

CROP PROTECTION PORTFOLIO

REFERENCE GUIDE

As a leader in crop protection products, we balance innovation and improvement in efficiency and simplicity to bring you a focused product portfolio that saves time and delivers results.

Nufarm.com/uscrop



Grow a better tomorrow



HARVEST TO CANOPY™

Nufarm is a leader in weed management chemistry from Harvest-to-Canopy™. From fall, to over-winter, through spring and early summer, our proven solutions help you gain time, flexibility and healthier crop stands.

	HERBICIDE SOLUTION	GAIN CONTROL	CONTROL IN COOL TEMPS	MANAGE RESISTANCE	SHORTEN PLANTING INTERVAL	FASTER ACTIVITY	PACK ON RESIDUAL
TRIED AND TRUE HERBICIDES Take control of broadleaf weeds with tried and true herbicide brands from Nufarm.	WEEDMASTER®	✓					
	BURNMASTER™	✓	✓				
	CREDIT® XTREME	✓				✓	
RESISTANT WEED CONTROL Add power with popular combination formulas designed to control tough and resistant weed pressure.	SCORCH™	✓	✓	✓			
	SPITFIRE®	✓	✓	✓	✓		
BURNDOWN BOOSTER Tank mix with Panther® to boost burndown results, combat herbicide resistance and keep fields clean through canopy.	PANTHER® SC	✓		✓		✓	✓
	PANTHER® MTZ	✓		✓		✓	✓
	PANTHER® PRO	✓		✓		✓	✓
	CONSIDER CLOAK® WHEN ADDITIONAL APPLICATION FLEXIBILITY IS NEEDED						
	CLOAK®	✓		✓		✓	✓



BROMOXYNIL Fast and cost-effective broadleaf weed control

Maestro® Advanced

Maestro® Advanced is an emulsifiable concentrate post-emergence herbicide that offers control of tough broadleaf weeds in several cereal crops including wheat, barley, oats, rye and flax. Maestro Advanced can also be applied to grasses grown for seed or sod production.

EPA REG. NO.	71368-77
ACTIVE INGR.	MCPA ester (40% / 2.5 lb ae/gal), bromoxynil (2.5 lb/gal), octanoic acid ester (18.7%), heptonic acid ester (18.1%)
FORMULATION	liquid
CHEM. FAMILY	nitrile, phenoxy
GROUP NO.	6 and 4
REI	24 hours
SIGNAL WORD	caution
PACKAGE SIZE	2.5 gal container (2 per case), 250 gal tote

KEY PERFORMANCE BENEFITS

- Utilizes mixed esters of bromoxynil in combination with MCPA ester
- Takes on the toughest weeds with quick burndown and complete control
- Excellent tank-mix compatibility, even in hard water environments

KEY USES

Barley, flax, oat, rye

KEY WEEDS CONTROLLED

Common tarweed, field pennycress, green smartweed, jimsonweed, lambsquarters, London rocket, marshelder, nightshade, Pennsylvania smartweed, pigweed, Russian thistle, shepherd's-purse, sunflower, wild buckwheat, wild mustard
(see label for complete list)

Maestro® 2EC

Maestro® 2EC is a 33.4% bromoxynil formulation that provides control of a variety of difficult broadleaf weeds in corn, sorghum, wheat, non-crop and many other crops and uses.

EPA REG. NO.	71368-29
ACTIVE INGR.	bromoxynil (2 lb/gal): octanoic acid ester (33.4%)
FORMULATION	liquid
CHEM. FAMILY	nitrile
GROUP NO.	6
REI	24 hours
SIGNAL WORD	warning
PACKAGE SIZE	2.5 gal container (2 per case)

KEY PERFORMANCE BENEFITS

- Controls more than 40 tough broadleaf weeds
- No weed resistance issues
- Compatible with many grass and broadleaf herbicides
- Flexible application options

KEY USES

Alfalfa (seedling), barley, corn, flax, garlic, mint, oat, onion (dry bulb), rye, sorghum (grain and forage), triticale

KEY WEEDS CONTROLLED

Annual sowthistle, buffalobur, field pennycress, groundsel, hemp sesbania, jimsonweed, ladythumb, lambsquarters, London rocket, nightshade, prostrate knotweed, puncturevine, ragweed, Russian thistle, shepherd's-purse, velvetleaf, Venice mallow
(see label for complete list)

Maestro® 4EC

Maestro® 4EC offers growers excellent control of more than 50 broadleaf weeds including cocklebur, common lambsquarters, morningglory and velvetleaf. This fast acting post-emergence herbicide can be used as a stand-alone product or in tank-mix combinations.

