2026 Canadian Potato Product Guide

A useful reference guide for potato growers.

Partners IN POTATOES By Syngenta

syngenta

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Partners in potatoes.

At Syngenta, we continue to be steadfast in our goal to be a true partner in helping you grow your best crop. We don't just talk about our commitment, we back it up with a dedicated team and comprehensive solutions to address the challenges you face every day.

As you have come to expect, this guide highlights the Syngenta solutions available to help you grow your best crop and offers a place to write down application notes.

Looking for something different to try this year?

- Check out Envita® Dry on page 36, Captan L on page 27, and Orondis® Advanced on page 29.
- Any new registrations will be found on our Potato Hub (hey.syngenta.ca/partners-in-potatoes) at the QR code below
- More resources, like the Seedcare™ calculator, can be found on our Potato Hub at the QR code below

Scan this QR code to go to our new potato hub for spud-tacular tools and new product information!

Product application timing

Seed treatment	Planting	Vegetative	Tuber initiation	Full flower	Tuber fill	Vine kill	Post-harvest
Vibrance Ultra Potato	Boundary LQD					Reglone	
CruiserMaxx Vibrance Potato	Dual II Magnum					Desica	
	Reflex						
Actara 240SC		Venture L					
	Ridomil Gold 480 SL						Stadium
	Quadris	Captan L by syngenta					
	Elatus	Quadris Top					
	Orondis Gold DC	Aprovia Top					
				Miravis Duo			
			Bravo ZN				
			Revus				
			Orondis Advanced /	Orondis Ultra			
					Allegro		
	Amatis	Megafol					
		Envita DRY					
					Minecto Pro		

Table of contents

Potato seed treatment comparison

	CruiserMaxx® Vibrance® Potato	Vibrance® Ultra Potato	Actara® 240SC
Active ingredient(s)	Thiamethoxam Fludioxonil Difenoconazole Sedaxane	Difenoconazole Sedaxane Mandipropamid	Thiamethoxam
Fungicide group(s)	3, 7, 12	3, 7, 40	
Insecticide group	4A		4A
Insects			
Aphids	●		●
Colorado potato beetle	●		●
Potato leafhopper	●		●
Potato flea beetle			
Wireworms			
Diseases			
Blackleg *(Erwinia carotovora)*			
Fusarium dry rot *(Fusarium* spp.)	●	●	
Late blight *(Phytophthora infestans)*		●	
Pink rot *(Phytophthora erythroseptica)*		◆	
Seed-borne black scurf *(Rhizoctonia solani)*	●	●	
Seed-borne stem and stolon canker *(Rhizoctonia solani)*	●	●	
Seed-borne silver scurf *(Helminthosporium solani)*	●	●	
Seed-piece decay *(Pythium* spp.)			
Verticillium wilt *(Verticillium albo-atrum)*			

Legend

- ● Control
- ◆ Suppression
- * Damage suppression only

The three “Cs” to better seed piece protection

Your goal should always be to cover and protect the entire seed. To do the best treating job possible, keep the “three Cs” in mind: calibration, concentration, and coverage. The four components behind those three Cs are: chemical flow, seed flow, water volume, and secondary contact.

Calibration and chemical flow rate

- Calibration is key to ensuring your treater delivers the correct product quantity every time. As well, having consistently well-covered seed pieces will provide the strongest, season-long protection.
- Calibrate your liquid seed treater prior to every season and periodically during the treating season. Ensure that there is continuous and thorough tank agitation, especially when tank mixing multiple products.
- Ask your Syngenta Representative for assistance.

Seed flow

- Check seed flow often! It can be highly variable.
- For best results, check using a small container hourly, a larger crate a few times a day and every truck load if possible.
- Remember: adjusting your seed flow to match the chemical flow (as closely as possible) helps ensure that each seed piece has the correct product concentration.

Water volume

- Increasing water volumes will improve the coverage of seed pieces.
- Decreasing water volumes will limit excess moisture on the seed pieces.
- **It’s easier to start at a lower water rate and increase as needed.** Water volumes need to be adjusted for variety, temperature, and humidity.

Secondary contact

- Increasing time in treater increases secondary contact, promoting better coverage between seed pieces. Slow down where possible. **This process should roll and mix the seed but be gentle so as not to cause bruising.**
- **This is the most commonly overlooked step in accomplishing good coverage.**

Seedcare best management practices

Start by making a decision to treat your seed.

- Know **your** seed
  - Think about physiological conditions, disease spectrum, characteristics of your seed and variety
- Follow application guidelines
  - Consider label rates and slurry volume
- Encourage wound healing (suberization)
  - Temperature, humidity, and availability of oxygen all play a role

Want to learn more about best management practices? Scan this QR code:

Seedcare conversion chart

Actara® 240SC

CruiserMaxx® Vibrance® Potato

Vibrance® Ultra Potato

			Actara® 240SC					
Seeding rate			Low rate			High rate		
100 kg/ha	tonnes/ acre	cwt/ acre	L/ 100 kg	L/cwt	acres/ case	L/ 100 kg	L/cwt	acres/ case
16	0.65	14	0.024	0.011	27	-	-	-
17	0.69	15	0.022	0.010	27	-	-	-
18	0.73	16	0.021	0.010	27	-	-	-
19	0.77	17	0.020	0.009	27	-	-	-
20	0.81	18	0.019	0.009	27	0.024	0.011	21
21	0.85	19	0.018	0.008	27	0.023	0.011	21
22	0.89	20	0.017	0.008	27	0.022	0.010	21
23	0.93	21	0.017	0.007	27	0.021	0.010	21
24	0.97	21	0.016	0.007	27	0.020	0.009	21
25	1.01	22	0.015	0.007	27	0.020	0.009	21
26	1.05	23	0.015	0.007	27	0.019	0.009	21
27	1.09	24	0.014	0.006	27	0.018	0.008	21
28	1.13	25	0.014	0.006	27	0.017	0.008	21
29	1.17	26	0.013	0.006	27	0.017	0.008	21
30	1.21	27	0.013	0.006	27	0.016	0.007	21
31	1.26	28	0.012	0.006	27	0.016	0.007	21
32	1.30	29	0.012	0.005	27	0.015	0.007	21
33	1.34	29	0.012	0.005	27	0.015	0.007	21
34	1.38	30	0.011	0.005	27	0.014	0.007	21
35	1.42	31	0.011	0.005	27	0.014	0.006	21
36	1.46	32	0.011	0.005	27	0.014	0.006	21
37	1.50	33	0.010	0.005	27	0.013	0.006	21
38	1.54	34	0.010	0.005	27	0.013	0.006	21
39	1.58	35	0.010	0.004	27	0.013	0.006	21
40	1.62	36	0.010	0.004	27	0.012	0.006	21
41	1.66	37	0.009	0.004	27	0.012	0.005	21
42	1.70	37	0.009	0.004	27	0.012	0.005	21
43	1.74	38	0.009	0.004	27	0.011	0.005	21
44	1.78	39	0.009	0.004	27	0.011	0.005	21
45	1.82	40	0.008	0.004	27	0.011	0.005	21
46	1.86	41	0.008	0.004	27	0.011	0.005	21
47	1.90	42	0.008	0.004	27	0.010	0.005	21
48	1.94	43	0.008	0.004	27	0.010	0.005	21

