



HERBICIDE

INSECTICIDE

FUNGICIDE

PROTECT YOUR
CEREALS

ADAMA

HERBICIDE

ESTEEM™ Replacing Prestige™ XL, this herbicide provides targeted control of broadleaf weeds like thistle, cleavers and kochia in barley, spring wheat and durum wheat.

ACTIVE INGREDIENTS: Fluroxypyr 180 g/L, MCPA Ester 600 g/L, Clopyralid 360 g/L

CHEMISTRY GROUP: Group 4

APPLICATION RATES AND PACKAGING:

- 1 co-pack case includes: 9.6 L jug Fluroxypyr 180 + 11.01 L MCPA Ester 600 + 3.34 L ADAMA Clopyralid 360
- 30 (high rate) to 40 (low rate) acres per co-pack case

REGISTERED CROPS:

- Barley
- Wheat (spring, durum)

WEEDS CONTROLLED:

At the low rate of 40 ac/case or 605 ml/ac: (240 ml/ac of 180 g/L Fluroxypyr 180; 280 ml/ac of 600 g/L MCPA Ester 600; 84 ml/ac of 360 g/L of ADAMA Clopyralid 360) will control:

Wild buckwheat, burdock, cleavers, Canada thistle (low infestations), cocklebur, field horsetail (top growth), volunteer flax, flixweed, kochia, lamb's quarters, wild mustard, plantain (top growth), prickly lettuce, ragweeds, shepherd's purse, stinkweed, stork's bill, volunteer sunflowers, annual sunflowers, vetch, wild radish

At the high rate of 30 ac/case or 800 ml/ac: 320 ml/ac of 180 g/L Fluroxypyr 180; 365 ml/ac of 600 g/L MCPA Ester 600; 110 ml/ac of 360 g/L ADAMA Clopyralid 360) will control:

Tartary buckwheat, Canada thistle (medium to high infestations, season long control), volunteer canola, chickweed, dandelions, common groundsel, hempnettle, roundleaf mallow, redroot pigweed, Russian pigweed, scentless chamomile, smartweed, annual sow-thistle, perennial sow-thistle (season long control)

HOW IT WORKS:

The components of ESTEEM™ move within the plant to control exposed and underground plant tissues. It mimics naturally occurring plant hormones which control weeds by disrupting normal plant growth patterns. Symptoms of effect include epinasty (twisting of the stems) and swollen nodes.

CROP STAGING:

3-leaf stage to just before flag emergence

WATER VOLUME:

- Ground: 20 – 40 L/ac or 5 – 10 gal/ac
- Aerial: 12 – 20 L/ac or 3 – 5 gal/ac

RAINFASTNESS:

4 hours

SUPPORTED TANK MIXES:

BENGAL® WB, BISON® 400 L, LADDER® 240 EC, LADDER® ALL-IN, Liquid Achieve™, Horizon®, Assert® 300 SC, Puma®, Avenge® 200-C, Axial®, BroadBand® and Varro®

MIXING INSTRUCTIONS:

1. ½ fill the tank with clean water.
2. Add the required amount of MCPA Ester and fluroxypyr, agitate thoroughly.
3. Add any tank-mix partners, agitate thoroughly.
4. Add the required amount of ADAMA Clopyralid, agitate thoroughly.
5. Fill the tank and agitate again before using.



CROP ROTATIONS:

Barley, canola, flax, forage grasses, mustard, oats, rye and wheat can be seeded the following year.

PRE-HARVEST INTERVAL:

Do not harvest treated crop within 60 days of application.

GRAZING RESTRICTIONS:

Do not graze livestock within 7 days of application.

STORAGE:

Do not freeze.