EPA REG. NO.	71368-78
ACTIVE INGR.	bromoxynil (4 lb/gal): octanoic acid ester (28%), heptonic acid ester (27%)
FORMULATION	liquid
CHEM. FAMILY	nitrile
GROUP NO.	6
REI	24 hours
SIGNAL WORD	warning
PACKAGE SIZE	2.5 gal container (2 per case)

KEY PERFORMANCE BENEFITS

- Contains a proprietary mixed-ester formulation of bromoxynil
- Less product to store and handle
- Controls more than 50 tough broadleaf weeds
- Can be applied by ground or aerial application or through sprinkler irrigation equipment
- 30 day interval for rotational crops
- Compatible with many grass and broadleaf herbicides

KEY USES

Alfalfa (seedling), barley, corn, flax, garlic, mint, oat, onion (dry bulb), rye, sorghum (grain and forage), triticale

KEY WEEDS CONTROLLED

Annual sowthistle, buffalobur, field pennycress, groundsel, hemp sesbania, jimsonweed, ladythumb, lambsquarters, nightshade, prostrate knotweed, puncturevine, ragweed, Russian thistle, shepherd's-purse, velvetleaf, Venice mallow, woolly croton
(see label for complete list)

Maestro® MA

Maestro® MA is a convenient premix formulation of bromoxynil and MCPA ester that provides control of certain broadleaf weeds in small grains (wheat, barley, oats, and rye). Also applicable in Conservation Reserve Program (CRP) areas.

EPA REG. NO.	71368-28
ACTIVE INGR.	bromoxynil; octanoic acid ester (31.7% / 2 lbs/gal), MCPA ester (31.2% / 2 lbs ae/gal)
FORMULATION	liquid
CHEM. FAMILY	nitrile, phenoxy
GROUP NO.	4 and 6 REI 12 hours
SIGNAL WORD	caution
PACKAGE SIZE	2.5 gal container (2 per case), 30 gal drum, 265 gal tote, bulk

KEY PERFORMANCE BENEFITS

- Multi-season applications
- Ground, aerial, and sprinkler application options
- Convenient premix formulation of bromoxynil and MCPA ester

KEY USES

Barley, flax, oat, rye, wheat and CRP areas

KEY WEEDS CONTROLLED

Annual sowthistle, cowcockle, field pennycress, groundsel, hemp sesbania, henbit, jimsonweed, knawel, Kochia, lambsquarters, mustard, nightshade, puncturevine, Russian thistle, shepherd's-purse, smooth pigweed, tarweed, velvetleaf, wild buckwheat, yellow rocket (see label for complete list)

SULFONYLUREA Low-dose, selective choice for broad-spectrum control

Cloak®

Cloak® offers soybean growers selective burndown and residual control of many broadleaf weeds and partial control of nutsedge and annual grasses. Cloak contains two active ingredients with different modes of action and offers flexible application options.

EPA REG. NO.	71368-83
ACTIVE INGR.	metribuzin (6.4.3%), chlorimuron ethyl (10.7%)
FORMULATION	dispersible granule
CHEM. FAMILY	triazine, sulfonylurea
GROUP NO.	5 and 2 REI 12 hours
SIGNAL WORD	warning
PACKAGE SIZE	5 lb bag (8 per case)

KEY PERFORMANCE BENEFITS

- Helps maximize yield by providing full-season control of tough broadleaf weeds
- Offers burndown and residual activity
- Two modes of action to help prevent resistance development
- Flexible application options: no-till, reduced-till, stale seedbed or conventional production

KEY USES

Soybeans

KEY WEEDS CONTROLLED

Cocklebur, copperleaf hophornbeam, Florida beggarweed, giant sicklepod, hemp sesbania, henbit, jimsonweed, ladythumb, lambsquarters, marestalk, morningglory, mustard, pigweed, prickly sida (feaweeds), purslane, ragweed, smartweed, spurge, sunflower, velvetleaf (see label for complete list)

Cloak® EX

Cloak® EX controls tough weeds like henbit, marestalk and pigweed and offers powerful residual control to keep fields clean. Cloak EX fits perfectly in no-till or conservation tillage fields. It can be applied from fall through early spring for burndown of winter annuals and perennial weeds.

EPA REG. NO.	71368-84
ACTIVE INGR.	chlorimuron ethyl (22.7%), tribenuron methyl (6.8%)
FORMULATION	dispersible granule
CHEM. FAMILY	sulfonylurea
GROUP NO.	2 REI 12 hours
SIGNAL WORD	caution
PACKAGE SIZE	80 oz bag (6 per case)

KEY PERFORMANCE BENEFITS

- Helps maximize yield by providing outstanding control of tough broadleaf weeds
- Fall applications keep fields clean until planting
- Offers burndown and residual activity
- Flexible application options: no-till, reduced-till, stale seedbed or conventional production
- Adds second mode of action in glyphosate programs

KEY USES

Soybeans

KEY WEEDS CONTROLLED

PRE-EMERGENCE: Cocklebur, henbit, lambsquarters, marestalk, pigweed, purslane, ragweed, speedwell
BURNDOWN: Bittercress, buttercup, dandelion, henbit, mustard, pepperweed, pigweed, purslane shepherd's-purse, speedwell, velvetleaf, whittowgrass, yellow rocket (see label for complete list)

Curio®

Curio® offers better control than glyphosate alone on important weeds such as morningglories, hemp sesbania and yellow nutsedge. The residual control of Curio helps keep your fields cleaner longer. Plus, Curio can help mitigate weed resistance by offering a different mode of action.

