



WE ARE

All In
on potatoes



ADAMA



HERBICIDE
PRE-PLANT & IN-CROP · BROAD SPECTRUM

GROUP 5

SQUADRON® II

With enhanced pan-granulated formulation, SQUADRON® II has increased solubility, less foaming and better compatibility with other herbicides. This broad-spectrum herbicide is registered for grassy and broadleaf weed control in a wide range of crops, most notably potatoes.



ACTIVE INGREDIENT

75% Metribuzin = WDG

PACKAGING

4 x 5 kg jugs

APPLICATION RATES & ACRES TREATED

Rate: Please refer to the label for application rates as these vary based on crop, soil type and application methods.

Acres Treated: 15 – 60 acres/jug

RAINFASTNESS

6 hours after foliar application

WEEDS CONTROLLED

Broadleaf weeds:

- Carpetweed¹
- Cocklebur
- Common chickweed
- Common ragweed
- Corn spurry²
- Dandelion (seedling)
- Green smartweed
- Hemp-nettle²
- Jimsonweed¹
- Lady's thumb
- Lamb's quarters

Grassy weeds:

- Barnyard grass
- Cheat grass
- Crabgrass
- Fall panicum
- Giant foxtail

- Prickly mallow
- Prostrate pigweed
- Redroot pigweed
- Russian thistle
- Shepherd's purse
- Stinkweed³
- Velvetleaf
- Wild buckwheat³
- Wild mustard
- Wild potato vine
- Yellow woodsorrel¹

- Green foxtail
- Johnson grass (seedling)
- Witch grass
- Yellow foxtail

¹Pre-emergence only

²Suppression with multiple post-emergent applications of 200 g/ha

³Post-emergent applications only

HOW IT WORKS

Metribuzin inhibits the photosynthesis of grassy and broadleaf weeds. Used pre-emergent, susceptible weeds and crop seedlings emerge through treated soil, but 2–5 days later the weeds show chlorosis and necrosis. Plants treated post-emergent show chlorosis and necrosis between leaf veins, followed by wilting and death.

SOIL TYPES AND RESTRICTIONS

The recommended use rates of Squadron® II are dependent upon soil texture and the organic matter content of the soil being treated: coarse, medium and fine.

The following chart outlines the soil textures included in each of the soil texture groupings:

Coarse	Medium	Fine
Loamy sand, Sandy loam	Loam, Silt loam, Silt, Sandy clay loam, Sandy clay	Silty clay loam, Silty clay, Clay loam, Clay

- On variable soils with coarse sandy areas, some crop injury may occur on the sandy areas if the rate used is for the finer soil type.
- Sandy loam and silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions.
- Do not use this product on muck soils. If Squadron® II is applied to muck soils, subsequent crops may be injured.
- Do not use on coarse soils with less than 2% organic matter.

CROP ROTATIONS

Rotational crops such as onions, celery, peppers, cole crops, lettuce, spinach, sugar beets, table beets, turnips, pumpkins, squash, cucumbers, melons, tobacco and non-triazine-tolerant canola (rapeseed) are sensitive to Squadron® II and may be injured if planted in soil treated during the year of application or the following crop year.

Fall planted or cover crops such as wheat, oats and rye may be injured when planted within the same season.

MIXING INSTRUCTIONS

1. SQUADRON® II
2. Tank-mix partner

PRE-HARVEST INTERVAL (POTATOES)

60 days

STORAGE

May be stored at any temperature

CORMORAN®

Multiple modes of action for Colorado potato beetle control in potatoes as well as a wide range of other insects in specialty crops.



ACTIVE INGREDIENT

Novaluron 100 g/L and Acetamiprid 80 g/L = EC

PACKAGING

Case: 2 x 10.08 L jugs

APPLICATION RATES & ACRES TREATED

Rate: 180 – 840 ml/ac

Acres Treated: 12 – 56 ac/jug

WATER VOLUME

Ground: 80 – 400 L/ac (20 – 105 US gal/ac)

Aerial: Do not apply by air.

RAINFASTNESS

Avoid application when heavy rain is forecast.

