



WE ARE

All In
on soybeans



LEOPARD®

Control of hard-to-kill grassy weeds
in soybeans.



ACTIVE INGREDIENT

Quizalofop-P-ethyl 100 g/L = EC

PACKAGING

Case: 2 x 7.8 L jugs

APPLICATION RATES & ACRES TREATED

Rate: 150 – 290 ml/ac (standard rate: 195 ml/ac)

Acres Treated: 30 – 50 ac/jug (standard rate: 40 ac/jug)

WATER VOLUME

Ground: 40 L/ac (10 US gal/ac)

Aerial: 10 L/ac (2.5 US gal/ac)

RAINFASTNESS

1 hour

REGISTERED CROPS

Soybeans

NOTE: LEOPARD® is also registered in alfalfa (seed), beans (dry, snap, Lima, Adzuki, Mung), canola, cucurbit vegetables, peas, rutabagas and sugarbeets. For more information consult the label.

WEEDS CONTROLLED

Check label as weed stage controlled by LEOPARD® varies.

- Barnyard grass
- Downy brome
- Fall panicum
- Foxtail barley
- Green foxtail
- Japanese brome
- Old witchgrass
- Proso millet
- Quackgrass¹
- Volunteer cereals (wheat, barley, oats)
- Volunteer corn
- Wild oats
- Yellow foxtail

¹Suppression at lower rates; control at higher rates

HOW IT WORKS

LEOPARD® is a selective post-emergent herbicide for the control of annual and perennial grasses. LEOPARD® is a systemic herbicide which is rapidly absorbed and readily translocated for the treated foliage to the root systems and growing points of the plant. Treated plants show a reduction in growth and a loss of competitiveness. An early yellowing and browning of the younger plant tissues is followed by a progressive collapse of the remaining foliage. These symptoms will generally be observed in 1–3 weeks depending on the grass species treated and the environmental conditions. This product does not control sedges or broadleaf weeds.

CROP STAGING

- Most crops are tolerant at all stages, so target applications at the optimal weed stage.
- Always adhere to the pre-harvest interval for each crop.

REGISTERED AND SUPPORTED TANK MIXES

- Basagran®
- Glufosinate
- PHANTOM® 240 SL

MIXING INSTRUCTIONS

1. Thoroughly clean the sprayer by flushing the system with water containing detergent.
2. Fill clean spray tank ½ full with water. Start agitation.
3. If tank mixing LEOPARD® with another pesticide, add tank-mix partner followed by adjuvant.
4. Ensure that the herbicide is completely mixed before proceeding to the next step.
5. Add the rest of the required water to the tank. Mix well before applying to the crop. Mix well before applying to the crop.

On repeat tank loads, ensure that the amount of spray solution left in the tank from the previous load is less than 10% of volume about to be mixed.

Do not mix, load or clean spray equipment where there is a potential to contaminate wells or aquatic systems.

ADJUVANT RATES

- LEOPARD® is not packaged with, but requires, an adjuvant such as:
 - Merge® @ 0.5–1% v/v
 - LI700® @ 0.25–0.5% v/v
 - Liberate™ adjuvant @ 0.5% v/v
 - Other non-ionic surfactants (NIS) or methylated seed oil (MSO) adjuvants

PRE-HARVEST INTERVAL (SOYBEANS)

80 days

STORAGE

Do not freeze.

DAVAI® 80 SL

Broadleaf and grassy weed control in a convenient package that allows for flexible tank-mix options in soybeans



ACTIVE INGREDIENT

Imazamox 80 g/L = SL

PACKAGING

Case: 2 x 8 L jugs

APPLICATION RATES & ACRES TREATED

Rate: 100 ml/ac

Acres treated: 80 ac/jug

WATER VOLUME

Ground: 40 L/ac (10 US gal/ac)

Aerial: Do not apply by air.

RAINFASTNESS

3 hours

REGISTERED CROPS

Soybeans

NOTE: DAVAI® 80 SL is also registered in dry beans and field peas. For more information consult the label.