EPA REG. NO.	71368-82
ACTIVE INGR.	chlorimuron ethyl (2.5%)
FORMULATION	dispersible granule
CHEM. FAMILY	sulfonylurea
GROUP NO.	2 REI 12 hours
SIGNAL WORD	caution
PACKAGE SIZE	5 oz bag (8 per case)

KEY PERFORMANCE BENEFITS

- Residual control helps keep fields clean and maximize yield by preventing weed competition
- Different mode of action than glyphosate to help manage weed resistance on many broadleaf weeds
- Better control than glyphosate alone on key weeds such as morningglory, hemp sesbania, yellow nutsedge and velvetleaf
- Flexible rate range based on weed spectrum and size to meet your needs

KEY USES

Peanuts, soybeans, non-crop sites

KEY WEEDS CONTROLLED

PEANUTS: Florida beggarweed
SOYBEANS: Beggarticks, cocklebur, cowpea, dandelion (above ground portion), Florida beggarweed, hemp sesbania, jimsonweed, London rocket, marestalk, morningglory, mustard, pigweed, poinsettia, prickly lettuce, ragweed, sicklepod, smartweed, sunflower, tarweed fiddleneck, velvetleaf, yellow nutsedge (see label for complete list)





EPA REG. NO.	71368-121
ACTIVE INGR.	rimsulfuron (25%)
FORMULATION	water-dispersible granule
CHEM. FAMILY	sulfonylurea
GROUP NO.	2 REI 4 hours
SIGNAL WORD	caution
RESTRICTED	no
PACKAGE SIZE	20 oz bag (12 per case)

Grapple™ Herbicide delivers outstanding weed control on many crops, but it's designed with the unique challenges of vineyards and orchards in mind. Knock down existing weeds and keep floors clean with lasting residual. Plus, Grapple is tank mix compatible with many pre-emerge herbicides.

KEY PERFORMANCE BENEFITS

- Outstanding broad-spectrum pre- and post-emergent control of many weeds
- Labeled for use on a wide range of crops, but formulated to deliver excellent results in vineyards and orchards
- Long-lasting residual control

KEY USES

Many crops including; citrus fruit, grapes, stone and pome fruit, tree nuts, field corn, field-grown tomatoes, potatoes, potatoes grown for seed

KEY WEEDS CONTROLLED

Barleygrass, bluegrass, chamomile, crabgrass, dandelion, filaree, fleabane, foxtail, groundsel, henbit, Kochia, mallow, maretail (horseweed), mustards, pigweeds, puncturevine, purslane, quackgrass, shepherd's-purse, sarge (see label for complete list)



EPA REG. NO.	228-391
ACTIVE INGR.	metasulfuron methyl (60%)
FORMULATION	water-dispersible granule
CHEM. FAMILY	sulfonylurea
GROUP NO.	2 REI 4 hours
SIGNAL WORD	caution
PACKAGE SIZE	8 oz bag (8 per case), 16 oz bag (8 per case), 12 lb jug (2 per case)

Patriot® controls tough broadleaf weeds such as Russian thistle and mustards in wheat, barley, fallow, pastures and rangeland. With contact and residual control, it burns down existing weeds and keeps them down for 4 to 6 weeks. Plus, it offers a wide application window.

KEY PERFORMANCE BENEFITS

- Excellent post-emergence weed control
- Offers excellent crop safety
- Provides residual control for up to 6 weeks
- Wide application window
- Excellent tank-mix partner, particularly in pasture and small grains

KEY USES

Barley, triticale, CRP, fallow land, pastures, rangeland

KEY WEEDS CONTROLLED

Bur buttercup, chickweed, coast fiddleneck, cowcockle, false chamomile, field pennycress, filaree, groundsel, henbit, lambsquarters, mayweed, chamomile, miner's lettuce, pigweed, plains coreopsis, purslane, shepherd's-purse, smallseed falseflax, smartweeds, snow speedwell, wild mustard (see label for complete list)

Rapport® BroadSpec

EPA REG. NO.	71368-79
ACTIVE INGR.	thifensulfuron-methyl (25%), tribenuron-methyl (25%)
FORMULATION	water-dispersible granule
CHEM. FAMILY	sulfonylurea
GROUP NO.	2 REI 12 hours
SIGNAL WORD	caution
PACKAGE SIZE	2 lb bag (8 per case)

Post-emergence herbicide for use in wheat and barley, fallow and preplant burndown. Rapport® BroadSpec helps manage Canada thistle, wild buckwheat and a broad spectrum of other difficult weeds. Plus, Rapport BroadSpec gives rotational flexibility for next season.

KEY PERFORMANCE BENEFITS

- Dependable post-emergence control of a broad spectrum of broadleaf weeds
- Improved Canada thistle control
- Excellent crop safety
- Excellent tank-mix partner
- Flexible rotation options

KEY USES

Barley, wheat, fallow land

KEY WEEDS CONTROLLED

Bur buttercup, buckwheat, chickweed, coast fiddleneck, cowcockle, curly dock, field pennycress, flixweed, groundsel, henbit, ladythumb, lambsquarters, London rocket, mallow, marshelder, redmaids, shepherd's-purse, sunflower, tansy mustard, tarweed fiddleneck (see label for complete list)

Rapport® TankMix

EPA REG. NO.	71368-80
ACTIVE INGR.	thifensulfuron-methyl (40%), tribenuron-methyl (10%)
FORMULATION	water-dispersible granule
CHEM. FAMILY	sulfonylurea
GROUP NO.	2 REI 12 hours
SIGNAL WORD	caution
PACKAGE SIZE	2 lb bag (8 per case)

Rapport® TankMix delivers reliable control of many broadleaf weeds in wheat, barley and triticale. Plus, it can be used as post-harvest in cereals, fallow and preplant or post-harvest burndown. Rapport TankMix has good crop rotation flexibility.