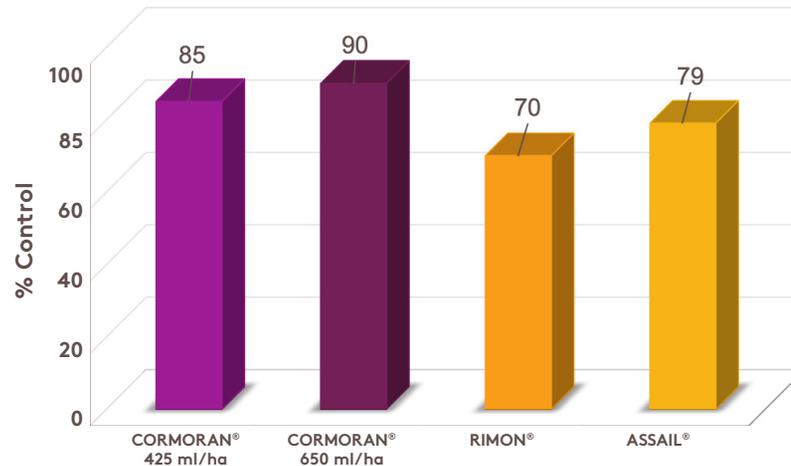
KEY INSECTS CONTROLLED:

- Aphids
- Armyworm
- Cabbage looper
- Colorado potato beetle
- European corn borer
- Leafhopper

CORMORAN® RESEARCH RESULTS

CORMORAN® for Colorado Potato Beetle Control in Potatoes; Summary of 7 Trials (2016–2018)

Trial Locations: MB(3), ON (2), PEI (2)



HOW IT WORKS:

Cormoran® kills insect eggs by contact and larvae by ingestion. Containing two modes of action, Cormoran® provides both rapid knockdown and residual control of insect pests.

REGISTERED AND SUPPORTED TANK MIXES

- Acramite® 50 WS
- Luna Sensation™
- Polyram® DF WSP
- Pristine® WG

MIXING INSTRUCTIONS:

1. Be sure sprayer is clean and not contaminated with any other materials or crop injury or sprayer clogging may result.
2. Fill tank ½ full with clean water.
3. Start agitation.
4. Be certain that the agitation system is working properly and creates a rippling or rolling action on the liquid surface.
5. Pour product directly from container into partially filled spray tank.
6. Continue filling tank. Increase agitation if necessary, to maintain surface action.
7. Maintain continuous agitation during mixing and application to assure uniform suspension. If mixture sits without agitation for extended periods, agitate the mixture for at least 10 minutes before use.

CROP ROTATIONS

There are no rotational crop plant restrictions for this product.

PRE-HARVEST INTERVALS

- Strawberries: 1 day
- Brassica leafy vegetables (Crop group 5-13 and subgroup 4-13B), Peppers, Potatoes, Stone fruits (Crop group 12-09): 7 days
- Bushberries (Crop sub-group 13-07B): 8 days
- Sweet corn: 10 days

STORAGE

- Store in original, tightly closed container.
- Do not ship or store near food, feed, seed and fertilizers.
- Store in cool, dry, locked, well-ventilated area without floor drain.
- Keep away from fire or open flame, or other sources of heat.

POTATO GROWTH STAGES

- HERBICIDE
- INSECTICIDE
- FUNGICIDE



GROWTH STAGE	Pre-Plant	Seedling (Pre-emergence)	Early Post-emergence	Leaf Development	Tuber Initiation	Tuber Number set	Flowering	Senescence Begins	Potato Harvest
BBCH CODE		00	10	20	40	50	60	90	99
PRODUCT									
ARMORY® 240			HERBICIDE					HERBICIDE	
ARROW® 240 EC			HERBICIDE	HERBICIDE					
ARROW ALL IN®			HERBICIDE	HERBICIDE					
SQUADRON® II		HERBICIDE	HERBICIDE	HERBICIDE					
ALIAS® 240 SC	INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE
CORMORAN®		INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE
SILENCER® 120 EC		INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE
ZIVATA™		INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE	INSECTICIDE
CAPTAN 80 WSP					FUNGICIDE	FUNGICIDE	FUNGICIDE	FUNGICIDE	FUNGICIDE

Timing based on using the product alone. Please refer to tank-mix partner labels for crop timing. Always read and follow registered product label instructions. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

EASTERN CANADA

DESICCANT

HERBICIDES

PRODUCT NAME
Active Ingredient**ARMORY® 240**
Diquat**ARROW® 240 EC**
Clethodim**ARROW ALL IN®**
Clethodim