CEREALS GROWTH STAGES

LEGEND

- WINTER WHEAT ○ WHEAT
- BARLEY □ OATS
- ▲ RYE △ CORN

- HERBICIDE BROADLEAF
- HERBICIDE GRASSES
- INSECTICIDE
- FUNGICIDE



PRODUCT (GROUP #)



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

BADGE®, BISON®, BROMOTRIL®, BUMPER®, FORCEFIGHTER®, HOTSHOT®, LADDER®, OUTSHINE®, PRIORITY®, PYRINEX®, RUSH®, SILENCER®, SOMBRERO®, SQUADRON®, THRASHER® and TOPLINE® are registered trademarks, and ESTEEM™, LADDER ALL IN™ and TOPNOTCH™ are trademarks of ADAMA Agricultural Solutions Canada Ltd.

⚠ Always read and follow label directions.

HERBICIDE

PRODUCT NAME

Active Ingredient

Group

Replaces

Case Package Size

Acres Treated

Bulk Package Size

Acres Treated

Registered/Supported Crops

Crop Rotation

Crop Stage (No Tank Mix)

Key Pests

Pest Staging

Registered Tank-Mix Options

Additional Supported Tank Mixes

Rainfastness

Adjuvent

Key Features

Aerial

Storage

Additional Info

BADGE® II Bromoxynil, MCPA Ester	BISON® 400 L Tralkoxydim	BROMOTRIL® II Bromoxynil	ESTEEM™ Fluroxypyr, MCPA Ester, Clopyralid
4,6	1	6	4
Buctril M, Logic® M, Mextrol®	Liquid Achieve™, Marengo®	Pardner®, Brotex®, Koril®	Prestige™ XL
2 x 10 L 40 ac/case	8 L + 8 L Addit® adjuvant 40 ac/case	2 x 9.7 L 40 ac/case	9.6 L fluroxypyr 180 + 11.01 L MCPA ester 600 + 3.34 L ADAMA clopyralid 360 = 23.95 L case 30–40 ac/case
120 L drum 240 ac	–	116.4 L drum 240 ac	–
wheat ^{WSD} , barley, oats, flax, corn	wheat ^{WSD} , barley, rye, triticale	wheat ^{WSD} , barley, oats, forages, alfalfa, canary seed, corn, millet, sorghum	barley, wheat ^{SD}
no restrictions	no restrictions	no restrictions	wheat, barley, oats, rye, canola, field peas, flax, mustard
2 leaf – flag	2 leaf – flag	up to flag leaf (crop dependent)	3 leaf to just before flag leaf emergence
30+ weeds including: wild buckwheat, volunteer canola, lamb's quarters, stinkweed, cow cockle, flixweed, cocklebur, green smartweed, redroot pigweed, shepherd's purse, wild mustard	foxtail ^{OY} , volunteer oats, wild oats, barnyard grass, Persian darnel	wild buckwheat, smartweed, pigweed, kochia, cow cockle, cocklebur, common ragweed, lady's thumb, stinkweed, wild mustard (see label for more)	wild buckwheat, burdock, cleavers, Canada thistle (low infestations), cocklebur, flixweed, kochia, lamb's quarters, wild mustard, prickly lettuce, ragweeds, shepherd's purse, stinkweed, stork's bill, volunteer sunflowers, annual sunflowers, vetch, wild radish
up to 8 leaf for many weeds (see label)	barnyard grass; Persian darnel: 1–4 leaf; foxtail ^{OY} : 1–5 leaf; oats (volunteer, wild): 1–6 leaf	up to 8 leaf	2–4 leaf (wild buckwheat: 1–8 leaf; cleavers: 1–8 whorls; volunteer flax: 1–12 cm; stork's bill: 1–8 leaf; dandelion, spring rosettes, hempnettle: 2–6 leaf; roundleaf mallow: 1–6 leaf)
BISON® 400 L, LADDER® 240 EC, LADDER ALL IN™, Avenge®, ARROW® 240 EC	Attain™, Curtail® M, Dichlorprop + 2,4-D, MCPA, ESTEEM™, BADGE® II, THRASHER® II	MCPA, 2,4-D, BISON® 400 L, LADDER® 240 EC, LADDER ALL IN™, Dicamba	Liquid Achieve™, BISON® 400 L, Horizon®, LADDER® 240 EC, LADDER ALL IN™, Assert® 300 SC, Puma®, BENGAL® WB
Refine®, Axial®, Everest®	SILENCER®, RUSH M®, RUSH® 24, BROMOTRIL® II, BUMPER®, OctTain™, Pixxaro™	–	–
1 hour	1 hour	30 minutes	4 hours
–	0.5 L Addit/100 L of water	–	–
gentle on crop	wide window of application	gentle on crop	–
✓ (wheat, barley, oats)	✓ (cereals)	✓ (wheat, barley)	may be applied by aircraft
do not freeze	store above -5 C	do not freeze	do not freeze
avoid temperatures above 25 C during application	do not mix with amines	avoid spraying above 25 C at application time or if frost has occurred	