KEY PERFORMANCE BENEFITS

- Dependable post-emergence control of a broad spectrum of broadleaf weeds
- Low tank-mix antagonism
- Excellent crop safety
- Flexible rotation options

KEY USES

Barley, triticale, wheat, fallow land and preplant or post-harvest burndown

KEY WEEDS CONTROLLED

Broad-spectrum broadleaf weed control, control varies with tank-mix combination (see label for complete list)

Treaty®

Treaty® offers excellent control of problem weeds in wheat, barley, oats, triticale, fallow, corn and soybeans. A dry flowable granular herbicide, Treaty is designed for selective post-emergence control either alone or in combination with many grass and other broadleaf herbicides.

EPA REG. NO.	71368-74		
ACTIVE INGR.	thifensulfuron-methyl (75%)		
FORMULATION	dry flowable		
CHEM. FAMILY	sulfonylurea		
GROUP NO.	2	REI	12 hours
SIGNAL WORD	warning		
PACKAGE SIZE	10 oz bag (8 per case)		

KEY PERFORMANCE BENEFITS

- Controls more than 40 tough broadleaf weeds, including wild buckwheat, redroot pigweed and common lambsquarters
- Excellent crop safety
- Dependable post-emergence control and preplant burndown
- Flexible tank-mix options

KEY USES

Barley, corn, oat, soybeans, triticale, wheat (including durum), fallow, preplant or post-harvest burndown

KEY WEEDS CONTROLLED

FIELD CORN, SOYBEANS: Lambsquarters, pigweed, velvetleaf, wild mustard
CEREALS, FALLOW, PREPLANT BURNDOWN: Buckwheat, Carolina geranium, field pennycress, lambsquarters, London rocket, marshelder, shepherd's-purse, swinecress, tarweed fiddleneck, tumble/Jim Hill mustard, wild mustard (see label for complete list)

Treaty® Extra

Treaty® Extra offers selective post-emergence broadleaf weed control in wheat, barley, oats, triticale and fallow. As a stand-alone, it provides outstanding control of more than 60 tough broadleaf weeds. It's an excellent tank-mix partner with grass and other broadleaf herbicides.

EPA REG. NO.	71368-76		
ACTIVE INGR.	thifensulfuron-methyl (50%), tribenuron-methyl (25%)		
FORMULATION	dry flowable		
CHEM. FAMILY	sulfonylurea		
GROUP NO.	2	REI	12 hours
SIGNAL WORD	caution		
PACKAGE SIZE	20 oz bag (10 per case)		

KEY PERFORMANCE BENEFITS

- Outstanding control of tough broadleaf weeds
- Can be tank-mixed with grass and other broadleaf herbicides
- Offers excellent crop safety
- Flexible rotation options

KEY USES

Barley, oat, triticale, wheat, fallow land

KEY WEEDS CONTROLLED

Buckwheat, chickweed, coast fiddleneck, cowcockle, curly dock, field pennycress, groundsel, ladysthumb, lambsquarters, London rocket, marshelder, mouse-ear, Pennsylvania smartweed, pigweed, pineappleweed, prostrate knotweed, shepherd's-purse, sunflower, swinecress, tansy mustard, tarweed fiddleneck, volunteer lentils, volunteer peas, volunteer sunflower, wild mustard (see label for complete list)

Victory®

Victory® offers selective post-emergence broadleaf weed control in wheat, barley and triticale and can be used post-harvest in cereals, fallow and preplant or post-harvest burndown. Victory can be used as a stand-alone product or in tank mix combinations with broadleaf or grass herbicides.

EPA REG. NO.	71368-75		
ACTIVE INGR.	tribenuron-methyl (75%)		
FORMULATION	dry flowable		
CHEM. FAMILY	sulfonylurea		
GROUP NO.	2	REI	12 hours
SIGNAL WORD	caution		
PACKAGE SIZE	10 oz bag (8 per case)		

KEY PERFORMANCE BENEFITS

- Delivers excellent control of Canada thistle and other tough broadleaf weeds
- Can be tank-mixed with grass and other broadleaf herbicides
- Excellent crop tolerance
- Flexible rotation options
- Supplemental label permits use on ExpressSun trait sunflowers

KEY USES

Barley, ExpressSun trait sunflowers, triticale, wheat, fallow, preplant burndown

KEY WEEDS CONTROLLED

BARLEY, TRITICALE, WHEAT: Chickweed, cowcockle, groundsel, lambsquarters, London rocket, mustard, purslane, redroot pigweed, shepherd's-purse
FALLOW, PREPLANT BURNDOWN: Canada thistle, chickweed, false chamomile, kochia, lambsquarters, mustard, purslane (see label for complete list)

DICAMBA Versatile choice for broadleaf weed control and resistance management

BurnMaster™

BurnMaster™ delivers excellent control of more than 65 broadleaf weeds, including herbicide resistant species. Designed for optimal performance – even in cool weather – it is ideal for fall and early spring burndown programs. Plus, it's labeled for use ahead of almost any crop.