			Cruiser Maxx® Vibrance Potato			Vibrance® Ultra Potato		
Seeding rate			Rate			Rate		
100 kg/ha	tonnes/ acre	cwt/ acre	L/ 100 kg	L/cwt	acres/ case	L/ 100 kg	L/cwt	acres/ case
16	0.65	14	0.0325	0.0147	64	0.032	0.015	83
17	0.69	15	0.0325	0.0147	61	0.032	0.015	78
18	0.73	16	0.0325	0.0147	57	0.032	0.015	74
19	0.77	17	0.0325	0.0147	54	0.032	0.015	70
20	0.81	18	0.0325	0.0147	51	0.032	0.015	66
21	0.85	19	0.0325	0.0147	49	0.032	0.015	63
22	0.89	20	0.0325	0.0147	51	0.032	0.015	66
23	0.93	21	0.0325	0.0147	45	0.032	0.015	58
24	0.97	21	0.0325	0.0147	43	0.032	0.015	55
25	1.01	22	0.0325	0.0147	41	0.032	0.015	53
26	1.05	23	0.0325	0.0147	40	0.032	0.015	51
27	1.09	24	0.0325	0.0147	38	0.032	0.015	49
28	1.13	25	0.0325	0.0147	37	0.032	0.015	47
29	1.17	26	0.0325	0.0147	36	0.032	0.015	46
30	1.21	27	0.0325	0.0147	34	0.032	0.015	44
31	1.26	28	0.0325	0.0147	33	0.032	0.015	43
32	1.30	29	0.0325	0.0147	32	0.032	0.015	41
33	1.34	29	0.0325	0.0147	31	0.032	0.015	40
34	1.38	30	0.0325	0.0147	30	0.032	0.015	39
35	1.42	31	0.0325	0.0147	29	0.032	0.015	38
36	1.46	32	0.0325	0.0147	29	0.032	0.015	37
37	1.50	33	0.0325	0.0147	28	0.032	0.015	36
38	1.54	34	0.0325	0.0147	27	0.032	0.015	35
39	1.58	35	0.0325	0.0147	26	0.032	0.015	34
40	1.62	36	0.0325	0.0147	26	0.032	0.015	33
41	1.66	37	0.0325	0.0147	25	0.032	0.015	32
42	1.70	37	0.0325	0.0147	25	0.032	0.015	32
43	1.74	38	0.0325	0.0147	24	0.032	0.015	31
44	1.78	39	0.0325	0.0147	23	0.032	0.015	30
45	1.82	40	0.0325	0.0147	23	0.032	0.015	29
46	1.86	41	0.0325	0.0147	22	0.032	0.015	29
47	1.90	42	0.0325	0.0147	22	0.032	0.015	28
48	1.94	43	0.0325	0.0147	21	0.032	0.015	28

Actara® 240SC

Protect your potato crop from early-season insect pests.

An application of Actara® 240SC insecticide on your potato seed pieces or at planting is what your crop needs for residual protection. Once inside the plant, Actara 240SC delivers effective protection into the growing season.

Active ingredient:
- Thiamethoxam (Group 4A insecticide)

PCP number:
- 28407

WALES mixing order:
- L

For control of:
- Aphids (buckthorn, foxglove, green peach, potato)
- Colorado potato beetle
- Potato leafhopper

Packaging:
- Each case contains 2 x 2.04 L jugs.

Use information:

Rate:
- Seed treatment: Apply no more than 488 mL/ha (197.6 mL/ac).

Maximum applications/season:
Seed treatment or in-furrow: 1

For information about Actara 240SC in-furrow, please see page 21.

CruiserMaxx® Vibrance® Potato

Robust all-in-one formulation.

Plus up your seed treatment with CruiserMaxx® Vibrance® Potato: the all-in-one simple-to-apply solution for early season insect, pests and seed-borne diseases. The unique combination of three fungicides provide two modes of action on standard seed-borne diseases, Fusarium, Rhizoctonia and silver scurf, helping you to protect your crop right from the start.

Active ingredients:

- Thiamethoxam (Group 4A insecticide)
- Fludioxonil (Group 12 fungicide)
- Difenoconazole (Group 3 fungicide)
- Sedaxane (Group 7 fungicide)

PCP number:

- 32009

WALES mixing order:

- L

For control of:

Diseases:

- Black scurf, stem and stolon canker (*Rhizoctonia solani*)
- Fusarium dry rot (*Fusarium* spp.)
- Silver scurf (*Helminthosporium* spp.)

Insects:

- Colorado potato beetle
- Aphids
- Potato leafhopper

Packaging:

- Each case contains 4 x (3.78 L jug + 233 mL jug colourant).

Use information:

Rate:

- 32.5ml/100 kg seed (14.7 mL/cwt)
- Each co-pack (3.78 L jug + 252 mL colourant) will treat 257 cwt
- Do not plant more than 128 700 kg (65 329 cwt) treated seed pieces/planter/day

PHI: N/A

REI: N/A

Revus®

Preventative control of seed-borne late blight.

When applied as a seed treatment, Revus® fungicide can help prevent seed-piece decay and the spread of late blight spores from seed piece to seed piece. Revus can also be used to help manage pink rot.

Active ingredient:
- Mandipropamid (Group 40 fungicide)

PCP number:
- 29074

WALES mixing order:
- L

For control or suppression of:
- For preventative control of seed-borne late blight (*Phytophthora infestans).*
- For suppression of pink rot (*Phytophthora erythroseptica*) caused by the pathogen *Phytophthora erythroseptica.*

Packaging:
- Each case contains 4 x 3.78 L jugs.

Use information:

Rate:
- Seed treatment: 13—26 mL/100 kg seed (3.25–6.5 g ai/100 kg seed)
- One jug applied at 20 mL/100 kg seed will treat 420 cwt.

PHI:
- Seed treatment: N/A

REI: N/A

Maximum applications/season: 1 seed treatment

If following a seed treatment application of Revus fungicide with foliar applications of this product, apply a fungicide belonging to a group other than Group 40 as the first foliar application of the season.

Do not apply more than 600 g mandipropamid/ha/year.

Check the MRL information on page 49.

Vibrance® Ultra Potato

A strong start for a stronger finish.

Vibrance® Ultra Potato fungicide seed treatment gives growers peace of mind by providing broad-spectrum protection against key seed- and soil-borne diseases. The easy-to-use formulation combines three modes of action and comes with a colourant so growers can evaluate coverage.

Active ingredients:

- Difenoconazole (Group 3)
- Sedaxane (Group 7)
- Mandipropamid (Group 40)

PCP number:

- 33171

WALES mixing order:

- L

For control or suppression of:

- Seed-borne silver scurf (*Helminthosporium solani*)
- Fusarium dry rot (*Fusarium* spp.)
- Seed-borne black scurf, stem and stolon canker (*Rhizoctonia solani*)
- Preventative control of late blight (*Phytophthora infestans*)
- Pink rot (*Phytophthora erythroseptica*)*

Packaging:

- One case contains 4 co-packs, each consisting of 1x4.8L jug of Vibrance Ultra + 1x0.3L jug of colourant.

Use information:

Rate:

- 32 mL/100 kg seed
- One jug of Vibrance Ultra Potato will treat 330.6 cwt.
- To determine your use rate per acre, multiply 14.5 mL by your seeding rate (in cwt).
- For control of Colorado potato beetle, aphids and potato leafhopper, Vibrance Ultra Potato can be tank-mixed with Actara® 240SC insecticide.

PHI: N/A **REI:** N/A

Maximum applications/season:
Do not apply more than 600 g of mandipropamid per hectare per year.

*Suppression only.
The use of Vibrance Ultra Potato as a seed treatment will reduce the number of possible foliar applications of Revus® and Orondis® Ultra fungicides.

Check the MRL information on page 49.

