade Name	REI	Use Site(s) [:]	** Company
9	Glycine	Glyphosate	Ranger Pro	4	PO; A, P, BW, GH	Bayer Cropscience
			Refuge™	12	PO; A, P, BW, GH	Syngenta
10	Phosphinic acid	Glufosinate	Finale'	12	PO; MA, P, GH	Bayer Cropscience
12	Pyridazinone	Norflurazon	Predict [®]	12	PR; A, BW	Syngenta
14	Diphenylether	Oxyfluorfen	Goal	24	PR; PO, A, BW	Corteva Agriscience
	Oxadiazole	Oxadiazon	Ronstar	12	PR; A, BW	Bayer Cropscience
	N-phenylphthalimides	Flumioxazin	BroadStar	12	PR; A, BW	Nufarm
			SureGuard'	12	PR; PO, A, BW	Nufarm
15	Acetamide	Napropamide	Devrinol	12-24	PR; A, BW	United Phosphorous
	Chloroacetamide	S-metolachlor	Pennant Magnum	24	PR; A, BW	Syngenta
		Dimethenamid-P	Tower	12	PR; A BW, S	BASF
20	Nitrile	Dichlobenil	Casoron	12	PR; A, P	OHP, Inc.
21	Benzamide	Isoxaben	Gallery	12	PR A, BW	Corteva Agriscience
22	Bipyridylium	Paraquat	Gramoxone [®] Inteon	12-24	PO; MA, P, BW	Syngenta
		Diquat	Reward'	24	PO; MA, P, GH	Syngenta
27	Other	Dazomet	Basamid [*]	24	SF; MA, P	Certis USA, LLC
		Metam	Vapam	48	SF; MA, P	Amvac Chemical
		Pelargonic acid	Scythe [*]	12	PO; MA, P, GH	Gowan Company
29	Alkylazines	Indaziflam	Marengo	12	PR; A, GH, BW	Bayer Cropscience
			Marengo [:] G	12	PR; A, BW	Bayer Cropscience
3+3	Dinitroaniline + Dinitroaniline	Benefin + Oryzalin	XL 2G	24	PR; A, BW	Helena Chemical Co Agri-Enterprises
3+21	Diphenylether + Benzamide	Prodiamine + Isoxaben	Gemini' G	12	PR; A, BW	ICL Speciality Fertilizers
14+3	Diphenylether + Dinitroaniline	Oxyfluorfen + Pendimethalin	OH2*	24	PR; A, BW	ICL Specialilty Fertilizers



Herbicides

continued

(By Mode of Action Group and Class)

MOA Coo & Group	de* Class	Common Name	Trade Name	REI	Use Site(s)**	Company
14+3	Diphenylether + Dinitroaniline	Oxyfluorfen + Prodiamine	Biathlon*	24	PR; A, BW	OHP, Inc.
14+3	Oxadiazole + Dinitroaniline	Oxadiazon + Prodiamine	RegalStar II	12	PR; A, BW	Regal Chemical Co.
14+3	Diphenylether + Dinitroaniline	Oxyfluorfen + Oryzalin	Rout	24	PR; A, BW	ICL Speciality Fertilizers
14+14	Diphenylether + Oxadiazole	Oxyfluorfen + Oxadiazon	Regal O-O*	24	PR; A, BW	Regal Chemical Co
15+3	Chloroacetamide + Dinitroaniline	Dimethenamid-P + Pendimethalin	Freehand	12	PR; A, BW, S	BASF
21+3	Benzamide + Pyridine	lsoxaben + Dithiopyr	Fortress [∞]	12	PR; A, BW	OHP, Inc
21+3	Benzamide + Oxadiazole	Oxyfluorfen + Oxadiazon	Regal O-O ⁻	24	PR; A, BW	Regal Chemical Co.
3+21	Benzamide + Dinitroaniline	lsoxaben + Trifluralin	Snapshot ⁻ TG	12	PR; A, BW	Corteva Agriscience
М	Soaps	Ammonium Nonanoate	Axxe	24	PO; GH	BioSafe Systems
		Perlargonic Acid	Sythe [*]	12	PO; GH	Gowan Company

*Herbicides Modes of Action

- 1. Inhibition of acetyl CoA carboxylase (ACCase)
- 2. Inhibition of acetolactate synthase ALS (acetohydroxyacid synthase AHAS)
- 3. Microtubule assembly inhibition
- 4. Action like indole acetic acid (synthetic auxins)
- 5. Inhibition of photosynthesis at photosystem II (C1)**
- 6. Inhibition of photosynthesis at photosystem II (C3)**
- 7. Inhibition of photosynthesis at photosystem II (C2)**
- 9. Inhibition of EPSP synthase
- 10. Inhibition of glutamine synthetase
- 12. Bleaching: inhibition of carotenoid biosynthesis at the phytoene desaturase step (PDS)
- 14. Inhibition of protoporphyrinogen oxidase (PPO)
- 15. Inhibition of VLCFAs (Inhibition of cell division)
- 20. Inhibition of cell wall (cellulose) synthesis
- 21. Inhibition of cell wall (cellulose) synthesis
- 22. Photosystem -I- electron diversion
- 27. Unknown
- 29. Inhibit cellulose biosynthesis
- M. Miscellaneous

**Subclasses with different binding behavior at the binding protein D1, or different classes *This mode of action listing is based on the Herbicide Resistance Action Committee (HRAC) and the Weed Science Society of America (WSSA). More information on the Herbicide Resistance Action Committee and the Mode of Action Classification is available from: www.hracglobal.com.



Axxe[®] Herbicide by Biosafe Systems

A non-selective, post emergence broad spectrum herbicide labeled for use on many sites including greenhouses, nurseries and landscapes. Controls grasses and broadleaf weeds, mosses, liverworts and lichens. Provides a rapid burn down of weeds within hours and then biodegrades quickly, living no harmful residue behind. Does not volatilize or migrate through soil and is safe to use in all areas of production, both inside and outside.

RFI 4 Hrs

2.5gal

BIOS7600-2.5

SIGNAL WORD Warning **CHEMICAL FAMILY Soaps ACTIVE INGREDIENT** Ammonium nonanoate **CONTROLS** Most grassy and broadleaf weeds. See label for complete list.

AXXE

Barricade® 4FL Herbicide

by Syngenta Crop Protection

Barricade 4FL for preemergence control of grasses and broadleaf weeds in established turfgrasses, container grown and landscape ornamentals, nurseries and commercial landscapes.

Min. Buy 1 EA

REI 12 Hrs

SIGNAL WORD Caution **CHEMICAL FAMILY** Dinitroanaline **ACTIVE INGREDIENT Prodiamine** CONTROLS Many broadleaf and grassy weeds.

See label for complete list.

1gal AGENCY SYN37150

Min. Buy 1 EA

Barricade® 65WG Herbicide

by Syngenta Crop Protection

Barricade 65 WG for preemergence control of grasses and broadleaf weeds in established turfgrasses, container grown and landscape ornamentals, nurseries and commercial landscapes.

REI 12 Hrs

SIGNAL WORD Caution **CHEMICAL FAMILY** Dinitroanaline **ACTIVE INGREDIENT Prodiamine** CONTROLS Many broadleaf and grassy weeds. See label for complete list.

5lb AGENCY SYN51637

Basagran®T/O Herbicide

by BASF Corp

A turf and ornamental herbicide that offers reliable, post-emergent control of tough broadleaf weeds, yellow nutsedge and annual sedges in turf and ornamentals

Min. Buy 1 EA

REI 48 Hrs

RATE 24 to 32oz per Acre

SIGNAL WORD Caution **CHEMICAL FAMILY** Benzothiadiazinone **ACTIVE INGREDIENT Bentazon**

CONTROLS Broadleaf weeds, yellow nutsedge, annual sedges and more. See label for complete list

1aal BAS59011636

Min. Buy 1 EA



Biathlon® G Herbicide by OHP, Inc.

A pre-emergent granular herbicide for control of a wide range of problem grass and broadleaf weeds. Works by creating a barrier in the soil and is active for several months. Biathlon works by inhibiting cell division and disrupting cell wall formation in shoots and roots of emerging seedling weeds.

REI 24 Hrs

RATE 100lb per acre

SIGNAL WORD Caution **CHEMICAL FAMILY** Diphenylether + Dinitroaniline ACTIVE INGREDIENT Oxyfluorfen and Prodiamine **CONTROLS** Broadleaf and grassy weeds.

See label for complete list.

50lh

OHP981350

Min. Buy 1 EA

BroadStar® Herbicide by Nufarm Americas Inc.

BroadStar herbicide controls tough broadleaf and grassy weeds with a long lasting residual activity. Low odor and dust free granular formulation for easy broadcast spreading. For use on container and field grown ornamentals, landscape ornamentals

and non-bearing fruit and nut trees.

REI 4 Hrs RATE 150lb per acre SIGNAL WORD Caution **CHEMICAL FAMILY** Phenylphalimides **ACTIVE INGREDIENT Flumioxazin CONTROLS** Crabgrass, Dandelion, Foxtail and many more.

50lb VAL88560.29

Min. Buy 1 EA



Casoron[®] 4G Fine 16-30 Mesh Herbicide by OHP, Inc.