EPA REG. NO.	71368-108		
ACTIVE INGR.	dicamba acid (10.73% / 1 lb ae/gal), 2,4-D ester (49.64% / 3.07 lb ae/gal)		
FORMULATION	liquid		
CHEM. FAMILY	phenoxyacetic acid, benzoic acid		
GROUP NO.	4	REI	48 hours
SIGNAL WORD	danger		
PACKAGE SIZE	2.5 gal container (2 per case), 265 gal tote, bulk		

KEY PERFORMANCE BENEFITS

- Excellent cool-weather performer – ideal for fall and early spring burndown programs
- True systemic control kills weeds above and below ground
- Optimized 2,4-D ester and dicamba acid ratio delivers broad-spectrum control of more than 65 weeds including glyphosate and ALS-resistant species
- Labeled for use ahead of virtually any crop and offers crop rotation flexibility

KEY USES

Corn (preplant and pre-emergence), cotton (preplant), grain sorghum, grass (hay or silage), soybean (preplant), wheat, CRP, fallow croplands, general farmstead, pasture, rangeland

KEY WEEDS CONTROLLED

Buckwheat, chickweed, cocklebur, dogfennel, evening primrose, henbit, kochia, lambsquarters, mallow, marestail, morningglory, mustard, pigweed, ragweed, smartweed, sowthistle, velvetleaf (see label for complete list)



Clash™

EPA REG. NO.	228-615		
ACTIVE INGR.	DGA dicamba salt (56.8% / 4 lbs ae/gal)		
FORMULATION	liquid		
CHEM. FAMILY	benzoic acid		
GROUP NO.	4	REI	24 hours
SIGNAL WORD	caution		
PACKAGE SIZE	2.5 gal container (2 per case), 265 gal tote, bulk		

Clash™ controls difficult ALS- and triazine-resistant annual weeds in addition to a broad spectrum of perennial and biennial weeds. Plus, Clash offers early application and residual control. Its wide application window offers flexibility to deal with unpredictable spring weather.

KEY PERFORMANCE BENEFITS

- Controls a broad spectrum of annual and perennial broadleaf weeds
- Economical solution for ALS- and triazine-resistant weeds
- Flexible application timing: preplant burndown, pre-emergence, post-emergence in corn
- Offers a wide application window
- Excellent crop safety

KEY USES

Asparagus, barley, corn, cotton, grass grown for seed, hay, oat, proso millet, sorghum, soybeans, sugarcane, triticale, wheat, CRP, fallow croplands, general farmstead (non-cropland), pasture, rangeland

KEY WEEDS CONTROLLED

Asparagus, barley, corn, cotton, grass grown for seed, hay, oat, sorghum, soybeans, sugarcane, triticale, wheat, CRP, fallow croplands, general farmstead (non-cropland), pasture, rangeland (see label for complete list)

Diablo®

EPA REG. NO.	228-379		
ACTIVE INGR.	DMA dicamba salt (49.41% / 4 lbs ae/gal)		
FORMULATION	liquid		
CHEM. FAMILY	benzoic acid		
GROUP NO.	4	REI	24 hours
SIGNAL WORD	caution		
PACKAGE SIZE	2.5 gal container (2 per case), 30 gal drum, 265 gal tote, bulk		

Diablo® is a water-soluble amine formulation of dicamba that offers extensive control of brush, vines and broadleaf weeds. Diablo provides perennial broadleaf weed and brush management in corn, sorghum, small grains, pasture and other crops.

KEY PERFORMANCE BENEFITS

- Water-soluble amine formulation of dicamba
- Offers extensive control of brush, vines and broadleaf weeds

KEY USES

Asparagus, corn, hay, small grains, sorghum, sugarcane, fallow, general farmstead (non-cropland), pasture, rangeland

KEY WEEDS CONTROLLED

Amaranth, buckwheat, burcucumber, clover (annual), lambsquarters, mayweed, pigweed, slender aster, spurge (see label for complete list)

Scorch™

EPA REG. NO.	71368-117		
ACTIVE INGR.	dicamba acid (10.43% / 1 lb ae/gal), 2,4-D ester (47.51% / 3 lbs ae/gal), fluroxypyr ester (11.27% / 0.75 lb ae/gal)		
FORMULATION	liquid		
CHEM. FAMILY	phenoxycarboxylic acid, pyridinecarboxylic acid, benzoic acid		
GROUP NO.	4	REI	48 hours
SIGNAL WORD	danger		
PACKAGE SIZE	2.5 gal container (2 per case), 265 gal tote		

Not for Sale, Distribution, or Use in Nassau and Suffolk Counties, NY.

With three actives, Scorch™ knocks down more than 60 annual and 50 biennial/perennial weeds – even resistant species. Designed with resistant kochia in mind, it's the ideal solution for tough kochia control. Scorch better handles challenging cool weather conditions. Plus, it delivers excellent efficacy.