In-furrow conversion chart

Actara® 240SC

Row spacing		Actara® 240SC					
		Low rate			High rate		
cm	in	mL/ 100 m	L/acre	acres/case	mL/ 100 m	L/acre	acres/case
75	30	3.4	0.183	22	4.4	0.237	17
76	30	3.4	0.181	23	4.4	0.234	17
77	30	3.4	0.179	23	4.4	0.231	18
78	31	3.4	0.176	23	4.4	0.228	18
79	31	3.4	0.174	23	4.4	0.225	18
80	31	3.4	0.172	24	4.4	0.223	18
81	32	3.4	0.170	24	4.4	0.220	19
82	32	3.4	0.168	24	4.4	0.217	19
83	33	3.4	0.166	25	4.4	0.215	19
84	33	3.4	0.164	25	4.4	0.212	19
85	33	3.4	0.162	25	4.4	0.209	19
86	34	3.4	0.160	26	4.4	0.207	20
87	34	3.4	0.158	26	4.4	0.205	20
88	35	3.4	0.156	26	4.4	0.202	20
89	35	3.4	0.155	26	4.4	0.200	20
90	35	3.4	0.153	27	4.4	0.198	21
91	36	3.4	0.151	27	4.4	0.196	21
92	36	3.4	0.150	27	4.4	0.194	21
93	37	3.4	0.148	28	4.4	0.191	21
94	37	3.4	0.146	28	4.4	0.189	22
95	37	3.4	0.145	28	4.4	0.187	22
96	38	3.4	0.143	28	4.4	0.185	22
97	38	3.4	0.142	29	4.4	0.184	22
98	39	3.4	0.140	29	4.4	0.182	22
99	39	3.4	0.139	29	4.4	0.180	23
100	39	3.4	0.138	30	4.4	0.178	23

In-furrow conversion chart

Elatus®

Row spacing		Elatus® A						Elatus® B					
		Low rate			High rate			Low rate		Recommended rate		High rate	
cm	in	mL/ 100 m	L/acre	acres/ case	mL/ 100 m	L/acre	acres/ case	L/acre	acres/ case	L/acre	acres/ case	L/acre	acres/ case
75	30	4.0	0.216	38	6.0	0.324	25	0.202	40	0.270	30	0.304	27
76	30	4.0	0.213	38	6.0	0.319	25	0.202	40	0.270	30	0.304	27
77	30	4.0	0.210	39	6.0	0.315	26	0.202	40	0.270	30	0.304	27
78	31	4.0	0.208	39	6.0	0.311	26	0.202	40	0.270	30	0.304	27
79	31	4.0	0.205	40	6.0	0.307	26	0.202	40	0.270	30	0.304	27
80	31	4.0	0.202	40	6.0	0.304	27	0.202	40	0.270	30	0.304	27
81	32	4.0	0.200	41	6.0	0.300	27	0.202	40	0.270	30	0.304	27
82	32	4.0	0.197	41	6.0	0.296	27	0.202	40	0.270	30	0.304	27
83	33	4.0	0.195	42	6.0	0.293	28	0.202	40	0.270	30	0.304	27
84	33	4.0	0.193	42	6.0	0.289	28	0.202	40	0.270	30	0.304	27
85	33	4.0	0.190	43	6.0	0.286	28	0.202	40	0.270	30	0.304	27
86	34	4.0	0.188	43	6.0	0.282	29	0.202	40	0.270	30	0.304	27
87	34	4.0	0.186	44	6.0	0.279	29	0.202	40	0.270	30	0.304	27
88	35	4.0	0.184	44	6.0	0.276	29	0.202	40	0.270	30	0.304	27
89	35	4.0	0.182	45	6.0	0.273	30	0.202	40	0.270	30	0.304	27
90	35	4.0	0.180	45	6.0	0.270	30	0.202	40	0.270	30	0.304	27
91	36	4.0	0.178	46	6.0	0.267	30	0.202	40	0.270	30	0.304	27
92	36	4.0	0.176	46	6.0	0.264	31	0.202	40	0.270	30	0.304	27
93	37	4.0	0.174	47	6.0	0.261	31	0.202	40	0.270	30	0.304	27
94	37	4.0	0.172	47	6.0	0.258	31	0.202	40	0.270	30	0.304	27
95	37	4.0	0.170	48	6.0	0.256	32	0.202	40	0.270	30	0.304	27
96	38	4.0	0.169	48	6.0	0.253	32	0.202	40	0.270	30	0.304	27
97	38	4.0	0.167	49	6.0	0.250	32	0.202	40	0.270	30	0.304	27
98	39	4.0	0.165	49	6.0	0.248	33	0.202	40	0.270	30	0.304	27
99	39	4.0	0.164	50	6.0	0.245	33	0.202	40	0.270	30	0.304	27
100	39	4.0	0.162	50	6.0	0.243	33	0.202	40	0.270	30	0.304	27

In-furrow conversion chart

Quadris® RidomilGold® 480 SL

Row spacing		Quadris®						Ridomil Gold® 480 SL		
		Low rate			High rate			Rate		
cm	in	mL/ 100 m	L/acre	acres/ case	mL/ 100 m	L/acre	acres/ case	mL/ 100 m	L/acre	acres/ case
75	30	4.0	0.216	70	6.0	0.324	47	4.0	0.216	70
76	30	4.0	0.213	71	6.0	0.319	47	4.0	0.213	71
77	30	4.0	0.210	72	6.0	0.315	48	4.0	0.210	72
78	31	4.0	0.208	73	6.0	0.311	49	4.0	0.208	73
79	31	4.0	0.205	74	6.0	0.307	49	4.0	0.205	74
80	31	4.0	0.202	75	6.0	0.304	50	4.0	0.202	75
81	32	4.0	0.200	76	6.0	0.300	50	4.0	0.200	76
82	32	4.0	0.197	77	6.0	0.296	51	4.0	0.197	77
83	33	4.0	0.195	78	6.0	0.293	52	4.0	0.195	78
84	33	4.0	0.193	78	6.0	0.289	52	4.0	0.193	78
85	33	4.0	0.190	79	6.0	0.286	53	4.0	0.190	79
86	34	4.0	0.188	80	6.0	0.282	54	4.0	0.188	80
87	34	4.0	0.186	81	6.0	0.279	54	4.0	0.186	81
88	35	4.0	0.184	82	6.0	0.276	55	4.0	0.184	82
89	35	4.0	0.182	83	6.0	0.273	55	4.0	0.182	83
90	35	4.0	0.180	84	6.0	0.270	56	4.0	0.180	84
91	36	4.0	0.178	85	6.0	0.267	57	4.0	0.178	85
92	36	4.0	0.176	86	6.0	0.264	57	4.0	0.176	86
93	37	4.0	0.174	87	6.0	0.261	58	4.0	0.174	87
94	37	4.0	0.172	88	6.0	0.258	59	4.0	0.172	88
95	37	4.0	0.170	89	6.0	0.256	59	4.0	0.170	89
96	38	4.0	0.169	90	6.0	0.253	60	4.0	0.169	90
97	38	4.0	0.167	91	6.0	0.250	60	4.0	0.167	91
98	39	4.0	0.165	92	6.0	0.248	61	4.0	0.165	92
99	39	4.0	0.164	92	6.0	0.245	62	4.0	0.164	92
100	39	4.0	0.162	93	6.0	0.243	62	4.0	0.162	93

In-furrow conversion chart

Orondis® Gold DC

Row spacing		Orondis® Gold DC		
		Rate		
cm	in	mL/ 100 m	L/acre	acres/case
75	30	18	0.97	17
76	30	18	0.96	17
77	30	18	0.95	17
78	31	18	0.93	18
79	31	18	0.92	18
80	31	18	0.91	18
81	32	18	0.90	18
82	32	18	0.89	18
83	33	18	0.88	19
84	33	18	0.87	19
85	33	18	0.86	19
86	34	18	0.85	19
87	34	18	0.84	20
88	35	18	0.83	20
89	35	18	0.82	20
90	35	18	0.81	20
91	36	18	0.80	20
92	36	18	0.79	21
93	37	18	0.78	21
94	37	18	0.78	21
95	37	18	0.77	21
96	38	18	0.76	22
97	38	18	0.75	22
98	39	18	0.74	22
99	39	18	0.74	22
100	39	18	0.73	23

Elatus®

Combat soil-borne diseases early with Elatus® fungicide.

An in-furrow application of Elatus® protects your potato crop and will help to minimize the effects of Verticillium wilt for improved marketable yield.