WEEDS CONTROLLED

Broadleaf weeds (cotyledon to 4-leaf):

- Cleavers*
- Cow cockle
- Flixweed
- Green smartweed
- Lamb's quarters
- Redroot pigweed
- Shepherd's purse
- Stinkweed
- Stork's bill
- Wild buckwheat*
- Wild mustard
- Volunteer canary seed
- Volunteer canola

Grassy weeds (1- to 4-leaf or early tillering):

- Barnyard grass
- Green foxtail
- Japanese brome grass*
- Persian darnel
- Volunteer canola
- Volunteer barley
- Volunteer tame oats
- Volunteer wheat
- Wild oats¹
- Yellow foxtail

*Suppression only

¹Including Group-1-resistant weeds. DAVAI® 80 SL will NOT control weed biotypes that are multiple-resistant to both Group-1 and Group-2 herbicides.

HOW IT WORKS

DAVAI® 80 SL is readily absorbed through both leaf and root uptake, and it is translocated in the plant to inhibit amino acid production and cell division. Plant growth is inhibited, and a few days after application, chlorosis and terminal bud injury become evident. Leaves and stems become yellow and purple, and root growth may be inhibited. Crop competition is quickly reduced, although complete plant death is relatively slow.

CROP STAGING

- Soybeans: Emergence to 3-expanded trifoliolate leaves.
- Always adhere to the pre-harvest interval for each crop.

REGISTERED AND SUPPORTED TANK MIXES

- ARROW® 240 EC
- ARROW ALL IN®
- Basagran® Forté
- Broadloom®
- LEOPARD®
- PHANTOM® 240 SL

MIXING INSTRUCTIONS

1. Fill clean tank $\frac{1}{2}$ to $\frac{3}{4}$ full of clean water and turn agitation on.
2. Add the required amount of DAVAI® 80 SL herbicide and continue to agitate.
3. If required, add the correct amount of tank-mix partner while agitating.
4. Add the required amount of adjuvant while agitating.
5. Continue agitating and fill the remainder of the spray tank with water.

ADJUVANT RATE

Methylated Seed Oil (MSO) such as Merge®, NORAC MSO, Hasten NT Ultra® @ 0.50% v/v

ADAMA Adjuvant 80, Agral® 90, Sentry™ @ 0.25% v/v

PRE-HARVEST INTERVAL

Soybeans: 85 days.

STORAGE

Do not freeze.



Always read and follow label directions.

SOYBEAN GROWTH STAGES

-  HERBICIDE Broadleaf
-  HERBICIDE Broad-spectrum
-  HERBICIDE Grass
-  INSECTICIDE
-  FUNGICIDE



GROWTH STAGE	Seed Treatment	Pre-Plant	Emergence	1	2	3	Flowering	Pre-Harvest	Post-Harvest
BBCH CODE		00	10	20	30	50	60	80 – 90	
PRODUCT									
ARMORY® 240									
ARROW® 240 EC									
ARROW ALL IN®									
DAVAI® 80 SL									
INVOLVE® 50 WDG									
LEOPARD®									
PHANTOM® 240 SL									
PYTHON™									
SQUADRON® II									
SILENCER® 120 EC ¹									
SOMBRERO® 600 FS									
ZIVATA™ ¹									
BUMPER® 432 EC									
CUSTODIA®									
SORATEL™									
TOPNOTCH™									

Timing based on using the product alone. Please refer to tank-mix partners label for crop timing.

¹ Dependent of Pre-harvest Interval (PHI)

EASTERN CANADA

PRODUCT NAME Active Ingredient(s)

Group(s)

Replaces

Case Package Size Acres Treated

Crop Staging

Key Pests Controlled

Pest Staging

Tank-Mix Options

Rate
(when used alone)

Rainfastness

Mixing Instructions

Re-Entry Period

Grazing Restrictions

Pre-Harvest Interval

Additional Info

DESICCANT

ARMORY® 240

Diquat

22

Reglone®, Dessicash

Case: 2 x 10 L jugs
Pallet: 5 x 120 L drums
Totes: 450 L; 1000L
7–28 ac/jug
83–333 ac/drum
320–1250 ac/450 L tote
700–2775 ac/1000 L tote

Spray at 80–90% natural leaf defoliation and when at least 80% of the pods have turned yellow.