A pre-emergent herbicide which easily handles many troublesome weeds in and around established woody landscape ornamentals, non-crop areas, fruit and nut trees and respective nurseries. It develops a vapor barrier and is active for 9-10 months after application. Applications should be made under cool weather conditions in late fall or very early spring. Active ingredient is dichlobenil, which acts by inhibiting germination and actively dividing cells of meristems of growing points and root tips.

Don't See What You Need?

Use the BFG Mobile App

or visit www.bfgsupply.com

to see a much larger selection

of Plant Growth Regulators

REI 12 Hrs SIGNAL WORD Caution **CHEMICAL FAMILY Nitrile** ACTIVE INGREDIENT Dichlobenil CONTROLS Broadleaf and grassy weeds. See label for complete list.

25lb

OHP981520

Min. Buy 1 EA





MATHLON

Crop Protection

Herbicides

Dimension Ultra® WP Herbicide by Corteva Agriscience

Dimension herbicide provides pre-emergence control of more than 45 grassy and broadleaf weeds as well as post-emergence control of crabgrass. Use sites include turf, landscape and container grown ornamentals. It is safe to use on established turfgrasses and most ornamental plants.

REI 12 Hrs

SIGNAL WORD

CHEMICAL FAMILY Pyridine ACTIVE INGREDIENT Dithiopyr

CONTROLS Many broadleaf and grassy weeds. See label for complete list.

40oz

DOW19-0008D

Min. Buy 1 EA

Envoy Plus[®] Herbicide by Nufarm Americas Inc.

Envoy Plus herbicide provides effective post-emergent control of grassy weeds. It provides over-the-top control of both annual and perennial grasses with excellent plant safety. For use on garden flowers and plants, groundcovers and ornamental trees and shrubs.

REI 12 Hrs

RATE 9 to 32oz per acre

SIGNAL WORD Caution **CHEMICAL FAMILY** Cyclohexanedione **ACTIVE INGREDIENT Clethodim CONTROLS** Many annual and perennial weeds. See label for complete list.

1gal

VAL86793.935

Finale[®] Herbicide by BASF Corp

Provides fast, effective control of a broad spectrum of emerged annual and perennial grasses, broadleaf weeds, woody species and controls even the toughest weeds, like poison ivy, dandelion and thistle. Only kills what you spray it on and produces results in 1 to 4 days under many conditions. Shows rapid control without the regrowth of typical burndowns, has a long application window, is effective in spring and fall and does not translocate in most plants. Minimal soil-residual activity

Min. Buy 1 FA

means transplanting or seeding is possible hours after application. REI 12 Hrs

RATE 64-192oz per acre

SIGNAL WORD Warning **CHEMICAL FAMILY** Phosphinic Acid **ACTIVE INGREDIENT Glufosinate-Ammonium CONTROLS** Emerged grassy and broadleaf weeds

and woody species.

2.5gal PROKZ4193473

Min. Buy 1 EA



Fortress® Herbicide by OHP, Inc.

Fortress is a pre-emergent herbicide containing two active ingredients that is formulated on a dust and odor-free granule. Controls a wide range of both grassy and broadleaf weeds by creating a barrier in the soil. Fortress works by inhibiting cell division and disrupting cell wall formation in roots and shoots of emerging weed seedlings.

New

REI 12 Hrs

RATE 150lb per acre **SIGNAL WORD** Caution

CHEMICAL FAMILY Benzamide,

Pvridine

ACTIVE INGREDIENT Isoxaben and Dithiopyr CONTROLS Many broadleaf and grassy weeds.

See label for complete list.

50lh OHP982800

Min. Buy 1 EA



FreeHand® 1.75G Herbicide by BASF Corp

Features two active ingredients; Pendimethalin and Dimethenamid-P. This unique combination makes the perfect tool for pre-emergent weed control of annual grasses, sedges and many broadleaf weeds. Use sites include nurseries, residential and commercial landscapes, turfgrass **REI 24 Hrs**

RATE 100 to 200lb per acre

SIGNAL WORD Caution

CHEMICAL FAMILY Chloracetamide + Dinitroaniline ACTIVE INGREDIENT Dimethenamid-P + Pendimethalin CONTROLS Annual grasses, sedges and many broadleaf weeds. See label for complete list.

Min. Buy 1 FA

50lb AGENCY BAS59011296

Fusilade® II Herbicide

by Syngenta Crop Protection

Fusilade II herbicide is a selective post emergent herbicide for control of perennial and annual grass weeds. Can be applied over-the-top or as a directed spray without damaging ornamental plants and shrubs. **REI** 12 Hrs

RATE 32oz per acre **SIGNAL WORD** Caution **CHEMICAL FAMILY** Aryloxyphenoxy Priopionate **ACTIVE INGREDIENT Fluazifop-P-Butyl CONTROLS** Grassy weeds

SYN73215 Min. Buy 1 EA

Gallery[®] SC Herbicide by Corteva Agriscience

32oz

Pre-emergent herbicide that provides excellent plant tolerance and long-lasting control of more than 95 species of broadleaf weeds for up to 6-8 months. Labeled for use on all established turf grasses and can be applied on more than 700 labeled nursery, landscape and ornamentals. REI 12 Hrs

RATE 0.5 oz per 1,000sq ft SIGNAL WORD Caution CHEMICAL FAMILY Benzamide ACTIVE INGREDIENT Isoxaben CONTROLS Broadleaf weeds.

32oz DOW11079207

2gal DOW11103357

Min. Buy 1 EA

Min. Buy 1 EA













Final

Crop Protection

Gemini® Granular Herbicide by ICL/Specialty Fertilizers

Gemini G is a pre-emergent herbicide for control of over 120 grassy and broadleaf weeds. Use sites include container, field grown and landscape ornamentals and Christmas tree

farms. Granular formulation for easy broadcast

application.

REI 12 Hrs

RATE 100 to 200lbs per acre

SIGNAL WORD Caution

CHEMICAL FAMILY Benzamide + Dinitroaniline **ACTIVE INGREDIENT** Prodiamine, Isoxaben

50lb EVRE95765 Min. Buy 1 EA

Gemini[™] 3.7 SC Liquid Pre-Emergent Herbicide by ICL/Specialty Fertilizers

Gemini 3.7 SC is a pre-emergent herbicide for control of over 120 grassy and broadleaf weeds. Use sites include container, field grown and landscape ornamentals and Christmas tree farms. Concentrated

liquid formulation for easy tank mixing. REI 12 Hrs

SIGNAL WORD Caution

CHEMICAL FAMILY Benzamide + Dinitroaniline

ACTIVE INGREDIENT Prodiamine, Isoxaben

CONTROLS More than 120 broadleaf and annual grasses, including: Annual Bluegrass, Bittercress, Chickweed, Crabgrass, Foxtail, Goosegrass, Groundsel, Henbit, Oxalis, Spurge.



6407 EVRE95450

Min. Buy 1 EA

2.5gal EVRE95224

Min. Buy 1 EA

Lontrel[®] Herbicide

by Corteva Agriscience

A specialty herbicide that provides postemergence control of hardto-manage weeds around labeled ornamentals, golf course fairways and roughs without injuring even the most sensitive turfgrasses. REI 12 Hrs

RATE 3 to 8oz per 1,000sq ft

SIGNAL WORD Caution **CHEMICAL FAMILY** Carboxylic Acid **ACTIVE INGREDIENT Clopyralid CONTROLS** Broadleaf weeds.

32oz DOW19-1043

Min. Buy 1 EA





Marengo is a preemergent herbicide that provides up to 8 months control of over 70 different weeds. Features a Verge carrier for uniform, virtually dust-free application. Marengo G is labeled for use in outdoor nurseries only

REI 12 Hrs R

RATE 100 to 200lb per acre	
SIGNAL WORD Warning	6
CHEMICAL FAMILY Alkylazine	
ACTIVE INGREDIENT Indaziflam	1
CONTROLS Over 70 grassy and broadleaf	1
weed species	

50lb AGENCY BYR84922757

Min. Buy 1 EA



Marengo[®] SC Herbicide by Bayer CropScience, LP

Marengo is a preemergent herbicide that provides up to 8 months control of over 70 different weeds. Effective on hard to control weeds and labeled for weed control in greenhouses and outdoor nurseries. REI 12 Hrs

RATE 7 to 15oz per acre SIGNAL WORD None **CHEMICAL FAMILY Alkylazine ACTIVE INGREDIENT Indaziflam CONTROLS** Over 70 grassy and broadleaf

weed species

18oz BYR84927600 6407 AGENCY



BYR84967874

OH2® Pre-Emergent Herbicide by ICL/Specialty Fertilizers

OH2 is a pre-emergent herbicide for container and field grown ornamentals in nurseries. OH2 combines two selective herbicides on one granule, giving the user a broad spectrum of weed control and ornamental plant tolerance. No dust, granular formulation for easy broadcast application.

Min. Buy 1 EA

Min. Buy 1 EA

REI 24 Hrs

RATE 100lb per acre

SIGNAL WORD Caution

CHEMICAL FAMILY Dinitroanaline + Diphenylether ACTIVE INGREDIENT Pendimethalin, Oxyfluorfen

CONTROLS Bittercress, Common Chickweed, Cudweed, Dandelion, Eclipta, Fleabane, Fireweed, Groundsel, Marestail, Oxalis, Pearlwort, Pepperweed, Pigweed, Shepherdspurse, Sowthistle, Spurge Garden-Prostrate-Spotted.