Active ingredients:
- SOLATENOL® (Group 7 fungicide)
- Azoxystrobin (Group 11 fungicide)

PCP number:
- Elatus® A - 31973
- Elatus® B - 31977

WALES mixing order:
- Elatus® A - L
- Elatus® B - E

For control of:
- Silver scurf (*Helminthosporium solani*)
- Rhizoctonia stem and stolon canker (*Rhizoctonia* spp.)
- Black scurf (*Rhizoctonia solani*)
- Verticillium wilt (*Verticillium dahliae*)*

Packaging:
- Each case contains 1 x 8.1 L jug of Elatus® A and 1 x 8.1 L jug of Elatus® B.

Use information:
- Apply as an in-furrow spray in 50 to 140 L/ha of water at planting.

Elatus® A – In-furrow:
- Apply 4–6 mL/100 m row (178–267 mL/ac with 36" row spacing).

Elatus® B – In-furrow:
- Apply 500–750 mL/ha (202–303 mL/ac).

- When targeting silver scurf and *Rhizoctonia* spp., one case will treat up to 40 acres.
- See label for specific recommendations when targeting Verticillium wilt.

PHI: N/A **REI:** 12 hours **Maximum applications/season:** 1

Mount the spray nozzle so the spray is directed into the furrow in a 15 to 20 cm band just before the seed is covered. In-furrow application only.

If an application of Elatus® is made, DO NOT make more than one application of Aprovia® Top fungicide in subsequent foliar applications.

*Suppression only.

Orondis® Gold DC

Fungicide

Start strong and stop losses before storage.

NEW FORMULATION

Protect potatoes destined for storage from pink rot and Pythium.

Active ingredients:

- Metalaxyl-M (Group 4)
- Oxathiapiprolin (Group 49)

PCP number:

- 35176

WALES mixing order:

- E

For suppression of:

- Pink rot (*Phytophthora erythroseptica*)
- Pythium leak (*Pythium* spp.)

Packaging:

- Each case contains 2 x 8.2 L jugs.

Use information:

- Water volume: Apply in 40 L/ha (4 gal/ac) of water in-furrow at planting

Rate:

- 18 mL/100m row at 36” row spacing
- One case will treat 20 acres on a 36” row spacing

PHI: N/A

REI: 12 hours

Maximum applications/season: 1

Quadris®

Fungicide

Improve tuber uniformity while enhancing tuber skin finish.

Apply Quadris® fungicide as an in-furrow treatment for protection against soil-borne diseases caused by Rhizoctonia, as well as silver scurf.

Active ingredient:
- Azoxystrobin (Group 11 fungicide)

PCP number:
- 26153

WALES mixing order:
- L

For control of:
- Black scurf, stem and stolon canker (*Rhizoctonia solani*)
- Silver scurf (*Helminthosporium solani*)

Packaging:
- Each case contains 4 x 3.78 L jugs.

Use information:
- Water volume: Apply in at least 50–140 L/ha (5–14 gal/ac)

Rate:
- Apply 4–6 mL/100 m row (178–267 mL/ac with 36” row spacing).
- One jug of Quadris applied at the in-furrow rate of 4.32 mL/100 m row treats approximately 20 acres.

PHI: N/A

REI: 12 hours

Maximum applications/season: 1

RidomilGold® 480 SL

Fungicide

Help mitigate financial loss in storage.

An in-furrow application of Ridomil Gold® 480 can be used as part of your pink rot management strategy.

Active ingredients:
- Metalaxyl-M (Group 4 fungicide) and S-isomer

PCP number:
- 28474

WALES mixing order:
- S

For suppression of:

In-furrow:
- Pink rot (*Phytophthora erythroseptica*)*

Packaging:
- Each case contains 4 x 3.78 L jugs.

Use information:
- If Orondis Gold Potato or Ridiomil Gold 480 SL is applied in-furrow, foliar applications of Ridomil Gold 480 SL are not permitted.
- Water volume: Apply in a minimum of 50 L/ha (5 gal/ac)

Rate:
- In-furrow: 4 mL/100 m row (178 mL/ac with 36” row spacing)
- Consider a post-harvest application of a registered product targeted at pink rot and tuber blight going into storage for increased protection.

PHI: In-furrow: N/A **REI:** 12 hours

Maximum applications/season: In-furrow: 1

For Ridomil 480 SL foliar application information, please refer to page 33.

*There is known Ridomil Gold 480 SL insensitivity to certain strains of late blight and pink rot. Ridomil Gold 480 SL should always be tank-mixed with another product that controls late blight when targeting that disease.

Actara® 240SC

Insecticide

Protect your potato crop from early-season insect pests.

An application of Actara® 240SC insecticide at planting is what your crop needs for residual protection.

Active ingredient:
- Thiamethoxam (Group 4A insecticide)

PCP number:
- 28407

WALES mixing order:
- L

Pair Actara 240SC with Vibrance® Ultra Potato fungicide seed treatment to provide broad-spectrum protection against key seed- and soil-borne diseases including seed-borne late blight of pink rot. For more information, see page 14.

For control of:
- Aphids (buckthorn, foxglove, green peach, potato)
- Colorado potato beetle
- Potato leafhopper

Packaging:
- Each case contains 2 x 2.04 L jugs.

Use information:

Rate:
- In-furrow: Apply 3.4–4.4 mL/100 m row (151–196 mL/ac with 36” row spacing).
- At the registered high rate, one jug of Actara 240SC treats approximately 10 acres when applied in-furrow.

PHI: N/A

REI: N/A

Maximum applications/season: Seed treatment or in-furrow: 1

For information about Actara 240SC as a seed treatment, please see page 14.

Amatis™

Promotes strong early plant-stand.

Soil-applied biostimulant that focuses on early-season plant performance and promotion of root growth.

Active ingredients:
- Contains select humic acids, amino acids, polysaccharides and vitamins.
- Guaranteed minimum analysis 3-0-8.

PCP number:
- 2017126F

Adjuvant:
- N/A

Rainfast:
- 4

WALES mixing order:
- Add Amatis™ to the tank last

Product Benefits:
- Amatis improves the rhizosphere and soil structure around the plant, which in turn promotes root growth, known to positively affect water and nutrient uptake by the plant.
- In preliminary field-scale demonstration plots, plants treated with one application of Amatis showed visually larger roots compared to the untreated check. Improved soil structure enables young plants to develop a larger root mass, which promotes strong early plant stand establishment. Improved root development allows for increased nutrient and water absorption, unlocking untapped yield potential and improved uniformity.

Packaging:
- Each case contains 2 x 10 L jugs.

Use information:

Rate:
- 0.7–1.6 L/acre

PHI: 0

REI: 0

Maximum applications/season: N/A

Storage and/or use restrictions: Do not freeze

Product application timing

Vegetative	Tuber initiation	Full flower	Tuber fill
Ridomil Gold 480 SL			
		Bravo ZN	
Captan L by syngenta			
Quadris Top			
	Aprovia Top		
		Miravis Duo	
	Revus		
		Orondis Advanced	
		Orondis Ultra	
			Allegro
Megafol			
Envita DRY			
			Minecto Pro

Allegro®

Fungicide

Protect against white mould and late blight at the same time!

Allegro® 500F prevents the spread of white mould and late blight by inhibiting the disease from further development, providing excellent control of white mould and preventing the spread of foliar and tuber late blight.

Active ingredient:
- Fluazinam (Group 29 fungicide)

PCP number:
- 27517

Adjuvant:
- None required

Rainfast:
- 2 hours

WALES mixing order:
- L

For control of:
- Late blight (*Phytophthora infestans*)
- White mould (*Sclerotinia sclerotiorum*)

Packaging:
- Each case contains 2 x 10 L jugs.