KEY PERFORMANCE BENEFITS

- Optimized premix ratio of three actives
- Systemic control: kills above and below ground
- Ideal herbicide option where dicamba- or glyphosate-resistant kochia is a threat
- Tank mix compatible with many K salt herbicides, fertilizers, and other products
- Unique combination of three actives delivers better control in variable weather conditions

KEY USES

CRP, fallow systems, general farmstead, grass (hay, silage), labeled crops (including cereal grains, field corn, sorghum), non-crop areas, pasture, rangeland

KEY WEEDS CONTROLLED

Bittercress, buckwheat, chickweed, chicory, clover, cocklebur, dogfennel, groundsel, henbit, knotweed, kochia, lambsquarters, marestail, mustard, pigweed, ragweed, smartweed, thistle, velvetleaf (see label for complete list)

Spitfire®

EPA REG. NO.	71368-109		
ACTIVE INGR.	2,4-D ester (50.31% / 3.07 lb ae/gal), dicamba acid (5.44% / 0.5 lb ae/gal)		
FORMULATION	liquid		
CHEM. FAMILY	phenoxycarboxylic acid, benzoic acid		
GROUP NO.	4	REI	48 hours
SIGNAL WORD	caution		
PACKAGE SIZE	2.5 gal container (2 per case), 265 gal tote, bulk		

Spitfire® provides above- and below-ground burndown of broadleaf weeds, including herbicide-resistant species. Treated fields will benefit from weed control that will ease planting and ensure optimum yields, while managing the risk of herbicide-resistant weed populations.

KEY PERFORMANCE BENEFITS

- Below-ground burndown: kills resistant weeds, roots and all
- Dual auxin mode of action for broad spectrum control
- Ester formulation for dependable cool-weather performance
- Optional 7-day preplant interval from application to soybean planting (when applied at 16-20 oz rate and after 1/2 inch rain or irrigation – see product label for details and restrictions)

KEY USES

Corn (preplant and pre-emergence), cotton (preplant), fallow systems (between crop applications), pasture, sorghum, soybean (preplant), wheat

KEY WEEDS CONTROLLED

Buckwheat, buffalobur, chickweed, cocklebur, dogfennel, evening primrose, flax, henbit, knotweed, kochia, lambsquarters, mallow, marestail, morningglory, mustard, pigweed, ragweed, shepherd's-purse, smartweed, sowthistle, Russian thistle, velvetleaf (see label for complete list)



EPA REG. NO.	71368-34
ACTIVE INGR.	DMA dicamba salt (12.4% / 1 lb ae/gal), 2,4-D amine salt (35.7% / 1 lb ae/gal)
FORMULATION	liquid
CHEM. FAMILY	phenoxycarboxylic acid, benzoic acid
GROUP NO.	4 REI 48 hours
SIGNAL WORD	danger
PACKAGE SIZE	1 gal container (4 per case), 2.5 gal container (2 per case), 30 gal drum, 265 gal tote, bulk

PHENOXY ESTER Effective control of broadleaf weeds

WeedMaster® delivers consistent weed control in sugarcane, pastures, small grains and fallow. This selective, post-emergence herbicide provides tough, long-lasting control of a broad spectrum of annual, biennial and perennial broadleaf weeds.

KEY PERFORMANCE BENEFITS

- Achieve outstanding control of brush and broadleaf weeds in a concentrated formula
- Controls tough weeds such as Carolina horsenettle, thistles and blackberry
- Good tolerance of labeled pasture grasses
- Pre-emergence control with residual activity

KEY USES

Grass (hay or silage), sorghum, sugarcane, wheat, CRP, fallow land, general farmstead, pastures, rangeland

KEY WEEDS CONTROLLED

Buckwheat, burdock, chickweed, chicory, cocklebur, dandelion, goldenrod, henbit, honeysuckle, kochia, morningglory, mustard, pigweed, purslane, ragweed, Russian thistle, shepherd's-purse, velvetleaf, vetch (see label for complete list)

Weedone® 650

EPA REG. NO.	35935-6-71368
ACTIVE INGR.	2,4-D ester (87.3% / 5.5 lbs ae/gal)
FORMULATION	liquid
CHEM. FAMILY	phenoxycarboxylic acid
GROUP NO.	4 REI 12 hours
SIGNAL WORD	caution
PACKAGE SIZE	2.5 gal container (2 per case), 30 gal drum, 265 gal tote

Weedone® 650 is a 2,4-D ester formulation designed to control susceptible broadleaf weeds in cereal grains, corn, sorghum, non-crop areas, preplant soybeans and forestry.

KEY PERFORMANCE BENEFITS

- Flexible label includes burndown, no-fill, preplant and in-crop uses
- Lower use rates require less jugs and packaging
- Exceptional mixing capabilities with liquid fertilizers – even in hard water
- Superior formulation mixes faster and stays in suspension longer than other 2,4-D herbicides

KEY USES

Corn, preplant soybeans, sorghum, non-crop areas

KEY WEEDS CONTROLLED

Chicory, cocklebur, dandelion, ground ivy, jimsonweed, kochia, lambsquarters, pigweed, purslane, ragweed, velvetleaf, vetch (see label for complete list)

Nufarm

Weedone® LV4 EC

EPA REG. NO.	228-139-71368
ACTIVE INGR.	2,4-D ester (67.2% / 3.84 lb ae/gal)
FORMULATION	liquid
CHEM. FAMILY	phenoxycarboxylic acid
GROUP NO.	4 REI 12 hours
SIGNAL WORD	caution
PACKAGE SIZE	2.5 gal container (2 per case), 30 gal drum, 265 gal tote

Weedone® LV4 is one of the lowest volatile 2,4-D ester on the market. It is registered for small grains, corn, sorghum, pasture and rangeland, non-crop areas and preplant corn and soybeans and is more effective than amine formulations for controlling hard-to-kill weeds.