^Wwinter wheat | ^Sspring wheat | ^Ddurum wheat | ^Ogreen foxtail | ^Yyellow foxtail

HERBICIDE

PRODUCT NAME

Active Ingredient

Group

Replaces

Case Package Size

Acres Treated

Bulk Package Size

Acres Treated

Registered/Supported Crops

Crop Rotation

Crop Stage (No Tank Mix)

Key Pests

Pest Staging

Registered Tank-Mix Options

Additional Supported Tank Mixes

Rainfastness

Adjuvant

Key Features

Aerial

Storage

Additional Info

FORCEFIGHTER® M	HOTSHOT®	LADDER® 240 EC	LADDER ALL IN™
MCPA, Fluroxypyr, Bromoxynil	Bromoxynil, Florasulam	Clodinafop-propargyl	Clodinafop-propargyl
4,6	2,6	1	1
Enforcer® M	Unique to ADAMA	Slam'R®, Bullwhip®, Signal®	Horizon® NG, NextStep® NG, Foothills® NG, Foax
2 x 10 L bromoxynil/MCPA + 9.6 L fluroxypyr 40 ac/case	2 x 9.7 L bromoxynil, 1.6 L florasulam 50 ac/case	3.68 L + 4 L Adjuvant 80 40 ac/case	2 x 5.66 L jug 40 ac/case
2 x 120 L bromoxynil/MCPA + 115.2 L fluroxypyr 480 ac	–	11.04 L + 12 L Adjuvant 80 120 ac	90.6 L drum 320 ac/drum
wheat ^{WSD} , barley	wheat, barley, oats	wheat ^{SD}	wheat ^{SD}
barley, canola, flax, forage grasses, lentils, mustard, peas, rye, wheat	pre-seed wheat ^{WD} , barley, oats	no restrictions	no restrictions
2 leaf – early flag	prior to seeding	1–6 leaf	1–6 leaf
wild buckwheat, cleavers, kochia, Canada thistle, chickweed, cocklebur, cow cackle, flixweed, lamb's quarters, night-flowering catchfly, perennial sow thistle, redroot pigweed, Russian thistle, smartweed, stinkweed, volunteer canola, wild mustard	kochia, hempnettle, volunteer canola, dandelion, wild buckwheat, narrow-leaved hawk's beard	foxtail ^{GY} , wild oats, volunteer oats, barnyard grass, Persian darnel	foxtail ^{GY} , wild oats, volunteer oats, barnyard grass, Persian darnel
1–4 leaf stage	apply to small weeds, target the 1–4 leaf stage	barnyard grass: 1–5 leaf; foxtail ^{GY} : 1–5 leaf; wild oats: 1–6 leaf; volunteer oats: 3–6 leaf	barnyard grass: 1–5 leaf; foxtail ^{GY} : 1–5 leaf; wild oats: 1–6 leaf; volunteer oats: 3–6 leaf
wheat only: LADDER® 240 EC, LADDER ALL IN™, Simplicity™; wheat and barley: BISON® 400 L	Glyphosate (DMA, IPA or K-salt formulations)	2,4-D, Attain™, RUSH® 24, BADGE® II, BROMOTRIL® II, Curtail® M–30+ Broadleaf products (see label)	2,4-D, Attain™, RUSH® 24, BADGE® II, BROMOTRIL® II, Curtail® M
–	–	SILENCER® 120 EC, BUMPER®, RUSH M®	SILENCER® 120 EC, BUMPER®
1 hour	30 minutes	30 minutes	30 minutes
–	–	0.25–0.32 v/v	–
3 actives, 2 groups controls a wide range of weeds, including many herbicide resistant weeds	controls hard-to-kill and herbicide resistant weeds	tank mixable with 30+ products	–
–	–	✓	–
do not freeze	store above -10 C (see below)	no restrictions	store away from food, feed and fertilizer
avoid application 3 days before or after frost	if frozen, bring to room temperature and agitate before use	must use Adjuvant 80	no additional adjuvant is required