Min. Buy 1 EA



50lb EVR95715

Pendulum[®] Aquacap Herbicide by BASF Corp

Pendulum Aquacap is a pre-emergent herbicide effective in many broadleaf and grassy weeds. Labeled for use in nurseries, turf and landscape or grounds maintenance applications

REI 24 Hrs

Jrop Protection

RATE 24 to 32oz per acre **SIGNAL WORD** Caution **CHEMICAL FAMILY** Dinitroanaline **ACTIVE INGREDIENT** Pendamethalin CONTROLS Many broadleaf and grassy weeds.

See label for complete list.

2.5gal BAS59049276

Min. Buy 1 EA

Pennant Magnum[®] Herbicide by Syngenta Crop Protection

Pre-emergent herbicide offering long-lasting residual control of yellow nutsedge, tough annual grasses and broadleaf weeds. Can be used in a wide range of ornamentals and can be tank mixed with other herbicides for broader control.

REI 24 Hrs

RATE 1.3 to 2.6pt per acre **SIGNAL WORD** Caution **CHEMICAL FAMILY** Chloraoacetimide **ACTIVE INGREDIENT S-metolachlor**

CONTROLS Yellow nutsedge, Crabgrass and more.

1gal SYN38782

Preen® Plus Herbicide

by Lebanon Seaboard Corp

Combines the power of two active ingredients (Trifluralin and Isoxaben) for control of both grassy and broadleaf weeds. One application can prevent over 150 weeds from invading shrub beds and other landscape areas for up to eight months.

Min. Buy 1 EA

REI 12 Hrs

CHEMICAL FAMILY Dinitroanaline + Benzamide ACTIVE INGREDIENT Isaoxaben + Trifluralin

20lb

WO2456320

Min. Buy 1 EA

Prosedge2® Herbicide by Nufarm Americas Inc.

Nufarm Prosedge 2 is a selective post-emergent herbicide for control of nutsedge as well as broadleaf weeds in turfgrass, landscaped areas and other non-crop sites.

REI 12 Hrs

RATE 2/3 to 1oz per acre **SIGNAL WORD** Caution **CHEMICAL FAMILY** sulfonylurea **ACTIVE INGREDIENT** Halosulfuron-methyl

CONTROLS Nutsedge, Cocklebur, Horsetail and more.

1.3307 NTS10453133

Min. Buy 1 EA

Ranger Pro[®] Herbicide by Bayer CropScience, LP

A post-emergent systemic herbicide with no residual soil activity. Ranger Pro provides broad spectrum control of many annual and perennial weeds, woody brush and trees. 41% Glyphosate with surfactant.

REI 4 Hrs

2.5aal

SIGNAL WORD Caution **CHEMICAL FAMILY Glycine ACTIVE INGREDIENT** Glyphosate **CONTROLS** Annual, perennial grassy and broadleaf weeds, woody brush and trees.

MON339020 Min. Buy 1 EA

30gal Drum MON50030

Min. Buy 1 EA



RegalStar Granular Herbicide by Regal Chemical Company

RegalStar G is a selective pre-emergent herbicide that combines two effective active ingredients to control many grassy and broadleaf weeds. Granular formula for easy broadcast spreading. Can be used over the top of plant material.

REI 12 Hrs

RATE 200lbs per acre

SIGNAL WORD Caution **CHEMICAL FAMILY** Dinitroanilines, Oxadiazole

ACTIVE INGREDIENT Oxadiazon, Prodiamine

CONTROLS Wide variety of broadleaf and grassy weeds

501b

REGAL190478 Min. Buy 1 EA

Resolute® 65WG Herbicide

by Syngenta Crop Protection

Resolute 65 WG for preemergence control of grasses and broadleaf weeds in established turfgrasses, container grown and landscape ornamentals, nurseries and commercial landscapes.

REI 12 Hrs RATE 1 to 2.3lb per acre SIGNAL WORD Caution **CHEMICAL FAMILY** Dinitroanaline **ACTIVE INGREDIENT Prodiamine** CONTROLS Many broadleaf and grassy weeds.

Min. Buy 1 EA



Reward® Herbicide

Fast-acting, non-selective, contact herbicide for control of weeds in the greenhouse, nursery and aquatic environments. Superior formulation for fast burndown

REI 24 Hrs

RATE 32-64oz per 100gal SIGNAL WORD Warning **CHEMICAL FAMILY Bipyridylium ACTIVE INGREDIENT** Diquat dibromide CONTROLS Aquatic, turf and landscape weeds.

1gal SYN73711 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

2.5gal AGENCY

SYN73710 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ





See label for complete list.

5lb

SYN34443

by Syngenta Crop Protection





PENDIATE

Ronstar[®] FLO Herbicide by Bayer CropScience, LP

Offers exceptional root safety on container and field-grown ornamentals. Can be applied to newly transplanted ornamentals and liners. Doesn't inhibit root growth or recovery from stress. Controls difficult to control weeds including bittercress, groundsel and oxalis.

REI 12 Hrs

RATE 80 to 120oz per acre

SIGNAL WORD Danger

CHEMICAL FAMILY Oxadiazole

ACTIVE INGREDIENT Oxadiazon

CONTROLS Crabgrass, Goosegrass, Annual Bluegrass and Annual Sedge.

2.5gal AGENCY BYR80847505

Min. Buy 1 EA

Roundup QuikPRO[™] Herbicide by Monsanto Roundup QuikPro is a post-emergent systemic herbicide with no

residual soil activity. Roundup Pro provides broad spectrum control of many annual and perennial weeds, woody brush and trees. 73% Glyphosate with Diquat and surfactant. Rainfast in one hour.

REI 4 Hrs SIGNAL WORD Caution

CHEMICAL FAMILY Glycine + Bipyridylium

ACTIVE INGREDIENT Glyphosate

CONTROLS Annual, perennial grassy and broadleaf weeds, woody brush and trees.

5 x 1.5oz Pack RATE 1 pack per gallon

MON88603 Min. Buy 1 EA

6.8lb

RATE 4 to 8oz per 1gal MONCH362 Min. Buy 1 EA



Roundup ProMax® Herbicide

by Monsanto

Roundup ProMax[®] controls a broad spectrum of weeds with virtually no re-growth. The surfactant system of Roundup PROMAX allows the solution to penetrate weed leaf surfaces faster, which means it is rain fast in half the time of Roundup PRO[®]. Roundup ProMax[®] has a concentrated potassium salt formulation, so one gallon of Roundup ProMax[®] contains the glyphosate equivalent of 6 quarts of Roundup PRO[®].

REI 4 Hrs

SIGNAL WORD Caution CHEMICAL FAMILY Glycine ACTIVE INGREDIENT Glyphosate CONTROLS Annual, perennial grassy and broadleaf weeds, woody brush and trees.

1.67gal

MON19-1058A Min. Buy 1 EA

30gal Drum MON19-1058B

Min. Buy 1 EA



Roundup Pro[®] Concentrate Herbicide

Roundup Pro is a post-emergent systemic herbicide with no residual soil activity. Roundup Pro provides broad spectrum control of many annual and perennial weeds, woody brush and trees. 50% Glyphosate with surfactant. **REI 4 Hrs**

SIGNAL WORD Caution

CHEMICAL FAMILY Glycine ACTIVE INGREDIENT Glyphosate CONTROLS Annual, perennial grassy and broadleaf weeds, woody brush and trees.

265gal Tote MON19-1056B Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Rout[®] Pre-Emergent Herbicide by ICL/Specialty Fertilizers

Rout pre-emergent herbicide controls many grassy and broadleaf weeds around field grown and container grown ornamental trees and shrubs and contained garden beds.

REI 24 Hrs

RATE 100lb per acre SIGNAL WORD Caution

CHEMICAL FAMILY Diphenylether + Dinitroaniline ACTIVE INGREDIENT Oxyfluorfen, Oryzalin

Min. Buy 1 EA

CONTROLS Many broadleaf and grassy weeds. See label for complete list.

50lb EVR95722

Scythe® Herbicide

by Gowan

A non-selective, contact herbicide composed of Pelargonic Acid and related fatty acids. Readily mixes with water to be applied as a foliar spray for the burn down of actively growing, emerged green vegetation of both annual and perennial broadleaf and grassy weeds as well as most mosses and cryptogams.

REI 12 Hrs RATE 3 to 5% concentration

SIGNAL WORD Warning CHEMICAL FAMILY Other ACTIVE INGREDIENT Pelargonic acid CONTROLS Broadleaf and grassy weeds.

2.5gal GOW52823

Min. Buy 1 EA

Sedgehammer® Plus Herbicide

by Gowan

Sedgehammer plus turf herbicide is a selective herbicide for control of nutsedge and other weeds in turfgrass, ornamentals and landscaped areas.

REI 12 Hrs RATE One 13.5g pouch per 1,000sq ft.

SIGNAL WORD Caution

CHEMICAL FAMILY

ACTIVE INGREDIENT Halosulfuron-methyl

CONTROLS Nutsedge, Wild Mustard, Pigweed and many more.