KEY PERFORMANCE BENEFITS

- Low-volatile 2,4-D ester formulation
- Broad-spectrum control of broadleaf and woody weeds
- Extremely low freezing temperature (less than 0°F)
- Excellent compatibility with liquid fertilizers

KEY USES

Corn (field, sweet and popcorn), cereal grains, grass seed crops, non-crop areas (fencerows), pasture, rangeland, red potatoes, sorghum, soybeans (preplant only)

KEY WEEDS CONTROLLED

Bindweed, curly dock, marshelder, ragweed, smartweeds, tansy ragwort, thistle, wild garlic (see label for complete list)

Weedone® LV4 Solventless

EPA REG. NO.	71368-14
ACTIVE INGR.	2,4-D ester (62.6% / 3.8 lbs ae/gal)
FORMULATION	liquid
CHEM. FAMILY	phenoxycarboxylic acid
GROUP NO.	4 REI 12 hours
SIGNAL WORD	caution
PACKAGE SIZE	2.5 gal container (2 per case), 30 gal drum, 250 gal tote

Weedone® LV4 Solventless uses high-quality emulsifiers and surfactants to replace the solvent base. This low-odor formulation mixes well with most liquid fertilizers and is an excellent choice for burndown applications. It easily washes from containers and spray equipment.

KEY PERFORMANCE BENEFITS

- Contains no solvents, solvents are replaced with high-quality emulsifiers and surfactants
- Low-odor formulation
- Easily rinses out of containers and spray equipment
- Greater crop tolerance than most conventional 2,4-D formulations

KEY USES

Barley*, field corn, grain, grasses for seed production, oat*, preplant soybeans, rye*, sorghum, wheat*, fallow land, non-crop areas, pastures and rangelands

*not underseeded with a legume

KEY WEEDS CONTROLLED

Annual yellow sweet clover, bull thistle, coffeeweed, jimsonweed, marshelder, ragweed, velvetleaf (see label for complete list)



Nufarm

Weedone® LV6 EC

EPA REG. NO.	71368-11
ACTIVE INGR.	2,4-D ester (87.3% / 5.5 lbs ae/gal)
FORMULATION	liquid
CHEM. FAMILY	phenoxycarboxylic acid
GROUP NO.	4 REI 12 hours
SIGNAL WORD	caution
PACKAGE SIZE	2.5 gal container (2 per case), 30 gal drum, 265 gal tote, bulk

This low-volume formulation offers easy handling and storing and is ideal for aerial or custom application. As with Weedone® LV4, it mixes well with liquid fertilizers and can also be mixed with water and oil to control tough perennial broadleaf weeds and brush.

KEY PERFORMANCE BENEFITS

- Low-volatile formulation mixes well with liquid fertilizers
- Mixes with water and oil to control tough perennial broadleaf weeds and brush
- Ideal for aerial application utilizing less product
- Highest acid concentration for more efficient shipping and storage

KEY USES

Barley*, corn, grain, grasses for seed production, oat*, preplant soybeans, rye*, sorghum, wheat*, fallow land, non-crop areas, pastures and rangelands
*not underseeded with a legume

KEY WEEDS CONTROLLED

Annual yellow sweet clover, bull thistle, coffeeweed, jimsonweed, marshelder, ragweed, velvetleaf
(see label for complete list)

PHENOXY AMINE Effective control of broadleaf weeds

Orchard Clean®

EPA REG. NO.	71368-1
ACTIVE INGR.	2,4-D amine (46.8% / 3.8 lbs ae/gal)
FORMULATION	liquid
CHEM. FAMILY	phenoxycarboxylic acid
GROUP NO.	4 REI 48 hours
SIGNAL WORD	danger
PACKAGE SIZE	2.5 gal container (2 per case)

Orchard Clean® is a low-volatile, premium 2,4-D amine formulation that is sequestered to 1,500-ppm water hardness. This “workhorse” of 2,4-D amines is registered for control of a variety of difficult weeds - including marestail, mustard, and fleabane.

KEY PERFORMANCE BENEFITS

- Readily soluble in water and forms a true solution
- Broad-spectrum broadleaf phenoxy herbicide in a low-volatile formulation
- Specialty label allows for applications in a variety of orchard settings

KEY USES

Apples, grape vineyards*, pears, stone fruit and nut orchards
*only for use in California

KEY WEEDS CONTROLLED

Bull thistle, burdock, carrot, chicory, coffeeweed, dandelion, evening primrose, galinsoga, garlic, healall, jimsonweed, lambsquarters, lettuce, morningglory, mustards, onion, pepperweeds, pigweeds, plantains, prickly lettuce, ragweed, rough fleabane, salsify, sowthistle, vetch
(see label for complete list)

Weedar® 64

EPA REG. NO.	71368-1
ACTIVE INGR.	2,4-D amine salt (46.8% / 3.8 lbs ae/gal)
FORMULATION	liquid
CHEM. FAMILY	phenoxycarboxylic acid
GROUP NO.	4 REI 48 hours
SIGNAL WORD	danger
PACKAGE SIZE	1 gal container (5 per case), 2.5 gal container (2 per case), 30 gal drum, 265 gal tote, bulk

Weedar® 64 is a non-volatile, premium DMA-4 formulation that is sequestered to 1,500-ppm water hardness. This “workhorse” of 2,4-D amines is registered for a variety of settings including cereal grains, corn, sorghum, rice, sugarcane, pastures/rangeland, and tree fruit and nut crops.