Use information:
- To protect your potato plants against white mould infection, make the first application of Allegro® fungicide at first bloom (10%). Make a second application within two weeks if rain and humidity remain high.
- Water volume: Apply in sufficient water to obtain adequate coverage of foliage, ground rig: ranging from 200-600 L/ha (20-60 gal/ac); aerial at least 45 L/ha (4.5 gal/ac).

Rate:
- 400–600 mL/ha (162–243 mL/ac)
- One jug of Allegro applied at 162 mL/ac treats approximately 60 acres.

PHI: 14 days

REI: 24 hours

Maximum sequential applications: 3

Maximum applications/season: 6 (high rate)
10 (low rate)

Aprovia® Top

Fungicide

Two modes of action to protect against early blight and brown spot.

Aprovia® Top fungicide combines the trustworthy power of difenoconazole with SOLATENOL®, a potent, longer-lasting SDHI, to protect against early blight and brown spot and keep potato crops greener longer.

Active ingredients:
- SOLATENOL® (Group 7 fungicide)
- Difenoconazole (Group 3 fungicide)

PCP number:
- 31526

Adjuvant:
- None required

Rainfast:
- 1 hour

WALES mixing order:
- E

For control of:
- Early blight (*Alternaria solani*)
- Brown spot (*Alternaria alternata*)*

Packaging:
- Each case contains 4 x 3.78 L jugs.

Use information:
- Water volume: apply in a minimum of 150 L/ha (15 gal/ac) by ground, 45 L/ha (4.5 gal/ac) by air.

Rate:
- 643–967 mL/ha (260–391 mL/ac)
- One jug of Aprovia® Top applied at 391 mL/ac will treat 10 acres.

PHI: 14 days

REI: 12 hours

Maximum applications/season: Four applications by ground or two applications by air. All applications must be made by the same method. For best resistance management of early blight, count seed and soil applications of Group 7-containing fungicides toward the total number of recommended Group 7 foliar applications.

Application interval: 7–14 days

Consecutive applications: Make no more than two consecutive applications before switching to a non-Group 7 and a non-Group 3 fungicide.

If an in-furrow application of Elatus® was made, do not make more than one application of Aprovia® Top fungicide in subsequent foliar applications.

*Suppression only.

Bravo® ZN

Fungicide

Botrytis control that sticks and stays.

Patented Weather Stik® technology from Syngenta maximizes the ability of Bravo® ZN to stick to plant surfaces, even during heavy rainfall or irrigation. Bravo ZN can be applied in combination or rotation with other Syngenta fungicides targeting late blight and early blight.

Active ingredient:
- Chlorothalonil (Group M05)

PCP number:
- 28900

Adjuvant:
- None required

Rainfast:
- 30 minutes

WALES mixing order:
- L

For control of:
- Early blight (*Alternaria solani*)
- Late blight (*Phytophthora infestans*)
- Botrytis vine rot (*Botrytis cinerea*)

Packaging:
- 450 L tote

Use information:
- Water volume: Minimum 50 L/ha aerial and 225 L/ha ground. Use sufficient water to obtain adequate spray coverage.

Rate:
- For late blight: 1.2 to 2.4 L/ha (0.49–0.97 L/ac).
- For early blight and Botrytis vine rot: 1.6–2.4 L/ha (0.65–0.97 L/ac).
- The most common use rates for Bravo ZN in potatoes are 0.8–0.97 L/ac.
- Under severe disease conditions, use the higher rates at 7-day intervals.

Reminders:
- All mixing and loading must be done with closed transfer systems.
- Applicators treating potato fields must use groundboom equipment with an enclosed cab.
- A vegetative filter strip (VFS) with a width of at least 10 metres must be constructed and maintained.

PHI: 2 days **REI:** Refer to label.

Maximum applications/season: 3

Captan L by syngenta

Broad spectrum disease control.

Broad-spectrum protection in the convenience of a liquid formulation.

Active ingredients:
- Captan (Group M04)

PCP number:
- 35343

Adjuvant:
- None required

Rainfast:
- Avoid application when heavy rain is forecast

WALES mixing order:
- L

For control of:
- Early blight (*Alternaria solani*)
- Late blight (*Phytophthora infestans*)

Packaging:
- Each case contains 2 x 10 L jugs.

Use information:
- Water volume: Use enough water to obtain sufficient coverage
- Do not mix with oils or oil-containing products

Rate:
- 4.15-6.22 L/ha (1.6 - 2.5L/ac)

PHI: 8 days

REI: Hand set irrigation activities involving foliage contact 7 days; rogueing 6 days; all other activities 12 hours

Maximum applications/season: 3

Miravis® Duo

Fungicide

Level up your foliar fungicide.

Miravis® Duo fungicide brings together a powerful active ingredient, ADEPYDIN®, and proven chemistry to help you proactively protect yield and quality. Miravis Duo delivers highly effective control of early blight and protection against brown spot, Botrytis and white mould.

Active ingredients:
- ADEPIDYN® (Group 7 fungicide)
- Difenoconazole (Group 3 fungicide)

PCP number:
- 33206

WALES mixing order:
- L

For control of:
- Early blight *(Alternaria solani)*
- Brown spot *(Alternaria alternata)*
- Botrytis grey mould *(Botrytis cinerea)**
- White mould *(Sclerotinia sclerotiorum)**

Packaging:
- Each case contains 2 x 8.1 L jugs.

Use information:
- Water volume: Use sufficient water to obtain thorough coverage, at least 150 L/ha (15 gal/ac) by ground equipment and 50 L/ha (5 gal/ac) by aerial.

Rate:
- Apply at one convenient rate of 1 L/ha (0.4 L/acre).
- One case treats 40 acres.

Application timing:
- To control early blight and brown spot, or suppress Botrytis grey mould,apply on a 7- to 14-day interval, prior to disease establishment. If disease pressure is high, use the shortest interval.
- For suppression of white mould, begin applying at 20 per cent bloom. Repeat applications 10 to 14 days later.

PHI: 14 days **REI:** 12 hours

Maximum applications/season: Two applications, then switch to a non-Group 7 and non-Group 3 fungicide.

- For best resistance management of early blight, count seed and soil applications of Group 7-containing fungicides toward the total number of foliar Group 7 applications as recommended by the Fungicide Resistance Action Committee (FRAC).

*Suppression only.

Orondis® Advanced

Fungicide

Proven late blight and white mould protection.

Orondis® Advanced offers potato growers proven, consistent, and convenient late blight control with a premixed formulation that features two modes of action. It also enables critical fungicide group rotation and white mold control for optimal crop production.

Active ingredients:
- Fluazinam (Group 29 fungicide)
- Oxathiapiprolin (Group 49 fungicide)

Adjuvant:
- None required

Rainfast:
- 1 hour

WALES mixing order:
- L

For control of:
- Late blight (*Phytophthora infestans*)
- White mould (*Sclerotinia sclerotiorum*)

Packaging:
- Each case contains 2 x 9.6 L jugs.

Use information:

Rate:
- 0.633-0.79L/ha (0.25-0.32L/ac)
- Common rate: 0.32 L/ac

Reminders:
- When the total number of fungicide applications is less than three, apply no more than one Group 49 containing fungicide. When three or more fungicide applications are made, use a Group 49 containing fungicide in no more than 33% of applications, or a maximum of 6 applications, whichever is fewer.
- For late blight, do not make more than three sequential applications of a Group 29; limit the number of Group 29 containing fungicides to 50% of the total applications in a season.

PHI: 14 days

REI: 24 hours

Maximum applications/season: 4

Orondis® Ultra

Fungicide

The ultimate in late blight protection.

Orondis® Ultra fungicide provides unbeatable protection against late blight. Plan your late blight program with confidence with Orondis Ultra.

Active ingredients:
- Oxathiapiprolin (Group 49 fungicide)
- Mandipropamid (Group 40 fungicide)

PCP number:
- 32805

Adjuvant:
- None required

Rainfast:
- 1 hour

WALES mixing order:
- L

For control of:
- Late blight (*Phytophthora infestans*)

Packaging:
- Each case contains 4 x 3.78 L jugs.