12 x 13.5g Packets GOW51516 Min. Buy 1 EA



Crop Protection



Roundup

PRoConcentrate





Segment[®] II Herbicide by BASF Corp

Segment II is a post-emergent herbicide for control of grassy weeds. For use on bedding plants, ground covers, field and container nurseries. **REI 12 Hrs**

RATE 36oz per acre

Crop Protection

SIGNAL WORD Warning

CHEMICAL FAMILY Cyclohexanedione ACTIVE INGREDIENT Sethoxydim CONTROLS Grassy weeds

2.5gal BAS59014427

Min. Buy 1 EA

Snapshot® 2.5TG Herbicide

by Corteva Agriscience A granular pre-emergence herbicide for the control of certain annual grasses and broadleaf weeds. Controls or suppresses more than 111 broadleaf weeds and annual grasses. It can be used over the top of 413 field-grown and 235 container-grown ornamentals.

REI 12 Hrs

RATE 2.5lb per 1,000sq ft.

SIGNAL WORD Caution

CHEMICAL FAMILY Dinitroanaline + Benzamide ACTIVE INGREDIENT Trifluarlin and Isoxaben CONTROLS Many broadleaf and grassy weeds.

See label for complete list.

50lb

DOW19-1067H

Specticle® Total Herbicide

by Bayer CropScience, LP

Specticle Total herbicide has a dual action formula to knockdown existing weeds immediately with residual activity to prevent new weeds and grasses for up to 6 months. Labeled for use in noncrop areas including paths, parking lots, around buildings, hardscapes and landscape beds.

Min. Buy 1 EA

RATE 16oz per 1,000 sq ft

SIGNAL WORD Caution

CHEMICAL FAMILY Alkylazine, Glycine, Bypyridilium ACTIVE INGREDIENT Glyphosate, Indizaflam, Diquat CONTROLS Grassy and Broadleaf weeds.

144oz BYR80972768

Min. Buy 1 EA

SureGuard® SC Herbicide

by Nufarm Americas Inc.

SureGuard SC provides long-lasting pre-emergent and postemergent control on a wide variety of grassy and broadleaf weeds. Use sites include established woody landscape ornamentals, bare ground applications and cracks and crevices.

REI 12 Hrs RATE 8 to 12oz per acre

SIGNAL WORD

CHEMICAL FAMILY

ACTIVE INGREDIENT Flumioxazin

CONTROLS Broadleaf, grassy and aquatic weeds. See label for complete list.

160z

NTS10698861 M

NTS10698464





Surflan AS is a selective preemergence herbicide for control of annual grasses and many broadleaf weeds in ornamentals, perennials, non-bearing fruit and nut trees and more.

bearing

2.5gal PROKZ986011

CONTROLS Many broadleaf and grassy weeds.	
ACTIVE INGREDIENT Oryzalin	
CHEMICAL FAMILY Dinitroanaline	
SIGNAL WORD Caution	
RATE 64 to 128oz per acre	
KEI 24 Hrs	

Min. Buy 1 EA



Tenacity® Herbicide

by Syngenta Crop Protection

Manage weeds, both broadleaves and grasses, without limiting other key aspects of turf management. Systemic, selective pre- and postemergence herbicide. Safe on established and newly seeded turf. Controls 46 broadleaf weed and grass species and kills crabgrass.

REI 12 Hrs

RATE 5 to 8oz per acre SIGNAL WORD Caution CHEMICAL FAMILY Benzoylcyclohexanedione

ACTIVE INGREDIENT Mesotrione CONTROLS Many broadleaf and grassy weeds. See label for complete list.

8oz SYN46256

Min. Buy 1 EA

TerraCytePRO® Algaecide / Herbicide Controls & Suppresses Algae, Bacterial & Fungal Diseases on Turf and in Container Grown Plants

TerraCytePRO® Algaecide / Herbicide by Biosafe Systems

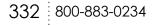
TerraCyte Pro controls and suppresses algae, moss liverwort, bacterial and fungal diseases on turf and in container grown plants. Works on contact and biodegrades quickly, leaving behind only water and oxygen. Can be applied as either a dry granular or as a spray solution. **REI 0 Hrs**

RATE 2 to 8lbs per 1,000sq ft SIGNAL WORD Danger CHEMICAL FAMILY Alkali Salt ACTIVE INGREDIENT Sodium Carbonate Peroxydrate CONTROLS Liverwort, Algae, Moss, Fungi.

50lb

BSF620150 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ







Snapshot 2

Tower[®] Herbicide by BASF Corp

Tower is a pre-emergent herbicide for the control of numerous weeds that cause problems in field-grown and landscape ornamentals. It provides unsurpassed control of yellow nutsedge and effectively controls more than 50 other troublesome weeds.

REI 12 Hrs

RATE 0.5 to 0.75oz per 1,000sq ft

SIGNAL WORD Danger **CHEMICAL FAMILY** Carboxylic acid amide **ACTIVE INGREDIENT Dimethenamid-P**

CONTROLS Annual sedges, yellow nutsedge,

nightshade, spurge, carpetweed, crabgrass and more.

2.5gal AGENCY BAS59014247

Min. Buy 1 EA

Treflan™ 500G Herbicide by Knox Fertilizer Company

A pre-emergence herbicide which provides long lasting control of a wide range of annual grasses and broadleaf weeds. Recommended for use on a wide variety of ornamental trees, shrubs and flowers.

RATE 1.8lbs per 1,000sq ft

SIGNAL WORD Caution

CHEMICAL FAMILY Dinitroaniline **ACTIVE INGREDIENT** Trifluralin

CONTROLS Annual grasses, broadleaf weeds and many

more. See label for complete list.

40lb SW1103409

Min. Buy 1 EA

reliable weed control



Vessel[™] Herbicide by Prokoz, Inc

Vessel is a post-emergent systemic herbicide for control of a wide range of broadleaf weeds. The combination of three active ingredients provide effective control of troublesome weeds in turfgrass sites including residential, commercial and industrial.

REI 48 Hrs

RATE 48 to 64oz per Acre SIGNAL WORD Danger

CHEMICAL FAMILY Phenoxyaliphatic Acid, Benzoic Acid ACTIVE INGREDIENT 2.4,D, MCPA, Dicamba **CONTROLS** Wide range of broadleaf weeds.

See label for complete list.

2.5gal PROKZ9921126

Min. Buy 1 EA

Use the BFG Mobile App

Crop Protection





Aquatic Herbicides & Algaecides

Aguaneat[®] Herbicide by Nufarm Americas Inc.

For non-selective aquatic weed control, nothing beats Aqua Neat®, Aqua Neat is a no-adjuvant formulation of glyphosate that controls almost 200 species of emerged weeds, including a wide range of broadleaf weeds, sedges and annual and perennial grasses, in and around flowing or stagnant fresh and estuaries or brackish water.

REI 12 Hrs **SIGNAL WORD** Caution

Crop Protection

CHEMICAL FAMILY Glycine ACTIVE INGREDIENT Glyphosate CONTROLS Many annual and perennial weeds. See label for complete list.

2.5gal NTS10021225

Min. Buy 1 EA

Cutrine[®] Plus Algaecide

by Cygnet Enterprises Inc Contains elemental copper for control of algae in lakes, industrial ponds, water hazards.

RATE 0.5 to 1gal per Acre-Feet **SIGNAL WORD** Caution **CHEMICAL FAMILY Copper ACTIVE INGREDIENT** Copper ethanolamine

1gal PROKZ337464 2.5gal

Min. Buy 1 EA

PROKZ337466

Min. Buy 1 EA



GreenClean® Pond Block by Biosafe Systems

Pond Block is a blend of naturally occurring bacteria formulated to increase water quality and clarity by reducing excess nutrients in the pond. Pond Block breaks down undesirable organic debris buildup to improve water clarity and the overall health of the ecosystem.

- Non-toxic, safe for aquatic life
- Easy to use, no license required
- Reduces pond muck and increases water clarity
- Reduces ammonia, nitrite, nitrate and phosphate

Improves dissolved oxygen levels RATE 5lb per 5 Acre for 30-60 Days **CONTROLS** Algae

5lb Block

BSF30064 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Radiance[™] Algaecide by Aquatrols Corp of America

Preventative control of algae blooms in ponds, lakes and fountains. The active ingredient is a biologically active form of copper held in a proprietary carrier. Self-disperses from a single application point. Maintains effective concentrations of biologically active copper in suspension throughout the body of water being treated.

REI 0 Hrs

RATE See Label SIGNAL WORD Danger **CHEMICAL FAMILY Inorganic Copper** ACTIVE INGREDIENT Copper Sulfate Pentahydrate **CONTROLS** Algae

2.5gal AQ19-3001B Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

Sanitizers, Cleaners, & Disinfectants

Floralife® MicroBLOC™ Greenhouse Disinfectant by Smithers-Oasis USA

MicroBLOC is an antimicrobial disinfectant for disinfecting hard, nonporous surfaces such as flower buckets, tools, floors and walls of coolers, benches and more. Effectively eliminates offensive odors caused by mold and mildew.

CHEMICAL FAMILY Quaternary Ammonium

ACTIVE INGREDIENT Quaternary Ammonium Compounds

1gal

SMFL3914 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

30gal Drum

SM5FL3930 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ



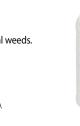
Floralife® Strip-IT® Cleaner by Smithers-Oasis USA

Strip-It cleaner is designed for between season cleaning of greenhouse structures and irrigation lines as well as water storage tanks and sunshade wash.