–

Agral® 90 (@ 0.1% v/v), LI 700® (@ 0.25% v/v) and other non-ionic surfactants

500–690 ml/ac

30 minutes

1. ARMORY® 240
2. Agral® 90 adjuvant

12 hours

Crop waste remaining after harvest may be used as a feed supplement for livestock.

–

Best results are made when applied under cloudy conditions or in the evening.

HERBICIDES

ARROW® 240 EC

Clethodim

1

Select®
Statue™
Clethodim 250

Case includes:

- 1 x 3 L jug of ARROW® 240 EC
 - 1 x 9 L jug of X-ACT® adjuvant
- 20–60 ac/case (dependent on weed infestations)

All stages

Barnyard grass, foxtail (green, yellow), quackgrass, volunteer cereals, wild oats

2- to 6-leaf

Soybeans (glyphosate-tolerant): glyphosate, PHANTOM® 240 SL or Pursuit®

Light infestations: 50 ml/ac
Moderate infestations: 75 ml/ac
Quackgrass control: 150 ml/ac

1 hour

1. Tank-mix partner
2. ARROW® 240 EC
3. X-ACT® surfactant

12 hours

Do not cut treated crops for feed or graze until 60 days after application.

75 days

Must be mixed with X-ACT® adjuvant

ARROW ALL IN®

Clethodim

1

Unique to ADAMA
Formulation advancement compared to Select®, Statue™ and Clethodim 250

2 x 6 L jugs/case

20–60 ac/case (dependent on weed infestations)

All stages

Barnyard grass, foxtail (green, yellow), quackgrass, volunteer cereals, wild oats

2- to 6-leaf

Soybeans (glyphosate-tolerant): glyphosate, PHANTOM® 240 SL or Pursuit®

Light infestations: 100 ml/ac
Moderate infestations: 150 ml/ac
Quackgrass control: 300 ml/ac

1 hour

1. Tank-mix partner
2. ARROW ALL IN®

12 hours

Do not cut treated crops for feed or graze until 60 days after application.

75 days

Adjuvant built into formulation

These are just a few of our many herbicide offerings. To see our full product portfolio for soybeans, please visit our website at ADAMA.com