Use information:

Rate:
- 400–600 mL/ha (162–243 mL/ac).
- At the mid-rate, Orondis Ultra treats 75 acres per case.

Application timing:
Orondis Ultra must be applied preventatively:
- Apply in-season when conditions are conducive to disease development.
- Use a shorter interval during periods of rapid growth or high disease pressure.

Resistance management guidelines:
- Refer to the potato section of the label for resistance management guidelines for late blight.
- Do not apply curatively — if infection is present in the field, use alternate solutions.

PHI: 14 days

REI: 12 hours

Maximum applications/season: 3

Quadris Top®

Fungicide

Proven protection from black dot, early blight and brown spot.

Quadris Top® fungicide combines two powerful active ingredients and provides highly effective early season protection against black dot, early blight and brown spot.

Active ingredients:
- Azoxystrobin (Group 11 fungicide)
- Difenoconazole (Group 3 fungicide)

PCP number:
- 30518

Adjuvant:
- None required

Rainfast:
- 1 hour

WALES mixing order:
- L

For control of:
- Early blight (*Alternaria solani*)
- Black dot (*Colletotrichum coccodes*)*
- Brown spot (*Alternaria alternata*)*
- White mould (*Sclerotinia sclerotiorum*)*

Packaging:
- Each case contains 2 x 10.125 L jugs.

Use information:

Rate:
- Apply 566–1000 mL/ha (229–404 mL/ac).
- Targeting black dot: Apply early in the season at 253 mL/ac. At this rate, one jug of Quadris top will treat 40 acres.
- Targeting early blight, brown spot, and/or white mould: One jug of Quadris Top applied at 404 mL/ac will treat 25 acres.

PHI: 14 days

REI: 12 hours

Maximum applications/season: 3

*Suppression only.

Revus®

Fungicide

Reliable, long-lasting late blight control.

With its powerful LOK+FLO® technology, Revus® fungicide delivers long-lasting protection against late blight in plants for up to 10 days, even during periods of expanding leaf growth.

Active ingredient:
- Mandipropamid (Group 40 fungicide)

PCP number:
- 29074

Adjuvant:
- A non-ionic adjuvant, such as Agral® 90 (0.25% v/v), is recommended.

WALES mixing order:
- L

Rainfast:
- 1 hour

For control of:
- Late blight (*Phytophthora infestans*)

Apply in an integrated late blight management program. Revus fungicide applications should begin prior to disease development and continue throughout the season on a 7- to 10-day schedule of fungicides, following the resistance management guidelines.

Packaging:
- Each case contains 4 x 3.78 L jugs.

Use information:

Rate:
- 400–600 mL/ha (162–243 mL/ac)
- One jug of Revus applied at 190 mL/ac will treat 20 acres.

PHI: 14 days

REI: 12 hours

Maximum applications/season: Maximum four applications of products containing mandipropamid, including Revus and Orondis® Ultra, per season. For best resistance management, alternate with a non-Group 40 containing fungicide and apply Revus in mixture with an effective tank mix partner.

The use of Vibrance® Ultra Potato or Revus as a seed treatment will reduce the number of foliar applications of Revus or Orondis Ultra.

RidomilGold® 480 SL

Fungicide

Help mitigate financial loss in storage.

Incorporate Ridomil Gold® 480 SL fungicide into your pink rot management strategy.

Active ingredients:
- Metalaxyl-M (Group 4 fungicide) and S-isomer

PCP number:
- 28474

WALES mixing order:
- S

For control of:
- Pink rot (*Phytophthora erythroseptica*)*
- Late blight (*Phytophthora infestans*)
- Pythium leak (*Pythium* spp.)*

There is known Ridomil Gold 480 SL insensitivity to certain strains of late blight and pink rot. When applying to foliage for pink rot, make a first application at tuber initiation (the beginning of flowering and/or stolon hooking) and then a second application 14 days later.

Packaging:
- Each case contains 4 x 3.78 L jugs.

Use information:
- Ridomil Gold 480 SL should always be tank-mixed with another product that controls late blight when targeting that disease.

Rate:
- Foliar: 208 mL/ha (80 mL/ac)
- Growers should follow through with a post-harvest application of a registered product targeted at pink rot and tuber blight going into storage.

PHI: Foliar: 14 days **REI:** 12 hours
Maximum applications/season: Foliar: 3

For Ridomil 480 SL in-furrow application information, please refer to page 20.

*For suppression only

If Orondis Gold Potato or Ridiomil Gold 480 SL is applied in-furrow, foliar applications of Ridomil Gold 480 SL are not to be permitted.

Best management practices for insecticide resistance management

Colorado potato beetle (CPB) resistance to insecticides is a decades-long concern for potato growers. A key insecticide resistance management (IRM) practice is to rotate modes of action (IRAC Groups) within and among years, and to avoid using the same mode of action in adjacent generational windows. A generational window is the number of days it takes the pest to go through one generation (ie, egg to adult), or the number of days a single insecticide application is effective, whichever is longest.

A partner in Colorado Potato Beetle resistance management

Example using generational windows with two generations per year

	'Early' window		'Late' window (foliar)
	Emerging adults (seed or in-furrow)	Escapes (foliar)	
Year 1	Actara® 240SC CruiserMaxx® Vibrance® Potato (Group 4)	Minecto® Pro (Group 6/28)	Non-group 4, 6, or 28 (ie. Group 5)
Year 2	Actara® 240SC CruiserMaxx® Vibrance® Potato (Group 4)	Non-group 4, 6, or 28 (ie. Group 15)	Minecto® Pro (Group 6/28)

Minecto® Pro

Insecticide

Exceptional control of hard-to-manage potato pests.

Minecto® Pro is a broad-spectrum, foliar-applied insecticide that provides excellent control of the most important potato pests, including Colorado potato beetle.

Active ingredients:
- Abamectin (Group 6)
- Cyantraniliprole (Group 28)

PCP number:
- 33023

Adjuvant:
- 0.1–0.5% v/v non-ionic surfactant

Rainfast:
- 1 hour

WALES mixing order:
- L

For control of:
- Colorado potato beetle
- European corn borer
- Flea beetle
- Potato psyllids
- Spider mites

Packaging:
- Each case contains 4 x 3.78 L jugs.

Use information:
- Do not apply Minecto Pro for Colorado potato beetle control if any Group 28 insecticide was used at planting as an in-furrow, soil or seed-piece treatment.

Rate:
- 370–670 mL/ha (149–271 mL/ac)
- One jug of Minecto Pro applied at 271 mL/ac will treat approximately 14 acres.

PHI: 14 days

REI: 12 hours

Maximum applications/season: Make up to two consecutive applications. After two consecutive applications, switch to a non-Group 6 and non-Group 28 insecticide.

For resistance management suggestions, see page 34 (previous page).

Envita® DRY

Nitrogen where and when plants need it.

Envita® Dry lets you stay one step ahead of your plant's nitrogen needs by enabling nitrogen fixation to occur in the plant's leaves, thus ensuring this essential nutrient is available in the right place and at the right time to drive higher yield, all season long.

Active ingredient:
- *Gluconacetobacter diazotrophicus*

Registration number:
- 2023743S

Rainfast:
- 2 hours

Adjuvant:
- When applying Envita on its own, use a non-ionic surfactant at 0.1% v/v.

WALES mixing order:
- WG

Product benefits:
- Envita gets inside the potato plant and fixes nitrogen received from the atmosphere. This provides plants with an additional nitrogen source where and when it's needed, supplementing the nitrogen available from fertilizer treatments.