30gal Drum SMFL6161A Min. Buy 1 EA SHIPPING INFO SHIPS HAZ







Sanitizers, Cleaners, & Disinfectants

GreenClean® Acid Cleaner

by Biosafe Systems

Removes greenhouse whitewash coatings, biofilms, organic deposits, calcium and other hard minerals. Sanitizes and disinfects most hard surfaces. The formulation of surfactants and organic acid detergents will help lift away organic mineral deposits without any odor.

REI 0-1 Hrs

RATE 5 to 10gal per Surface Acre SIGNAL WORD Danger **CHEMICAL FAMILY** Peracetic Acid CONTROLS Scale, oxide or lime buildup.

5gal AGENCY BSF7500-5 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ



GreenCleanPRO® Algaecide + Bactericide

by Biosafe Systems

A broad spectrum granular algaecide / bactericide. Kills algae, fungi, bacteria and their dormant spores on contact with its powerful oxidation reaction and is labeled for use in lakes, ponds and large bodies of water. Offers no mutational resistance and waters can be used without interruption after treatment. Can also be used to control algae on hard surfaces in a greenhouse

during production. RATE 1 to 2lb per 1,000sq ft SIGNAL WORD Danger **CHEMICAL FAMILY Alkali Salt**

ACTIVE INGREDIENT Sodium Carbonate Peroxyhydrate

Min. Buy 1 EA

50lb

BSF3300-50 SHIPPING INFO SHIPS HAZ



GreenClean PRO

Green-Shield® II Disinfectant + Algaecide

by BASF Corp

Provides greenhouse and nursery growers a biodegradable, costeffective way to control unwanted plant pathogens and algae on hard surfaces. EPA-registered for broad-spectrum control of pathogens and algae in and around greenhouses and causes no damage to clothing from splashes. Lasts four times longer in solution than bleach and provides residual control as long as treated surfaces stay wet.

OMRI

REI 12 Hrs

SIGNAL WORD Danger **CHEMICAL FAMILY** Quaternary Ammonium **ACTIVE INGREDIENT** Quaternary ammonium

1gal

BAS59014302 Min. Buy 1 EA

SHIPPING INFO SHIPS HAZ

30gal Drum

BAS59014303 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ



HORTI-KLOR™ by Pace 49 Inc.

HORTI-KLOR™ is a heavy-duty chlorinated detergent that is formulated for cleaning and sanitizing throughout the food plant and grower industries. Čan safely be used to clean indoor growing facilities, packing houses and coolers. HORTI-KLOR™ is an active, high-foaming chlorinated detergent designed to help meet the highest food plant and greenhouse grower sanitation standards and is HACCP approved.

REI 0 Hrs

RATE 2.5oz per 1gal for irrigation line cleaning, 5oz per 1gal for hard surface cleaning SIGNAL WORD Danger

CHEMICAL FAMILY Heavy-duty chlorinated cleaner ACTIVE INGREDIENT Sodium hydroxide

5aal

PAC4919-0604B

SHIPPING INFO SHIPS HAZ

PAC4919-0604A Min. Buy 1 FA SHIPPING INFO SHIPS HAZ 30gal



KleenGrow™ Disinfectant + Bactericide + Algaecide + Fungicide by Pace 49 Inc.

Min. Buy 1 EA

KleenGrow™ is a biodegradable, 4th generation DDAC quaternary ammonium which provides curative and preventative broad - spectrum control of algae, fungi, and bacteria on greenhouse flowers and ornamentals. KleenGrow can safely be applied as a spray, drench, or drip on crops, from propagation, bulbs/seeds, to finished crops, while offering residual disease control by way of membrane disruption with no worry of crop resistance. Kleengrow can also be used to control algae, bacteria, and viruses on hard surfaces. Product can safely be used to disinfect greenhouse structures, floors, benches, cool pads, irrigation lines, plastic pots/trays, tools, coolers, and in footbaths to reduce the spread of algae and diseases.

REI 0 Hrs - For Hard Surface Disinfection And Irrigation Line Sanitation

RATE 0.5-20z per 1 gal Hard Surface Disinfecting, 0.34-1.20oz per 100 gal in Irrigation SIGNAL WORD Danger

CHEMICAL FAMILY Quaternary Ammonium ACTIVE INGREDIENT Didecyldimethyl ammonium chloride

1gal

PAC4919-0603I Min. Buy 1 EA SHIPPING INFO SHIPS HAZ 5gal

PAC4919-0603J Min. Buy 1 FA SHIPPING INFO SHIPS HAZ 30gal Drum

PAC4919-0603K Min. Buy 1 EA SHIPPING INFO SHIPS HAZ 55gal Drum

PAC4919-0603B Min. Buy 1 EA SHIPPING INFO SHIPS HAZ



by Pace 49 Inc.

MASTER MHW™ is a powdered detergent that easily emulsifies dirt, oils and organic material, leaving surfaces spotless. It is designed to work without producing excessive foam in high-agitation environments. The lowfoaming characteristics make it ideal for removing deposits from plastic and Styrofoam plug trays and pots, using automated washing equipment. REI 0 Hrs

RATE 1-2oz per 1gal

SIGNAL WORD Danger

CHEMICAL FAMILY Low foaming alkaline detergent ACTIVE INGREDIENT Sodium Metasilicate, Sodium

Carbonate, Sodium Alkylbenzene Sulfonate

45lb PAC4919-0600A Min. Buy 1 EA SHIPPING INFO SHIPS HAZ



Bulk Totes Available!

www.bfgsupply.com 335

Sanitizers, Cleaners, & Disinfectants



SaniDate[®] 5.0 Sanitizer / Disinfectant by Biosafe Systems

Effective hard surface sanitizer and disinfectant for use in greenhouses including ones growing edibles. Effective against plant and human health pathogens and provides immediate pathogen control on food contact hard surfaces, equipment and processing water. This alternative to chlorine is not pH dependent and leaves no residue on produce that will affect taste or quality.

REI 4 Hrs

SIGNAL WORD Danger **CHEMICAL FAMILY** Hydrogren Peroxides ACTIVE INGREDIENT Hydrogen Peroxide and Peroxyacetic Acid

2.5gal

BSF200325 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

5gal

BSF20035 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

30gal Drum

BSF200330 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

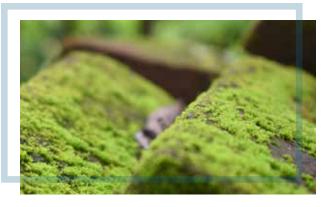
55aal Drum

BSF200355 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

275gal Tote

BSF2003275 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

> Don't See What You Need? Use the BFG Mobile App or visit www.bfgsupply.com to see a much larger selection of Sanitizers, Cleaners & Disinfectant Products



SaniDate® 12.0 Sanitizer / Disinfectant by Biosafe Systems



SaniĎate 12.0 is a high-strength, 12% Peracetic Acid-based microbicide formulated as an alternative to chlorine treatments in irrigation water. Use SaniDate 12.0 to control water-borne pathogens and their dormant spores caused by algae, bacteria and biofilm. This will prevent the spread of disease among crops in the greenhouse. SaniDate 12.0 is a one-step process for all types of irrigation systems. The highly concentrated formula guarantees economical dilution rates.

REI 2 Hrs

SIGNAL WORD Danger

CHEMICAL FAMILY Hydrogren Peroxides

ACTIVE INGREDIENT Hydrogen Peroxide and Peroxyacetic Acid

CONTROLS Water-borne pathogens and their dormant spores caused by algae, bacteria and biofilm.

30gal Drum

Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

55gal Drum

BSF200655 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

275gal Tote

Min. Buy 1 EA BSF2006275 SHIPPING INFO SHIPS HAZ

STRIP-IT PRO™

by Pace 49 Inc.

STRIP-IT PRO™ is a powerful combination of cleaning and wetting agents that effectively remove whitewash coatings, algae, dirt and mineral deposits including calcium due to hard water issues. Safely removes all common soils found in and around greenhouses, grower structures during crop rotation. Unlike other cleaning products, STRIP-IT PRO[™] will not harm the greenhouse structure and can safely be used to clean under benches with no harmful fumes to effect plants.

REI 0 Hrs

RATE 2.5oz per 1gal for Irrigation line cleaning, 5oz per 1gal for hard surface cleaning

SIGNAL WORD Danger

CHEMICAL FAMILY Heavy-duty Acid cleaner

ACTIVE INGREDIENT Sulfuric Acid, Ammonium Biflouride

5gal

PAC4919-0603D Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

30gal Drum

PAC4919-0603E Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

55gal Drum

PAC4919-0604 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ



Bulk Totes Available!



OMRI

BSF200630

Sanitizers, Cleaners, & Disinfectants

X3® Bactericide + Fungicide + Algaecide + Sanitation by Phyton Corp

Triple-powered, broad-spectrum formula for efficient, cost-effective disease control and sanitation. A powerful, highly concentrated bactericide / fungicide / algaecide / sanitizer with a zero hour re-entry and a low risk of phytotoxicity, when used as directed. Labeled for use as a fungicide/bactericide on greenhouse bedding plants, ornamentals and flowering plants, nursery stock and trees.