EASTERN CANADA

HERBICIDES

PRODUCT NAME Active Ingredient	INVOLVE® 50 WDG Tribenuron-methyl	PHANTOM® 240 SL Imazethapyr	PYTHON™ Imazamox & Bentazon	SQUADRON® II Metribuzin
Group	2	2	2 & 6	5
Replaces	Express® SG	Pursuit®	NEW to Eastern Canada	Sencor®, TriCor®
Case Package Size Acres Treated	10 x 480 g bags/case 800 ac/case	2 x 3.3 L jugs/case 20–26 ac/case	Case includes: · PYTHON™ A: 1 x 4 L jug · PYTHON™ B: 2 x 7.26 L jugs 40 ac/case	4 x 5 kg jugs/case Rate varies by soil type
Crop Staging	Pre-plant and post-harvest	Pre-plant, pre-emergent or post-emergent	Cotyledon to the 4-leaf stage	Pre-plant, pre-plant incorporated, pre-emergent, early post-emergent
Key Pests or Diseases Controlled	Refer to registered label for complete list of weeds controlled.	Barnyard grass, cocklebur, common ragweed, crabgrass, eastern black nightshade, foxtail, lady's thumb, lamb's quarters, proso millet, redroot pigweed, smartweed, velvetleaf, wild buckwheat, wild mustard	Barnyard grass, cow cockle, flixweed, foxtail (green ³ , yellow), green smartweed, lamb's quarters ² , proso millet, quackgrass ¹ , prostrate pigweed ² , redroot pigweed ² , shepherd's purse, stinkweed, stork's bill, volunteer cereals (barley, wheat), volunteer corn, witch grass	Ball and wild mustard, barnyard grass, buckwheat, common ragweed, crabgrass, foxtail (green, yellow), green smartweed, lamb's quarters, shepherd's purse, stinkweed, witchgrass
Pest/Disease Staging	Refer to registered label for complete list of weeds controlled and appropriate weed staging.	Up to 4 th true leaf	Broadleaf weeds: cotyledon to 4-leaf Grasses: 1- to 4-true leaf or early tillering	Refer to registered label for complete list of weeds controlled and appropriate weed staging.
Tank-Mix Options	Aim® EC, Authority®, Dicamba L, glyphosate	ARROW® 240 EC, ARROW ALL IN®, Basagran®, Basagran® Forte, Edge®, glyphosate, glyphosate + FirstRate®, LEOPARD®, Linuron, Lorox®, SQUADRON® II, trifluralin	ARROW® 240 EC, ARROW ALL IN® LEOPARD®, glyphosate	Axiom® DF, Broadstrike™ Dual, Dual II Magnum®, Frontier®, glyphosate, Lorox® DF, Linuron 50%, Linuron 480, PHANTOM® 240 SL, Treflan™ E.C.
Rate (when used alone)	6 g/acre	E.P.P.*, pre-emergent: 170 ml/ac Pre-plant incorporated: 126 ml/ac *If weeds are emerged, a non-ionic surfactant @ 0.25% v/v must be added.	PYTHON™ A: 101 ml/ac PYTHON™ B: 364 ml/ac	Rate varies by soil type
Rainfastness	Avoid if heavy rain is in the forecast.	up to 8 hours	6 hours	6 hours after foliar application
Mixing Instructions	1. INVOLVE® 50 WDG 2. Tank-mix partner 3. Surfactant	1. PHANTOM® 240 SL 2. Tank-mix partner 3. Non-ionic surfactant 4. Fertilizer (if desired) @ 28% or 32% (post-emergent only)	1. PYTHON™ A 2. PYTHON™ B 3. Adjuvant 4. UAN 28%	1. SQUADRON® II 2. Tank-mix partner
Re-Entry Period	12 hours	12 hours	12 hours	12 hours
Grazing Restrictions		Do not graze treated crops or cut for hay.		Do not graze treated crops until 70 days after application.
Pre-Harvest Interval	30 days	100 days	85 days	60 days
Additional Info	Activity of herbicide mixture may be delayed by cold, dry conditions after application.	Residual control helps with early season weed competition.	UAN 28% and an adjuvant are NOT INCLUDED in the case, but are REQUIRED (a reduction in weed control can be observed without the addition of a nitrogen source).	Flexible applications for broad-spectrum weed control

These are just a few of our many herbicide offerings. To see our full product portfolio for soybeans, please visit our website at ADAMA.com

¹ Suppression ² Including Group-2-resistant biotypes

³ Including Group-1-resistant weeds



Always read and follow label directions.

EASTERN CANADA

INSECTICIDES

PRODUCT NAME Active Ingredient

SILENCER® 120 EC
Lambda-cyhalothrin

SOMBRERO® 600 FS
Imidacloprid

ZIVATA™ NEW Low VOC
Lambda-cyhalothrin

Group

3

4

3

Replaces

Labamba, Matador® 120 EC

Stress Shield®

Labamba, Matador® 120 EC

Case Package Size Acres Treated

4 × 3.785 L jugs/case
160–450 ac/case

8 × 1.54 L jugs/case
60–120 ac/case

2 x 4.08 L jugs/case
45–240 ac/jug (120 ac/jug at standard rate)

Crop Staging

Any stage

Seed treatment

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

Soybean aphid, bean aphid, grasshoppers, cutworms, lygus bug, bean leaf beetle, western bean cutworm, pea aphid

Bean leaf beetle, seedcorn maggot, soybean aphid, wireworm

Bean aphid, bean leaf beetle, cutworms, grasshoppers, lygus bug, western bean cutworm, pea aphid, soybean aphid,

Pest Staging

When insects are present

Used as a protective seed treatment

Apply when disease first appears. Under severe disease pressure, make a second application 14 days after the first application.

Tank-Mix Options

BUMPER® 432 EC, SORATEL™

Apron-Maxx RTA®

BUMPER® 432 EC, SORATEL™

Rate (when used alone)

34–94 ml/ac (see label for rates by pest)

47–94 ml/100 lbs of seed

34–94 ml/ac (see label for rates by pest)

Rainfastness

1 hour

N/A

1 hour

Mixing Instructions

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

1. Fungicide
2. Coating agents
3. SOMBRERO® 600 FS

Confirm compatibility in advance by premixing small proportional quantities of water with ZIVATA™ and the tank-mix partner.