Packaging:
- Each pouch contains 200g (treats 40 acres).
- Each case contains 16 pouches (treats 640 acres)

Use information:

Rate:
- 5 grams per acre for foliar or in-furrow applications

PHI: 0 **REI:** 0 **Maximum applications/season:** N/A

Storage and/or use restrictions:
- Envita Dry is best applied solo with a non-ionic surfactant. Envita Dry can be added to an existing pass with compatible products, but should only be mixed with a tested product that has been shown to be compatible. Some tank mix partners may have an adverse effect on *Gluconacetobacter diazotrophicas* (Gd), the active ingredient in Envita Dry. Refer to the Syngenta Canada website for more information: https://www.syngenta.ca/productsdetail/envita-dry#tank-mix.

Megafol™

Anti-stress and growth activator.

Megafol™ is a liquid foliar biostimulant specially formulated to help reduce abiotic stresses including, drought, heat, low temperature, and physical damage. Megafol is intended to supplement standard fertility programs and is a readily available source of nitrogen and potassium.

Active ingredients:
- Contains vitamins, amino acids, proteins, betaines and growth factors.
- Guaranteed minimum analysis 3-0-8.

Registration number:
- 2016013D

Adjuvant:
- N/A

Rainfast:
- 4 hours

WALES mixing order:
- L

Product benefits:
- Plants have response mechanisms to stress. Megafol multiplies the effectiveness of these mechanisms so plants can recover from stress faster and get on with growing. Physical damage like hail is highly visible, other stresses aren't as obvious but can be just as harmful to the plant.
- Megafol helps plants respond to stress for 2—3 weeks after application.
- Adding Megafol regularly to your spray schedule can result in better size profile at harvest.

Packaging:
- Each case contains 2 x 10 L jugs.

Use information:

Rate:
- 1 L per acre by foliar application

PHI: 0 **REI:** 0

Maximum applications/season: N/A

Storage and/or use restrictions:
- Do not freeze.
- Add Megafol to the tank last.

Boundary® LQD

Long-lasting grass control for Eastern Canada.

Boundary® LQD herbicide is a flexible tank-mix partner that provides long-lasting grass control and also controls nightshade, allowing the crop to grow with less competition and fewer alternate hosts for diseases in the field.

Active ingredients:
- Metribuzin (Group 5 herbicide)
- S-Metolachlor (Group 15 herbicide)

PCP number:
- 30812

Adjuvant:
- None required

Rainfast:
- N/A

WALES mixing order:
- E

For control of:

Grass weeds:
- Barnyard grass
- Crabgrass (smooth, hairy)
- Witch grass
- Fall panicum
- Foxtail (green, yellow, giant)

Broadleaf weeds:
- American nightshade
- Redroot pigweed[1]
- Eastern black nightshade
- Yellow nutsedge[2]

Packaging:
- Each case contains 2 x 10 L jugs.
- 450 L tote

Use information:

Rate:
- 1.85–2.5 L/ha (0.75–1.0 L/ac)

Application timing: Apply Boundary LQD soon after hilling. Disturbing the soil after applying Boundary LQD may compromise activity, as treated soil will be moved and allow for weeds to grow in untreated soil.

PHI: 60 days **REI:** 12 hours **Maximum applications/season:** 1

[1] Some naturally occurring triazine-tolerant biotypes of this weed may not be controlled by Boundary LQD.
[2] Pre-plant incorporated treatment only. Extended periods of dry, hot weather following application may result in reduced yellow nutsedge control.

Potato varieties may vary in their response to Boundary LQD. Do not apply to Belleisle, Tobique or Superior. Boundary LQD is only registered for use in Eastern Canada.

Dual II Magnum®

Residual performance and flexibility.

Dual II Magnum® herbicide provides long-lasting residual weed control you can count on for a broad spectrum of annual grasses.

Active ingredient:
- S-Metolachlor (Group 15 herbicide)

PCP number:
- 25729

Adjuvant:
- None required

Rainfast:
- N/A

WALES mixing order:
- E

For control of:
- Barnyard grass
- Crabgrass (smooth, hairy)
- Fall panicum
- Foxtail (giant, green, yellow)
- Nightshade (American, Eastern black)[1]
- Old witchgrass
- Redroot pigweed[2]
- Yellow nutsedge[3]

Packaging:
- Each case contains 2 x 10 L jugs.
- 450 L tote
- Bulk

Use information:

Rate:
- 1.25–1.75 L/ha (0.5–0.7 L/ac)

PHI: N/A **REI:** 12 hours

Maximum applications/season: 1

[1] Pre-emergent treatments usually provide better control than pre-plant surface, pre-plant incorporated or post-emergent treatments.
[2] Suppression only.
[3] Pre-plant incorporated treatment only. Extended periods of hot, dry weather following application may result in reduced nutsedge control.

Potato varieties may vary in their response to Dual II Magnum.

Reflex®

Take early action against broadleaf weeds in Eastern Canada.

Applied after planting but before potato emergence, Reflex® herbicide provides fast knockdown of emerged broadleaf weeds. It also provides some residual activity to help keep fields clean through canopy closure.

Active ingredient:
- Fomesafen (Group 14 herbicide)

PCP number:
- 24779

Rainfast:
- 4 hours

WALES mixing order:
- S

For control of:
- Redroot pigweed
- Common ragweed
- Lamb's-quarters*

Packaging:
- Each case contains 2 x 10 L jugs.

Use information:

Rate:
- 1 L/ha (0.4 L/ac)
- One jug of Reflex will treat 25 acres.

PHI: 70 days

REI: 12 hours

Maximum applications/season: 1

Adjuvant:
- If weeds are emerged at time of application, include a non-ionic adjuvant, such as Agral® 90, at 0.1% v/v.

*Suppression only.

Reflex herbicide is only registered for use in potatoes in Eastern Canada.

Reglone®

Take control of your harvest in Eastern Canada.

With Reglone® desiccant, potato tubers mature naturally, developing a thicker and more scuff-resistant skin. In addition, Reglone allows for easier harvest because desiccated plants pass more easily through harvesting equipment.

Active ingredient:
- Diquat (Group 22 herbicide)

PCP number:
- 26396

Rainfast:
- 15 minutes or when dry

WALES mixing order:
- S

For control of:
- Green plant material — Reglone will desiccate any green plant material, whether it is a crop or annual or perennial weed.

Packaging:
- Each case contains 2 x 10 L jugs.
- 450 L tote

Use information:

Rate:
- Ground application: 1.25–3.5 L/ha (0.5–1.4 L/ac)
- One jug of Reglone will treat 20 acres at the low rate.

PHI: 1 day

REI: 24 hours

Desica™

Take control of your harvest in Western Canada.

With Desica® desiccant, potato tubers mature naturally, developing a thicker and more scuff-resistant skin. In addition, Desica allows for easier harvest because desiccated plants pass more easily through harvesting equipment.

Active ingredient:
- Diquat (Group 22 herbicide)

PCP number:
- 30488

Rainfast:
- 15 minutes or when dry

WALES mixing order:
- S

For control of:
- Green plant material — Desica will desiccate any green plant material, whether it is a crop or annual or perennial weed.

Packaging:
- Each case contains 2 x 10 L jugs.
- 450 L tote
- 115 L drum

Use information:

Rate:
- Aerial: 1.7 - 2.3 L/ha (0.1 - 0.93 L/ac) followed by a second application of 1.25L/ha (0.5L/ac) 7 days later
- Ground: 1.7 - 3.5 L/ha (0.7 - 1.4 L/ac)
- In prairie provinces, add 1L of Agral® 90 per 1000L

PHI: 1 day

REI: 24 hours

Venture® L

Post-emergent control of grasses.

Venture® L herbicide is the right choice for control of emerged grasses in your potatoes. Venture L controls all annual grasses plus quackgrass and wirestem muhly.

Active ingredients:
- Fluazifop-P-butyl (Group 1 herbicide) and S-isomer

PCP number:
- 21209

Adjuvant:
- None required

Rainfast:
- 2 hours

WALES mixing order:
- E

For control of:
- Barnyard grass
- Crabgrass
- Fall panicum
- Giant foxtail (Eastern Canada)
- Green foxtail
- Johnson grass
- Old witchgrass
- Persian darnel
- Spring barley
- Volunteer corn
- Volunteer spring wheat
- Wild oats
- Wild proso millet
- Wirestem muhly
- Yellow foxtail

Packaging:
- Each case contains 2 x 8 L jugs.