REI 0-2 Hrs **RATE** Varies By Application

SIGNAL WORD Danger

CHEMICAL FAMILY Hydrogen Peroxide

ACTIVE INGREDIENT Hydrogen Peroxide, Peroxyacetic Acid, Octanoic Acid

CONTROLS Algae, Alternaria, Anthracnose, Black Spot, Botrytis, Downy Mildew, Erwinia, Fusarium, Leaf Spot, Pseudomonas, Pythium, Phytophthora, Powdery Mildew, Rhizoctonia, Rust, Scab, Smut, Thielaviopsis, Xanthomonas, Wilts and Blights

96oz

PHTNX3-31096 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

4gal

PHTNX3-31004 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP SHIPS HAZ

12gal PHTNX3-31012 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP SHIPS HAZ





Dont See Something That You Are Looking For?

Visit www.bfgsupply.com for a larger supply of fertilizers, lawn care, and grower products or call your BFG sales rep today!





awn & Garden	Hort
hichael Carr	Indo
eed Reference Guide	Grou
reenhouse Structures	Gara
hichael Carr In-Season	Spri

liculture

oor Growing

wer Select

dener Select

ing Trials

Spray Adjuvants

CapSil® Spray Adjuvant by Aquatrols Corp of America

Waxy leaf surfaces can cause spray droplets to bead up, resulting in coverage gaps that can reduces the efficacy of foliar sprayed materials. CapSil® allows foliar sprays to spread evenly

over the entire leaf surface, giving you full coverage with every application. CapSil is a 100% active blend of organo-silicone and non-ionic surfactants the enables solutions to spread over the entire leaf surface evenly.

RATE 6 to 16fl oz per 100gal **SIGNAL WORD** Caution

ACTIVE INGREDIENT Polyether-polymethylsiloxanecopolymer

1gal

AQCAP-4X1

Min. Buy 1 EA

BRANDT Indicate 5[®] pH Indicator, Acidifier, Water Conditioner & Wetter / Spreader by **BRANDT**

A multi-functional adjuvant and water conditioner that counters the detrimental effects of high pH and hard water on sensitive pesticides. It adjusts water pH and contains a patented, built-in pH indicator that turns the spray water pink as soon as the optimum pH is reached. It also acts as a wetting/spreading agent that helps create an even film of spray over the plants surface.

RATE 5 to 30fl oz per 100gal

SIGNAL WORD Warning

ACTIVE INGREDIENT Alkyl Aryl Ethoxylates

& Water Conditioning Agents

1gal

PROKZ19-0409

Min. Buy 1 EA

Pentra-Bark® Penetrating Surfactant by Quest Products Corporation

Nonionic surfactant that improves penetration into the plant stem when mixed with insecticides, fungicides, herbicides, or fertilizers. REI 12 Hrs

RATE 4 to 64fl oz per 100gal

SIGNAL WORD Caution **ACTIVE INGREDIENT** Alkylphenol ethoxylate

32oz **QPC100**

1gal **QPC200** Min. Buy 1 EA

Min. Buy 1 EA



BRANDT Super 7 Surfactant, Penetrant, Deposition Aide, Acidifier by BRANDT

Super 7 is an all-in-one spreader, acidifier, deposition aid and penetrant. A non-ionic, low foam surfactant that enhances the activity and effectiveness of pesticides and foliar nutrients. Provides more uniform coverage by decreasing surface tension of spray solutions, thus aiding in penetration. It may be used as an acidifying agent to lower pH of spray solutions, thus preventing alkaline hydrolysis of pesticides sensitive to high pH.

REI 0 Hrs

RATE 8 to 64oz per 100gal

SIGNAL WORD Warning **ACTIVE INGREDIENT** Alcohol Ethoxylate, Lecithin and Propanoic Acid

1aal **BRANDTSUPER71.0** Min. Buy 1 EA 2.5aal

BRANDTSUPER72.5 Min. Buy 1 EA



BRANDT Super Wetter Premium Organosilicone Wetting Agent by BRANDT

Super Wetter is an organosilicone spreader that can be tank mixed with spray oils and EC formulations. Increases coverage of fungicides, insecticides, etc. by spreading the formulation across leaf and stem surfaces for complete coverage.

REI 0 Hrs RATE 3 to 16oz per 100gal SIGNAL WORD Warning ACTIVE INGREDIENT Siloxane polyalkyleneoxide copolymer and polyalkyleneoxide





BRANDT1047BRN101 Min. Buy 1 EA

BRANDT Ultra 90 Surfactant



Ultra 90 Spreader is a low cost 90% non-ionic adjuvant that improves wetting of foliage and enhances the effectiveness of spray applications. May be used on agricultural, aquatic, forestry, turf and ornamental crops.

Min. Buy 1 EA

OMR]

RELOHrs

RATE 8oz to 64oz per 100gal SIGNAL WORD Warning ACTIVE INGREDIENT Alkyl phenol ethoxylate, Propylene glycol, Tall oil fatty acids

2.5gal BRANDT01037BRN100







AquaGro® Media Surfactants Fro® ensures the continual wettability of your bark or peat based mix. It provides faster, more uniform water distribution and better moisture retention. AquaGro

AguaGro® 2000 G Media Surfactant

by Aquatrols Corp of America RATE 1lb per cu yd SIGNAL WORD Warning ACTIVE INGREDIENT Ethoxylated Alkyl Phenols and Fatty Acid Esters

Min. Buy 1 EA

44lb Granular AQ2KG-44

120lb Granular AQ2KG-120

Min. Buy 1 EA

AguaGro® L Media Surfactant

by Aquatrols Corp of America RATE 2 to 7fl oz per cubic yard **SIGNAL WORD** Caution **ACTIVE INGREDIENT** Alkoxylated Polyols

2.5gal Liquid	
AQAGPSI-2X2.5	Mi
30gal Drum	
AQAGPSI-30	Mi

55gal Drum AQAGPSI-55

in. Buy 1 EA Min. Buy 1 EA

n. Buy 1 EA





Untreated Treated

Add AquaGro to your mix for uniform water movement and mix that wets up evenly every time.

Most untreated growing media

is made of bark and peat that are

hydrophobic, resulting in water

being unable to spread evenly

throughout the soil profile both

initially and when re-wetting.

H2Pro[®] Wetting Agent by ICL/Specialty Fertilizers

H2Pro is a unique blend of surfactants with long residual activity for use in containers, pots, hanging baskets, flats, trays and more. Uniform moisture distribution creates a better root environment, eliminates dry spots and allows for an even distribution of fertilizer and or pesticide solutions added during the growing cycle. Liquid formulation for easy spray and drench application.

RATE 5.5 to 16oz per 100gal

CHEMICAL FAMILY Surfactant

ACTIVE INGREDIENT Ethylene oxide-propylene oxide copolymers

2.5gal EVRG95830	Min. Buy 1 EA
221b EVRG95820	Min. Buy 1 EA
30gal EVRG95833	Min. Buy 1 EA
55gal EVRG95835	Min. Buy 1 EA



Crop Protection

Suffusion[®] Surfactant by OHP, Inc.

An effective blend of surfactants for use on all types of growing media in nurseries, greenhouses, interior plantscapes and soil production. Suffusion works by reducing surface tension of applied water, penetrating into dry and water repellent areas and linking together water-repellent soil and water. Peat, bark or alternative compost substrates are typically candidates for Suffusion. **REI 0 Hrs**

RATE 4 to 6oz per cubic yard SIGNAL WORD Caution CHEMICAL FAMILY Alkoxyether Surfactants **ACTIVE INGREDIENT Blend of 3 surfactants**

2.5gal OHP988425 Min. Buy 1 EA 30gal Drum

OHP988430

Min. Buy 1 EA

Up Take[™] Soil Wetting Agent & Surfactant by Pace 49 Inc.

UpTake™ is a biodegradable, Soil Adjuvant/Wetting Agent/Surfactant, designed to improve performance of fertilizers, most pesticides, and insecticides when added through drip-irrigation systems or tank mixes. This unique 3-in-1 formulation is a penetrate, spreader sticker and wetting agent that will help increase the performance of a companion product, as well as penetration of water through growing media, resulting in improved root growth and plant quality.

REI 0 Hrs

RATE 0.34-1.20oz per 100gal in Irrigation Water SIGNAL WORD Danger **CHEMICAL FAMILY** Quaternary Ammonium

ACTIVE INGREDIENT Didecyldimethyl ammonium chloride

1gal PAC4919-0603S Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

5aal PAC4919-0603T Min. Buy 1 FA SHIPPING INFO SHIPS HAZ

30gal Drum

PAC4919-0603V Min. Buy 1 EA SHIPPING INFO SHIPS HAZ

55gal Drum

PAC4919-0603W Min. Buy 1 EA SHIPPING INFO SHIPS HAZ



Bulk Totes Available!



pH Adjusters

CAL-FLO® Liquid Lime by Burnett Lime Co

CAL-FLO liquid limestone soil can be used to increase the pH. of your soilless media. It also provides a source of calcium and magnesium for plants.