Re-Entry Period

12 hours

N/A

12 hours

Grazing Restrictions

DO NOT cut treated field for hay/forage.
DO NOT graze treated fields.
DO NOT feed treated crops to livestock.

None

DO NOT cut treated field for hay/forage.
DO NOT graze treated fields.
DO NOT feed treated crops to livestock.

Pre-Harvest Interval

21 days

N/A

21 days

Additional Info

For best results, apply below 25°C.

Apply at 10°C or warmer due to high viscosity.

For best results, apply ZIVATA™ during the early morning before temperatures rise, and during the evening, past the heat of the day.

These are just a few of our many insecticide offerings. To see our full product portfolio for soybeans, please visit our website at ADAMA.com

EASTERN CANADA

FUNGICIDES

PRODUCT NAME

Active Ingredient(s)

Group(s)

Replaces

Case Package Size
Acres Treated

Crop Staging

Key
Diseases Controlled

Disease Staging

Tank-Mix Options

Rate
(when used alone)

Rainfastness

Mixing Instructions

Re-Entry Period

Grazing Restrictions

Pre-Harvest Interval

Storage

Additional Info

BUMPER® 432 EC <small>Low VOC</small> Propiconazole (for seed only)	CUSTODIA® Tebuconazole & Azoxystrobin	SORATEL™ <small>Asorbital</small> Prothioconazole	TOPNOTCH™ Azoxystrobin & Propiconazole
3	3 & 11	3	3 & 11
Tilt®	Unique to ADAMA	Proline®	Unique to ADAMA, similar to Quilt®
2 x 4.8 L jugs per case 80 ac/case	2 x 9.5 L jugs/case 38–50 ac/jug	2 x 8.6 L jugs/case 15–40 ac/jug	2 x 8.6 L jugs/case 15–40 ac/jug
Surface and systemic protection See tank-mix partner labels if spraying at herbicide timing.	Apply at first sign/very early stage of disease.	Apply at the first sign of disease.	Apply first application at the first sign of disease.
Aerial web blight, frog-eye leaf spot	Asian soybean rust, frog-eye leaf spot	Asian soybean rust, frog-eye leaf spot	Anthracnose, mycosphaerella blight, powdery mildew, white mould (suppression only)
Apply when disease first appears. Under severe disease pressure, make a second application 14 days after the first application.	Apply at the very early stages of disease development.	Apply at the very early stages of disease development.	Apply the high rate only under conditions of high disease pressures. A second application 14 days after the first application may be needed if conditions persist.
SILENCER® 120 EC, ZIVATA™	Manipulator™	Coragen®, Decis®, SILENCER® 120 EC	Coragen®, Quadris®, SILENCER® 120 EC, ZIVATA™
120 ml/ac	190–250 ml/ac	160 ml/ac	310–620 ml/ac
1 hour	Avoid application when heavy rain is forecast.	Avoid application when heavy rain is forecast.	Do not apply when rain is imminent. Leaf coverage and penetration is critical for use.
1. BUMPER® 432 EC 2. Tank-mix partner	1. CUSTODIA® 2. Tank-mix partner NOTE: Use a 50-mesh (or coarser) filter screen.	1. SORATEL™ 2. Tank-mix partner	1. TOPNOTCH™ 2. Tank-mix partner
12 hours	12 hours	24 hours	12 hours
Harvested soybean seed should not be used for animal feed.	6 days	Do not graze livestock within 30 days of spraying.	Do not graze livestock within 30 days of spraying.
50 days	20 days	20 days	30 days
May be stored at any temperature	· Do not freeze. · Agitate vigorously before use.	Do not freeze	Do not freeze.
Do not mix with copper products, jar test.	Use of the higher rate should be considered when weather conditions are conducive to heavy disease development or when heavy disease pressure is present.	Good spray coverage and canopy penetration are important to achieve the best results.	Good spray coverage and canopy penetration are important to achieve the best results.

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

How can you inspire more innovation? Simply tell your ADAMA representative what you're looking for or visit ADAMA.COM



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