^Wwinter wheat | ^Sspring wheat | ^Ddurum wheat | ^Ggreen foxtail | ^Yyellow foxtail

HERBICIDE

PRODUCT NAME

Active Ingredient

Group

Replaces

Case Package Size

Acres Treated

Bulk Package Size

Acres Treated

Registered/Supported Crops

Crop Rotation

Crop Stage (No Tank Mix)

Key Pests

Pest Staging

Registered Tank-Mix Options

Additional Supported Tank Mixes

Rainfastness

Adjuvent

Key Features

Aerial

Storage

Additional Info

OUTSHINE® Florasulam, Fluroxypyr, MCPA Ester	PRIORITY® Florasulam	RUSH® 24 Fluroxypyr, 2,4-D Ester	RUSH M® Fluroxypyr, MCPA Ester
2,4	2	4	4
Stellar™	PrePass™, Spitfire®, FirstPass™, Blitz™, Battlefront®	OcTTain™ XL	Trophy®
2 x 8 L florasulam & fluroxypyr + 9.33 L MCPA 40 ac/case	2 x 6.4 L 320 ac/case	9.6 L fluroxypyr + 9.8 L 2,4-D ester 700 40 ac/case	4.8 L fluroxypyr + 7.5 L MCPA ester 600 20 ac/case
-	-	115.2 L Fluroxypyr + 117.6 L 2,4-D 480 acres	76.8 L fluroxypyr + 120 L MCPA 320 acres
wheat ^{SD} , barley	pre-seed prior to barley, oats, wheat (spring, durum, winter)	wheat ^{SD} , barley	wheat ^{SD} , barley
wheat, oats, peas, barley, canola	chemfallow before Aug. 1 – barley, canola, oats, wheat ^{WSD} , peas can be seeded the following year; chemfallow or post-harvest after Aug. 1 – barley, oats, wheat ^{WSD} can be seeded the following year	wheat, oats, peas, barley, canola, flax, forage grasses, lentils, rye, mustard	wheat, oats, peas, barley, canola, flax, forage grasses, lentils, rye, mustard
2 - 6 leaf	prior to seeding or post-harvest	4 leaf – flag	2 - 6 leaf
cleavers, hempnettle, kochia, volunteer canola, chickweed, wild mustard, lamb's quarters, flixweed, redroot pigweed, shepherd's purse, smartweed, stinkweed, stork's bill, wild buckwheat	cleavers, dandelions, hempnettle, narrow-leaved hawk's beard, volunteer canola, chickweed, cow cockle, flixweed, downy brome, foxtail, redroot pigweed, Russian thistle, smartweed, stinkweed, wild mustard	kochia, cleavers, wild buckwheat, lamb's quarters, stinkweed, volunteer canola, cocklebur, flixweed, burdock, plantain, prickly lettuce, wild mustard	cleavers, wild mustard, wild buckwheat, volunteer canola, hempnettle, kochia, lamb's quarters, stinkweed, redroot pigweed
2 - 4 leaf unless otherwise noted on label	target 2 - 4 leaf stage	2 - 4 leaf stage	2 - 4 leaf unless otherwise noted on label
Assert®, Axial®	Glyphosate (DMA, IPA or K-salt formulations)	Everest®, LADDER® 240 EC, LADDER ALL IN™, BISON® 400 L, Simplicity™	Assert®, LADDER® 240 EC, LADDER ALL IN™, BISON® 400 L
wheat only: Everest®, LADDER® 240 EC, LADDER ALL IN™, Simplicity™	BROMOTRIL® II	Avenge®, Assert®	-
2 hours	Delay if imminent	2 hours	-
-	-	-	-
2 modes of action controls Group 2 & 9 resistant kochia	mixes with all glyphosates	flexible re-cropping and can use at later stages of the crop	superior control of chickweed, cleavers and wild buckwheat
-	-	-	-
do not freeze	store above -10 C (see below)	do not freeze	do not freeze
	spray at pre-seed or post-harvest only. DO NOT spray post seeding	avoid temperatures above 25 C during application	do not mix with amines