SIGNAL WORD Caution

CHEMICAL FAMILY Calcium Carbonate ACTIVE INGREDIENT Calcium carbonate

2.5gal SA44298

Crop Protection

Min. Buy 1 EA

CalOx® Micronized Calcium Carbonate

by Biosafe Systems

A micronized flowable lime made up of over 70% active ingredient and is specifically formulated to immediately raise soil pH. Ideal product for crops like geraniums, poinsettias and greenhouse tomatoes. Since it won't clog lines, it is easily direct injected as a drench application, stabilizing the soil pH for more than 35 days.

REI 0 Hrs

RATE 3 to 10oz per 1,000sq ft.

SIGNAL WORD Caution CHEMICAL FAMILY Calcium Carbonate **ACTIVE INGREDIENT** Calcium carbonate

2.5gal BSF201125 Min. Buy 1 FA SHIPPING INFO DIRECT SHIP



Citric Acid pH Reducer by Growth Products

PH Réducer is a citric acid solution designed for soil and water applications, where the pH. needs to be lowered into a more acidic range. Suitable to control pH. on turf applications, trees and ornamentals and greenhouse growing media. SIGNAL WORD Caution

ACTIVE INGREDIENT Citric Acid

2.5gal GRWP30520 Min. Buy 1 EA





Spray Indicators & Dyes

Hi-Light® Dye Spray Indicator by BASF Corp

Used to ensure accurate and effective application of pesticides. Eliminate overlap, prevent skips and pinpoint unwanted drift to save time and money. Compatible with sprayable herbicides in spot spraying or broadcast applications.

32oz / Blue BAS19-0203 32oz / Red

BAS19-0203C





Defoamer

Shakedown Antifoaming Agent by BASF Corp

Eliminates unwanted foam in spray applications involving recirculating sprayers and other high agitation equipment to help ensure even distribution of pest control product applications.

32oz RATE 1oz per 100gal BAS19-0202A Min. Buy 1 FA



Foaming Agents

BioFoamer® Foaming Agent Indicator by Biosafe Systems

Infuses cleaning agents into a thick foam, providing a visual cue for coverage and extended contact time.

Min. Buy 1 EA

2.5gal

BSF9005-2.5



Tank Cleaner

BRANDT Pesticide Equipment Cleaner by **BRANDT**

Pesticide equipment cleaner will remove and deactivate residual pesticide contamination from storage tanks and spray equipment. Use before changing from one pesticide to another, or before storing equipment.

32oz BRANDTTANKCLEAN Min. Buy 1 EA





Fogging Solutions

Dramm[®] PulsFOG[®] Cleaning Solution PFC

by Dramm Corporation Cleaning solution for Dramm fogging equipment.

1gal DRMPFC1

Min. Buy 1 EA

Dramm[®] Nutrifog

by Dramm Corporation

NutriFOG for PulsFOG[™] thermal foggers is a 10-3-3 foliar fertilizer and carrier solution to improve fogging performance. When used correctly, NutriFOG will improve the fog quality and coverage distance by reducing the surface tension of the water in the Puls-FOG spray tank. It can be used with all chemical formulations.

20L†

DRMNF20

Min. Buy 1 EA

Beneficial Soil Innoculant

Nature's Source® Plant Probiotic by BALL DPF, LLC

A complex of 10 different beneficial microorganisms. It promotes the establishment and enhances the growth of greenhouse and nursery crops, landscape plants and specialty crops, in all types of soils and growing media.

5lh

DANL7502US Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Nature's Source[®] Plant Biotik™ by BALL DPF, LLC

Contains a beneficial microbial complex to feed your soil. Aids in nutrient breakdown, availability and absorption while reducing nutrient leaching. Reduce planting/transplant

shock for better plant establishment. Stimulates root development and nutrient uptake also increases tolerance to environmental stress.



DANL7511US





Acids

RIV Sulfuric Acid 93% by Riverside Chemical

Sulfuric Acid 93%, use to adjust pH. Sold in case of four 1 gallon jugs. Hazardous shipping charges may apply.

1 Gal

DRAMM

RIVSULFACID Min. Buy 4 EA SHIPPING INFO SHIPS HAZ



Perfect Amendment Soil Additive

Patented beneficial Streptomyces on an iron and humic acid carrier that when added to the soil produces healthier plants that more effectively resist stress and may reduce or eliminate the need for chemical fungicides. PerFect Amendment allows for faster and stronger rooting, more robust root zones, larger, healthier plants, long term greening and vigor.

Enhances root development.

- Includes complexed iron & humic acid
- Promotes plant vigor & strength
- Provides long term greening. Great for
- Calibrachoa & Petunias! · May help reduce the need for fungicides.
- · For Greenhouse, Nursery, Turf Grass and Agricultural use.

CHEMICAL FAMILY Biofungicide ACTIVE INGREDIENT Iron, Humic Acid, Streptomyces

50lb

Min. Buy 1 EA

TerraGrow® Beneficial Soil Innoculant

A beneficial soil inoculant designed to improve soil characteristics and plant stress tolerance. Quickly re-establishes beneficial bacteria/ fungal populations in and around the root zone.

RATE 1 to 4oz per 100gal

CHEMICAL FAMILY Biological

ACTIVE INGREDIENT Blend of six microbial organisms.

4lb **BSF71004** Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

10lb BSF710010 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

25lb BSF710025 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP



erfect /



REI 0 Hrs

ALP10020

by Biosafe Systems

Pest Monitoring

Includes Thripline Pheromone to Boost Thrips Control!

Trapline T+ Blue Roller Trap by Bioline Agrosciences, Inc.

Trapline T+ Blue Roller Trap is a non toxic, double-sided sticky tape for trapping and monitoring flying pests. Features includes specific colour, patterning, adhesive and attraction pheromone to increase control of Western Flower Thrips in soft fruits, vegetables and flowers grown in greenhouses.

6in W x 328ft L - Can Be Cut to Any Size BIOLNP8052-15 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Trapline T Roller Trap

by Bioline Agrosciences, Inc. Trapline T Yellow Roller Trap is a non toxic, double-sided sticky tape for trapping and monitoring flying pests.

Blue Roller Trap

6in W x 328ft L - Can Be Cut to Any Size BIOLNP8052-05 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Yellow Roller Trap

The yellow color is especially attractive to Whitefly

6in W x 328ft L - Can Be Cut to Any Size

BIOLNP8051-05 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Thripline[™] Sticky Thrips Pheromone Trap by Bioline Agrosciences, Inc.

Designed to improve the sensitivity of monitoring traps for thrips, particularly at low levels of infestation or in easily damaged crops. Thripline contains a synthetic version of a sexual aggregation pheromone for Western Flower Thrips (Frankliniella occidentalis). The natural pheromone is produced by males and attracts both males and females into mating aggregations. The Thrips will move to the top

of the crop to look for mates and to display. Thripline combines this pheromone with Taki-traps[®] to catch these Thrips. The pheromone is impregnated into rubber septa which are

sealed in foil sachets to maintain viability.

10pk

BIOLNP8061-01 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP

Trapline M Yellow Sticky Trap

by Bioline Agrosciences, Inc. Trapline M dry glue sticky traps are made of high impact polystyrene with dry, non toxic glue and easy to peel silicon paper covers.

10pk - 3in x 10in BIOLNP8051-01 Min. Buy 1 EA SHIPPING INFO DIRECT SHIP









Yellow Sticky Tape

by Olson Products Inc

Monitor and reduce populations of Whiteflies, Aphids, Thrips and Fungus Gnats. Tape is coated on both sides with safe non toxic adhesive.

12in x 1.50ft

OPPCR15012

6in x 530ft

OPPCR5306



Stiky Stuff[®] Insect Glue by Olson Products Inc

Make sticky traps with this brush on insect trapping adhesive. It spreads easily and remains tacky through repeated wetting and drying cycles. Clear and odorless.

Min. Buy 1 EA

Min. Buy 1 FA

32oz

OPSS32OZ Min. Buy 1 EA



Insect Monitoring Sticky Cards (Blue + Yellow) by Bioworks Inc.

Features a unique double sided yellow / blue format. The Yellow side attracts flying adult aphids, whitefly, fungus gnats, leaf miners and more. Blue side attracts flying adult thrips. Each card is 4in x 5in with 1in grid on both sides for easy monitoring. Weather resistant with a

easy peel-off backing. Includes a hole punched for hanging.

100pk

BW1GS40A41 Min. Buy 1 FA SHIPPING INFO DIRECT SHIP



Sensor® Yellow Sticky Cards

by BASF Corp

Durable, long-lasting pest monitoring and trapping cards are designed to catch a variety of pests, including aphids, leafminer,

thrips, whiteflies, fungus gnat and other flying insects. Offers growers the best way to eliminate guesswork and evaluate if insect control programs are working. Features nonsticky edges for easier handling.

50pk BAS45182529

Min. Buy 1 EA

Wire Holder for Sticky Cards by Olson Products Inc

Wire holders designed for use with sticky pest monitoring cards. Holds cards above plants and off the ground

Min. Buy 1 EA

100ct OP100SS12









Bioline

• Trapline t

Animal Repellents & Controls

DeerPro[™] Spring & Summer Animal Repellent by Great Oak, Inc.

DeerPro™ Repellent for Spring & Summer provides long-lasting professional strength protection for the growing season. DeerPro

Spring & Summer is specially designed for the commercial applicator. Each application provides four to six weeks of protection that is not degraded by rain or irrigation and delivers what others only promise: Reliable, long-lasting, professional strength protection.