Group

22

1

1

Replaces

Reglone®
Dessicash

Select®, Statue™, Clethodim 250

Unique to ADAMA
Formulation advancement compared to Select®,
Statue™, Clethodim 250Case Package Size
Acres Treated**2 x 10 L jugs**
7–20 ac/jug**Case includes:**
· 1 x 3 L jug of ARROW® 240 EC
· 1 x 9 L jug of X-ACT® adjuvant
20–60 acres/jug
(depending on weed pressure)**2 x 6 L jugs**
20–60 ac/jug

Crop Staging

Pre-harvest

All stages

All stages

Key Weeds
or Key Diseases
Controlled

Potato vines

Barnyard grass, crabgrass (smooth, large), fall
panicum, foxtail (green, yellow), persian darnel, proso
millet, quackgrass*, volunteer canarygrass, volunteer
cereals (wheat, barley, oats), volunteer corn, wild oats,
witch grassBarnyard grass, crabgrass (smooth, large),
fall panicum, foxtail (green, yellow), persian darnel,
proso millet, quackgrass**, volunteer canarygrass,
volunteer cereals (wheat, barley, oats), volunteer corn,
wild oats, witch grass

Pest Staging

Varies by pest

Foxtail, wild oats, volunteer cereals: 2- to 4-leaf
All other weeds listed: 2- to 6-leafFoxtail, wild oats, volunteer cereals: 2- to 4-leaf
All other weeds listed: 2- to 6-leaf

Tank-Mix Options

Agral® 90, LI 700®, Liberate® and other
non-ionic surfactants

SQUADRON® II

SQUADRON® II

Rate
(when used alone)Ground: 510–1420 ml/ac
Aerial: 680–930 ml/ac

Rate: 50–150 ml/ac

Rate: 100–300 ml/ac

Rainfastness

24 hours

1 hour

1 hour

Mixing
Instructions1. ARMORY® 240
2. Tank-mix partner
3. Surfactant1. ARROW® 240 EC
2. X-ACT® Surfactant1. Tank-mix partner
2. ARROW ALL IN®

Re-Entry Period

24 hours

12 hours

12 hours

Grazing
RestrictionsCrop waste remaining after harvest (e.g. pea vines,
alfalfa stems) may be used as a feed supplement
for livestock.Do not cut treated crops for feed or graze until 60 days
after application.Do not cut treated crops for feed or graze until 60 days
after application.

Pre-Harvest Interval

Harvesting can typically begin within 4–10 days,
depending on weather conditions.

60 days

60 days

Storage

Do not freeze.

May be stored at any temperature

Do not freeze.

Additional Info

Best results under cloudy conditions or in the evening.
Suggested conditions for aerial applications are a
temperature below 25°C, humidity above 50% and wind
speed below 9 km/hr at flying height.ARROW® 240 EC works best when applied to actively
growing weeds.Most effective control is achieved when application is
made prior to tillering when annual grasses are small
and actively growing.These are just a few of our many herbicide offerings.
To see our full product portfolio for potatoes, please visit our website at ADAMA.com

EASTERN CANADA

FUNGICIDE

INSECTICIDES

PRODUCT NAME
Active Ingredient**CAPTAN 80 WSP**
Captan**ALIAS® 240 SC — Foliar**
Imidacloprid**ALIAS® 240 SC — Seed and Soil Treatment**
Imidacloprid

Group

M4

4

4

Replaces

Supra® Captan 80 WDG
Maestro® 80 DF

Admire® 240

Admire® 240

Case Package Size
Acres Treated**4 foil bags containing 5 pouches of 0.5 kg**
6.5–10 ac/case**4 × 3.785 L jugs**
47 ac/jug**4 × 3.785 L jugs**
Seed treatment: 210–315 lbs seed/jug
Soil application: 7–11 ac/jug

Crop Staging

Pre-harvest

The need and timing of application should be based on the presence of pests at vulnerable developmental stages and significant populations as determined by local monitoring. Consult label for specific crop and insect timing.

Seed and seed piece treatment or apply in furrow prior to transplanting.

Key Weeds
or Key Diseases
Controlled

Early blight, late blight

Aphids (including green peach, buckthorn, foxglove and potato aphid), Colorado potato beetle

Aphids (including green peach, buckthorn, foxglove and potato aphid), Colorado potato beetle, potato flea beetle, potato leafhopper

Pest Staging

Varies by pest

The need and timing of application should be based on the presence of pests at vulnerable developmental stages and significant populations as determined by local monitoring. Consult label for specific crop and insect timing.