^Wwinter wheat | ^Sspring wheat | ^Ddurum wheat | ^Ggreen foxtail | ^Yyellow foxtail

HERBICIDE

PRODUCT NAME

Active Ingredient

Group

Replaces

Case Package Size

Acres Treated

Bulk Package Size

Acres Treated

Registered/Supported Crops

Crop Rotation

Crop Stage (No Tank Mix)

Key Pests

Pest Staging

Registered Tank-Mix Options

Additional Supported Tank Mixes

Rainfastness

Adjuvent

Key Features

Aerial

Storage

Additional Info

SQUADRON®

Metribuzin

5

Sencor®

4 x 5 kg
130–250 ac/case

–

wheat⁵, barley, peas, chickpeas, lentils, soybeans, potatoes

do not seed wheat, oats or rye as fall seeded/cover crop in the same season as SQUADRON® (see label)

wheat and barley 2–5 leaf

chickweed, hempnettle, volunteer canola, smartweed, stinkweed

varies by crop and soil type (see label)

2,4-D, Banvel®, MCPA Amine

–

6 hours (foliar application)

–

flexible applications for broad spectrum weed control

–

store in a cool dry place

avoid spraying above 25 C at application time or if frost has occurred

THRASHER® II

Bromoxynil, 2,4-D Ester

4,6

Thumper®, Leader®, Approve®

2 x 10 L
40 ac/case120 L drum
240 acwheat^{5D}, barley

no restrictions

4 leaf–flag

group 2 resistant kochia, Russian thistle, wild buckwheat, volunteer canola, ball mustard, bluebur, cocklebur, cow cockle, flixweed, lamb's quarters, night-flowering catchfly, redroot pigweed, shepherd's purse, stinkweed, wild mustard

4 leaf stage for most (see label)

BISON® 400 L, LADDER® 420 EC, LADDER ALL IN™, Avenge®

Everest®

1 hour

–

controls resistant kochia and thistle

✓

do not freeze

TOPLINE®

Florasulam, MCPA Ester

2,4

Frontline™ XL

1.6 L florasulam + 9.33 L MCPA ester
40 ac/case

–

wheat, barley, oats

no restrictions

2–6 leaf

wild buckwheat, cleavers, volunteer canola, cow cockle, flixweed, hempnettle, lamb's quarters, redroot pigweed, shepherd's purse, smartweed, stinkweed, wild mustard

1–4 leaf

Axial®, Everest®, Simplicity™ (only in wheat)

Varro®, Assert®, Avenge®

2 hours

–

multiple modes of action

–

do not freeze



^wwinter wheat | ^sspring wheat | ^Ddurum wheat | ^ogreen foxtail | ^yyellow foxtail