DEERPRO

REI 24 Hrs

RATE 1 part DeerPro, 7 parts water

SIGNAL WORD Caution

ACTIVE INGREDIENT Putrescent whole egg solids **CONTROLS** Deer, Rabbit and Voles

2.5gal DP44320

Min. Buy 1 EA

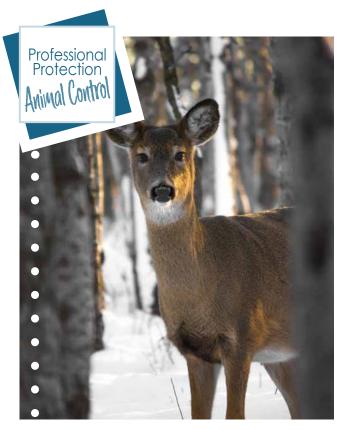
DeerPro™ Winter Animal Repellent

by Great Oak, Inc.

DeerPro animal repellant is a long lasting solution to winter foraging animals. It can be applied as early as October and it will protect shrubs and trees into early spring. Reduces browsing and chewing damage from deer, rabbits and voles.

REI 24 Hrs RATE 1 part DeerPro, 2 parts water **SIGNAL WORD** Caution **CHEMICAL FAMILY** Dimethyl Dithiocarbamate **ACTIVE INGREDIENT** Thiram **CONTROLS** Deer, Rabbit and Voles

2.5gal DP44318 Min. Buy 1 EA SHIPPING INFO SHIPS HAZ



Hawk® All-Weather Bait by Motomco LTD

Made with bromadiolone, Hawk is a single-feed anticoagulant rodenticide with Patented gnawing edges. Use with confidence for unsurpassed control, even against warfarin resistant "super-rats." The superior formulation is irresistible to rats and mice and kills them in 4 or 5 days after eating just a single-feeding. Highly weatherable.

SIGNAL WORD Caution

ACTIVE INGREDIENT Bromadiolone

CONTROLS Norway Rats, Roof Rats, House Mice

Bait Chunx

Qh

MTO312705 Min. Buy 1 EA

Place Packs

150 x 1.5oz Place Packs Min. Buy 1 EA MTO311654





Rampage[®] Rodent Bait

Rampage is a key component in the fight against resistance as it contains Bromethalin, a non-anticoagulant capable of killing even anticoagulant resistant rats and mice. It delivers a proven combination of bait acceptance and speed of kill. In fact its formula can kill rodents in as little as two days after consuming a toxic dose. Using Rampage also reduces the amount of bait required for control since rodents ingesting a toxic dose may not feed again.

SIGNAL WORD Warning **ACTIVE INGREDIENT Bromethalin CONTROLS** Norway Rats, Roof Rats, House Mice

Bait Chunx

Place Packs 121 x 15g Place Packs

MT0221212

9lb Pail MTO222912

Min. Buy 1 EA

Min. Buy 1 EA





Tomcat[®] Bullet Rodent Bait Station by Motomco LTD

Tier-1 tamper-resistant bait station with a secure, low-profile design. Easy to clean and easy to open. Holds 4 1oz Bait Chunx on 4 vertical rods.

For Use with Bait Chunx MTO33432 Min. Buy 1 EA



Animal Repellents & Controls



Ramik[®] Green Rodenticide

A diphacinone anticoagulant rodenticide. Excellent rodent palatability and weather resistant packaging

SIGNAL WORD Caution

ACTIVE INGREDIENT Diphacinone CONTROLS Rats and mice

45 x 43g (1.52oz) Packets

NGN116316 Min. Buy 1 EA

60 x 113.4g (4oz) Packets

NGN116305 Min. Buy 1 EA

Selontra® Rodenticide

Effective control of mice and rats, even anti-coagulant resistant rodents. Labeled for use in/around agricultural buildings, warehouses, homes, industrial buildings and transport vehicles. Single Feed and Stop Feed mode of action. Contains Bitrex to prevent harm to non-target animals.

SIGNAL WORD Caution

ACTIVE INGREDIENT Cholecalciferol CONTROLS Mice and rats

• •

8lb - Approximately 182 Baits per 8lb Pail BAS59014503 Min. Buy 1 EA





Talpirid Mole Worms by Bell Laboratories Inc

A worm-shaped mole bait that kills moles in lawns and gardens. Moles usually die in their tunnels, often within 12-24 hours of

ingesting the bait.

CHEMICAL FAMILY 2nd Generation Anticoagulant

ACTIVE INGREDIENT Bromethalin CONTROLS Moles

20pk BLI7150



Slug & Snail Control

Deadline® Ornamental Molluscicide

Ornamental labeled specifically for use as a barrier around gardens or plants. Deadline uses SNARE, a powerful attractant, to lure slugs and snails to Deadline and away from plants. It is formulated into minipellets that are rain fast and can withstand as much as six inches of rain or heavy watering over 14 days.

REI 48 Hrs RATE 0.25lb per 1,000sq ft

SIGNAL WORD Warning CHEMICAL FAMILY Aldehyde ACTIVE INGREDIENT Metaldehyde CONTROLS Snails, slugs

25lb AMVC11534

Min. Buy 1 EA



IronFist[™] Slug & Snail Bait by Belchim Crop Protection USA LLC

Kills snails and slugs on turf, ornamentals, vegetables and fruit. Slug and snails ingest the bait, causing them to stop feeding and die. Immediate plant protection will be observed through the decrease in feeding. Safe to pets and wildlife

Min. Buy 1 EA

REI 0 Hrs

RATE 10 to 40lb per acre SIGNAL WORD Caution CHEMICAL FAMILY Iron Chelates ACTIVE INGREDIENT Sodium Ferric EDTA CONTROLS Snails, slugs.

50lb RNG700001.050







Read the Label

BFG Supply Co. is committed to offering you the best products and the best service to meet the demands of growing a quality crop. While BFG Supply Co. has made every effort to ensure the information contained in this catalog is correct, there is **NO GUARANTEE**, written or implied, that all information contained here is accurate. This information is only intended to serve as a starting point or reference! Always refer to and read the label prior to chemical use.

HAZ

Hazardous Product

Requires special packaging and/or handling. Additional charges will apply. Shipping restrictions may apply.



Restricted Use Pesticide

A current copy of your pesticide applicators license must be on file to purchase a restricted use pesticide.



OMRI Listed

Organic Materials Review Institute denotes products certified for organic production or processing.



Small Package Delivery Restricted

Cannot be shipped via small package shippers such as UPS, FED-EX or SPEE-DEE due to product ingredients and DOT regulations. Must ship via common carrier.



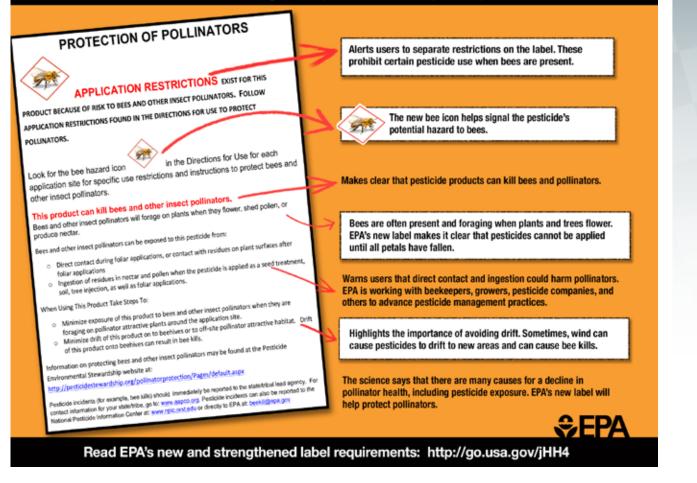
No Air Shipment

Can only be shipped via small package carriers for ground delivery. No overnight or second day air due to product ingredients and DOT regulations.

REMEMBER - ALWAYS READ & FOLLOW LABEL DIRECTIONS

THE NEW EPA BEE ADVISORY BOX

On EPA's new and strengthened pesticide label to protect pollinators



Gutter Connect Greenhouse



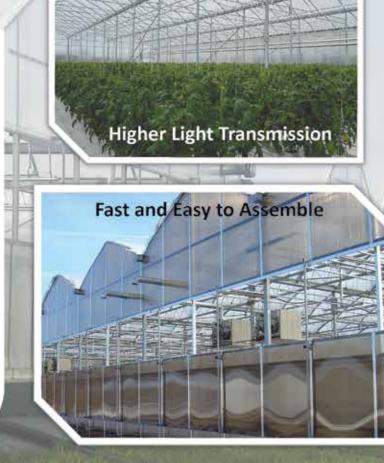
Horticulture, Agriculture, Commercial, Retail, Schools and Institutions. WE DESIGN THEM ALL!

Ventilation options include:

- Side wall vents
- Gutter vents & raised gutter vents
- Rollup walls
- Forced air systems
- Vertical up or down
- Sliding vents

Custom Opening Glass Wall

- Widths available to fit your needs
- Clear Span Series up to 48'
- Double or triple arch



FOR MORE INFORMATION: sungrow@decloetgreenhouse.com

SINCE 1986

WWW.DECLOETGREENHOUSE.COM

CALL US 1-519-582-3081 1

1-888-786-4769