Use information:

Rate:
- 0.6–2.0 L/ha (0.24–0.8 L/ac)
- One jug of Venture L will treat 10 acres at the high rate.

PHI: 45 days

REI: 12 hours

Maximum applications/season: Do not exceed 0.8 L/ac.

At time of print, Maximum Residue Limits (MRLs) for Venture L herbicide had been established for Canada and the United States.

Check the MRL information on page 49.

Application matters

For your Stadium® fungicide application to have the optimal effect, you need to cover the entire potato. Here are some best practices for improving your coverage.

1. Ensure your tubers are as free from dirt and debris as possible.
2. Make sure tubers are tumbling at application and rotating along a conveyor line into storage.
3. Whether you're outdoors or inside, set up shielding to prevent spray mist drifting.
4. Check for any obstructions to the spray pattern beginning with the nozzle.

Overhead nozzles spray Stadium onto tumbling potato tubers.

Scan this QR code to learn more about post-harvest application best practices:

Three-step calibration procedure:

1. Measure the tonnage throughput per hour
2. Calculate spray volume per minute required to apply the volume/ton of tubers
3. Your gallon spray/hr should be the sum of the volumes from all nozzles delivered per hour

High tonnage example

- Target tons/hr: 30 (0.5 tons/minute)
- Gal/ton = 0.5
- Gal/Spray/Hour = 15 (0.25 gal spray/minute)

Low tonnage example

- Target tons/hr: 15 (0.25 tons/minute)
- Gal/ton = 0.5
- Gal/Spray/Hour = 7.5 (0.25 gal spray/minute)

Mertect®

Help maintain tuber quality in storage.

Active ingredient:
- Thiabendazole (Group 1 fungicide)

PCP number:
- 13975

Adjuvant:
- None required

Rainfast:
- N/A

WALES mixing order:
- W

For control of:
- Black scurf (*Rhizoctonia* spp.)
- Fusarium dry rot (*Fusarium* spp.)*
- Gangrene (*Phoma* spp.)
- Silver scurf (*Helminthosporium* spp.)*
- Skin spot (*Oospora* spp.)

Packaging:
- Each case contains 4 x 5 L jugs.

Use information:
- Prepare a suspension of 7.5L Mertect per 170L of water.

Rate:
- Application volume: Apply 2000 mL of mixed slurry to 1000 kg of potatoes (91 mL/cwt).
- A limit of 500,000 kg of potato tubers may be treated per day per worker.

PHI: N/A

REI: 12 hours

Maximum applications/season: 1

* Some strains of *Fusarium* spp. and *Helminthosporium* spp. are resistant to thiabendazole, the active ingredient in Mertect®.

Stadium®

Quality in. Quality out.

Help keep your crop picture perfect coming out of storage. Just one application of Stadium® post-harvest fungicide on potatoes going into storage helps protect them from the spread of two quality-robbing diseases: Fusarium and silver scurf.

Active ingredients:
- Azoxystrobin (Group 11 fungicide)
- Difenoconazole (Group 3 fungicide)
- Fludioxonil (Group 12 fungicide)

WALES mixing order:
- L

PCP number:
- 31050

Adjuvant:
- None required

Rainfast:
- N/A

For control of:
- Fusarium (*Fusarium* spp.)[1]
- Silver scurf (*Helminthosporium solani*)[2]

Packaging:
- 2 x 10 L jugs

Use information:

Rate:
- 32.5 mL/metric tonne
- One case treats approximately 13,500 cwt.
- Do not apply to potatoes grown for seed.

PHI: N/A

REI: N/A

Maximum applications/season: 1

[1] Applications of Stadium more than two days after harvest will not be effective at controlling Fusarium.

[2] Suppression only.

At time of print, Maximum Residue Limits (MRLs) for Stadium have been established for markets in Canada, the United States, and Mexico, as well as Codex.

Check the MRL information on page 49.

Why does coverage matter?

The quality of your coverage can help elevate product performance and protection from “just okay” or “good” to “excellent.”

So, if you are striving for maximum potato protection, how do you get there?

- The majority of your protection is going to come from the product itself
- Additional protection comes from your application timing
- The quality of your application or coverage also plays a key role

Fungicides

Think of applying foliar fungicide like applying sunblock to your skin. Any areas that you miss or don’t cover will be left unprotected. The same general idea applies to potato plants! Your protection is only going to be as good as your coverage.

When applied correctly, a fungicide can provide an effective barrier for when pathogens attack. Smaller spray droplets tend to be more effective at moving down through the dense crop canopy and covering both sides of the lower leaves.

Good foliar fungicide coverage is also tied to proper crop staging. With a disease like black dot, for example, applying too early (or too late) can have minimal to no effect. Instead, you want to get your fungicide down just before row closure.

Insecticides

While seed treatments are highly effective at curbing early season insect pressure, an in-season foliar application can help deliver preventative and residual protection against pests like aphids, mites, and Colorado potato beetles. Similar to fungicides, aim to use smaller droplets and higher water volumes to ensure you get your insecticide down into the crop canopy.

Also, pay special attention to your foliar insecticide application timing for maximum efficacy. Depending on the insect pest you may be dealing with, it pays to know the economic threshold so you can maximize the impact of your insecticide and minimize crop damage.

Herbicides

Contact herbicides need to hit emerged weeds, while herbicides with residual modes of action demand consistent coverage across the soil surface. Spray quality, boom height, nozzle selection, and slower forward travel speeds are all key ingredients to getting effective coverage.

Slower speeds reduce the amount of turbulence that can increase your risk of spray drift. Selecting angled nozzles with larger spray droplets helps minimize finer, off-target droplets and increases the number of larger droplets that will better cover your soil surface.

WALES mixing order

W **Water** goes into the clean tank first. Fill the tank at least half full and start agitation.

W Add **Water Soluble Bags (WSB)** to the tank into clean water before adding any other tank mix partners. Allow the water soluble bags to completely dissolve before adding any other products.

W Add **Wettable Powders (WP).**

W Add **Water Dispersible Granules (WDG).**

A Maintain **Agitation** and allow the dry products to mix thoroughly to ensure uniform dispersion before adding other products. This might take a few minutes.

L Add **Liquid Flowables** [Suspension Concentrates (SC) or Suspo-emulsions (SE)].

E Add **Emulsifiable Concentrates (EC)** or Microemulsion Concentrates.

S Add **Solutions (SN)** or **Soluble Liquids (SL).** Finish by completely filling the spray tank with water and continue to agitate until the spray application is complete.*

w	w	w	W	A	L	E	S
WATER	Water Soluble Bags (WSB)	WETTABLE POWDERS	Minecto® Duo	AGITATION	Actara® 240 SC Allegro® Bravo® ZN Captan L Elatus® A Minecto® Pro Miravis® Duo Orondis® Advanced Orondis Gold A Orondis Ultra Quadris® Quadris Top® Revus® Stadium®	Aprovia® Top Boundary® LQD Dual II Magnum® Elatus® B Venture® L	Orondis Gold B Ridomil® Gold 480 SL Reglone®

*If boron is included in the fertilizer, ensure WSBs are dissolved completely in clean water, before adding the fertilizer to the spray tank.

Please check with your processor or packer prior to using Revus® (seed treatment application), Stadium® and Vibrance® Ultra Potato on potatoes destined for use outside of Canada.

Please see the Foodchain ID Regulatory Limits by BCGlobal database at https://bcglobal.bryantchristie.com/db#/ pesticides/query for a complete list of MRLs. Should you need additional information on export market MRLs, please consult with Syngenta to receive the most up-to-date information.

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