	INSECTICIDE			FUNGICIDE	
PRODUCT NAME Active Ingredient	PYRINEX® 480 EC Chlorpyrifos	SILENCER® 120 EC Lamba-cyhalothrin	SOMBRERO® 600 FS Imidacloprid	BUMPER® Propiconazole	TOPNOTCH™ Azoxystrobin & Propiconazole
Group	1B	3	4	3	3,11
Replaces	Lorsban®, Citadel®, Warhawk®	Matador®	Stress Shield®	Tilt®, Pivot®, Propel®	Quilt®
Case Package Size Acres Treated	2 x 10 L 34 – 84 ac/case	4 x 3.785 L 296 – 880 ac/case	8 x 1.54 L crop dependent (see label)	2 x 4.8 L 80 – 160 ac/case	2 x 8.6 L 80 ac/case
Bulk Package Size Acres Treated	205 L	–	–	–	–
Registered/Supported Crops	cereals, canola, flax, lentils, corn, potatoes, sunflowers	cereals, alfalfas, beans, potatoes, flax, peas, canola, lentils	barley, oats, wheat, soybeans, canola, mustard	cereals, canola, corn, canary seed, beans, soybeans	wheat, barley, oats, rye, triticale; watch for label expansions – more crops to be added
Crop Rotation	no restrictions	no restrictions	no restrictions	no restrictions	no restrictions
Crop Stage (No Tank Mix)	–	–	seed treatment	(see tank-mix partner labels if spraying at herbicide timing)	G.S. 29 – 55
Key Pests	cutworms, armyworms, wheat midge, brown wheat mite, orange wheat blossom midge, Russian wheat aphid	grasshoppers	wireworms	rusts, blotches, scalds, tan spots, septoria spots	net blotch, scald, leaf spot, leaf rust, tan spot; watch for label expansions – more diseases to be controlled
Pest Staging	based on the presence of pests and significant populations as determined by local monitoring	based on the presence of pests and significant populations as determined by local monitoring	–	timing is dependent on crop staging (see label)	apply at first sign of disease
Registered Tank-Mix Options	Avenge®, Banvel®, BADGE® II, MCPA, 2,4-D Ester, Amine	LADDER® 240 EC, LADDER ALL IN™, BISON® 400 L, BUMPER®, Headline® EC, Liquid Achieve™	Raxil®, Apron-Maxx® RTA®	2,4-D Amine, MCPA, BADGE® II, LADDER® 240 EC, LADDER ALL IN™, SILENCER® 120 EC; most other herbicides	SILENCER® 120 EC, LADDER® 240 EC; most other herbicides
Additional Supported Tank Mixes	–	pre-mix small proportional batches prior to tank mixing to determine compatibility	EverGol Energy, Trilex AL, Apex, Allegiance®, Vibrance® Maxx, Rancona®, Raxil® PRO	–	–
Rainfastness	4 – 6 hours	fast acting	–	1 hour	delay if imminent
Adjuvant	–	–	–	–	–
Key Features	tough insect control	crop flexible	effective seedling protection	can be sprayed at herbicide timing and flag leaf	2 modes of action
Aerial	✓ (some restrictions)	✓ (some restrictions)	–	✓	✓ (some restrictions)
Storage	do not freeze	do not freeze	do not freeze	no restrictions	do not freeze
Additional Info	respect 24 hour re-entry period	for best results apply when temperatures are below 25 C	apply at 10 C or warmer due to high viscosity	do not mix with copper products	preventative and curative



It's that simple.

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ARROW®, BADGE®, BENGAL®, BISON®, BROMOTRIL®, BUMPER®, FORCEFIGHTER®, HOTSHOT®, LADDER®, OUTSHINE®, PRIORITY®, PYRINEX®, RUSH®, SILENCER®, SOMBRERO®, SQUADRON®, THRASHER® and TOPLINE® are registered trademarks, and ESTEEM™, LADDER ALL IN™ and TOPNOTCH™ are trademarks of ADAMA Agricultural Solutions Canada Ltd. All other products are trademarks of their respective companies.