Tank-Mix Options

None registered for potatoes

None registered

ALIAS® 240 SC may be applied sequentially or mixed with other leading seed treatments that are registered for use in potato crops

Rate
(when used alone)

1.0–1.5 kg/ac

80 ml/ac

Seed treatment: 12–18 ml/100 lbs of seed
Soil application: 344–526 ml/ac (based on 36-inch row spacing)

Rainfastness

No restrictions

Avoid application when rain is forecast.

N/A

Mixing
Instructions1. CAPTAN 80 WSP
2. Tank-mix partner if required1. ALIAS® 240 EC
2. Fill tank with remaining balance of water

When using ALIAS® 240 SC in conjunction with another seed treatment such as Rancona® Apex, Rancona® Pinnacle or Vitaflo® 280, mix just prior to application

NOTE: Vigorous agitation is required for CAPTAN 80 WSP to become fully suspended. The pouches should be completely dissolved before application.

Re-Entry Period

Hand set/hand line irrigation related activities involving foliage contact: 7 days
Roguing: 6 days
All other activities: 12 hours

24 hours

N/A

Grazing Restrictions

N/A

Do not graze or harvest cover crops for food or feed.

Do not graze or feed livestock on treated areas for 4 weeks after planting.

Pre-Harvest Interval

2 days

7 days

21 days

Storage

May be stored at any temperature

Store in cool, dry place. Do not freeze.

- Store unused product in a cool, dry place.
- Long-term storage of mixed product or carry-over of seed treated with Alias® 240 SC is not recommended.

Additional Info

Do not excessively handle water-soluble pouches or expose to moisture since this may cause breakage. Do not allow pouches to become wet prior to mixing spray solution.

For optimal control, good coverage of the foliage is needed.

For optimal insect control, good coverage of the seed is required. For best results, direct spray on the seed pieces or seed potatoes in the furrow.

INSECTICIDES (CONT'D)

PRODUCT NAME
Active IngredientSILENCER® 120 EC
Lambda-cyhalothrinZIVATA™ NEW Low VOC
Lambda-cyhalothrin

Group

3

3

Replaces

Labamba, Matador® 120 EC

Labamba, Matador® 120 EC

Case Package Size
Acres Treated4 x 3.785 L jugs/case
75–110 ac/jug2 x 4.08 L/case
75–110 ac/jug

Crop Staging

The need and timing of an application should be based on the presence of pests at vulnerable developmental stages and significant populations, as determined by local monitoring.

Consult the label for specific crop and insect timing.

Key Pests
Controlled

Armyworm, European corn borer, potato flea beetle, potato leafhopper, tarnished plant bug, tuber flea beetle, Colorado potato beetle
Susceptibility to pyrethroid insecticides should be confirmed using an appropriate assay.

Pest Staging

The need and timing of application should be based on the presence of pests at vulnerable developmental stages and significant populations as determined by local monitoring.

Consult label for specific crop and insect timing.

Tank-Mix
Options

Confirm compatibility in advance by premixing small proportional quantities of water with SILENCER® 120 EC and the tank-mix partner.

Herbicides: SQUADRON® II, BISON® 400 L
Insecticides: Allegro®, BUMPER® 432 EC, SORATEL™, TOPNOTCH™

Rate
(when used alone)

34–50 ml/ac

34–50 ml/ac

Rainfastness

1 hour

1 hour

Mixing
Instructions

Confirm compatibility in advance by premixing small proportional quantities of water with SILENCER® 120 EC and the tank-mix partner.

Compatibility should always be confirmed by premixing small proportional quantities of water, ZIVATA™, and the tank-mix partner in advance.

Re-Entry Period

12 hours

12 hours

Grazing Restrictions

DO NOT feed treated crops to livestock.

DO NOT feed treated crops to livestock.

Pre-Harvest Interval

7 days

7 days

Storage

Do not freeze.

Do not freeze.

Additional Info

Apply below temperatures of 25°C.
Apply in the evening or early morning when temperatures are cool to get the best control.

Where has all the innovation gone?

While many crop protection companies have turned their attention to the development of seed technologies and collecting “big data”, only ADAMA remains unapologetically committed to providing the kind of innovative crop protection solutions Canadian growers need today.



WE ARE

Agile
Innovation

Filling the innovation void with unique mixtures and formulations.



WE ARE

Active
Ingredients

Leveraging the world's largest library of actives to accelerate the pace of innovation.



WE ARE

All About
Input

Listening to growers to ensure we're answering their greatest needs.



WE ARE

Agri-Retail
Inclusive

Partnering with retailers to deliver greater value to them and their customers.

WE ARE

All In
on you



ADAMA

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