KEY PERFORMANCE BENEFITS

- Readily soluble in water and forms a true solution
- Broad-spectrum broadleaf phenoxy herbicide in a non-volatile formulation
- Versatile label includes aquatics and irrigation ditches

KEY USES

Barley, corn, oat, preplant soybeans*, rice*, rye, sorghum, sugarcane*, wheat, aquatic sites, CRP, irrigation ditch banks, fallow land

KEY WEEDS CONTROLLED

Bull thistle, burdock, chicory, jimsonweed, lambsquarters*, marshelder, morningglory, plantain, prickly lettuce, ragweed, rough fleabane, sowthistle, vetch, wild carrot, wild lettuce, wild onion
(see label for complete list)
*not registered for use in California

PHENOXY MCPA Effective control of broadleaf weeds

Chiptox®

EPA REG. NO.	11685-20-71368
ACTIVE INGR.	MCPA sodium salt (24% / 2 lbs ae/gal)
FORMULATION	liquid
CHEM. FAMILY	phenoxycarboxylic acid
GROUP NO.	4 REI 48 hours
SIGNAL WORD	danger
PACKAGE SIZE	2.5 gal container (2 per case)

Available in limited number of states
visit nufarm.com/uscrop

Chiptox® is intended for use on small grains and peas. This product was designed for greater crop tolerance, registered for use on peas in the Pacific Northwest, with best results achieved under warm temperature conditions.

KEY PERFORMANCE BENEFITS

- Readily soluble in water and forms a true solution
- Phenoxy product ideal for use on Pacific Northwest peas
- Effective on key weeds along with crop tolerance of small grains and peas

KEY USES

Barley, oat, peas (Pacific Northwest), rye, wheat

KEY WEEDS CONTROLLED

Cocklebur, lambsquarters, mustard (except blue mustard), pepperweed, purslane, ragweed, yellow rocket
(see label for complete list)

Dagger® 5.2 LB. MCPA Ester Herbicide

EPA REG. NO.	228-267-71368
ACTIVE INGR.	MCPA ester (91% / 5.2 lbs ae/gal)
FORMULATION	liquid
CHEM. FAMILY	phenoxyacetic acid
GROUP NO.	4 REI 12 hours
SIGNAL WORD	warning
PACKAGE SIZE	2.5 gal container (2 per case)

Dagger® 5.2 LB. is a unique, low-odor formulation. It mixes well with other herbicides for broad-spectrum weed control in small grain markets and offers the highest active ingredient concentration of any MCPA ester in the agricultural market – which means less product handling.

KEY PERFORMANCE BENEFITS

- Controls more than 40 broadleaf weed species
- Highest active ingredient concentration of any MCPA ester
- Low-odor formulation
- Excellent tank-mix partner with other herbicides
- Less product to handle and store

KEY USES

Flax, oat, small grains not underseeded to legumes, rangeland

KEY WEEDS CONTROLLED

Fennel, kochia, mustard, pepperweed, prickly lettuce, stinkweed, thistle, wild carrot, yellow daisy
(see label for complete list)

Nufarm Rhomene®

EPA REG. NO.	229-143-71368
ACTIVE INGR.	MCPA amine salt (48.58% / 3.7 lbs ae/gal)
FORMULATION	liquid
CHEM. FAMILY	phenoxyacetic acid
GROUP NO.	4 REI 48 hours
SIGNAL WORD	danger
PACKAGE SIZE	2.5 gal container (2 per case), 250 gal tote

Rhomene® is an extremely versatile MCPA formulation that provides a reduced risk of injury to small grains when compared with other 2,4-D's. Rhomene is effective in moderately hard water and serves as an excellent tank-mix partner to other small grain herbicides.

KEY PERFORMANCE BENEFITS

- Excellent tank-mix partner with other small grain herbicides
- Versatile MCPA, effective in moderately hard water

KEY USES

Barley, oat, peas (Pacific Northwest only), rye, wheat, established grassland and pastures

KEY WEEDS CONTROLLED

Beggartick, bindweed, burdock, buttercup, cocklebur, daisy, dandelion, field bindweed, goldenrod, honeysuckle, knotweed, kochia, lambsquarters, mustard, nutgrass, pigweed, plantain, puncturevine, purslane, ragweed, shepherd's-purse, stinging nettle, thistle, vetch, witchweed
(see label for complete list)

Rhonox®

EPA REG. NO.	11685-21-71368
ACTIVE INGR.	ester MCPA (67.9% / 3.7 lbs ae/gal)
FORMULATION	liquid
CHEM. FAMILY	phenoxyacetic acid,
GROUP NO.	4 REI 12 hours
SIGNAL WORD	caution
PACKAGE SIZE	2.5 gal container (2 per case), 265 gal tote

Rhonox® is Nufarm's most effective MCPA formulation for larger and difficult to control weed species. It is registered for use on small grains (not underseeded to legumes), flax or oats and is most effective in low humidity areas. Plus, it can be tank-mixed for prescription weed control.

KEY PERFORMANCE BENEFITS

- Most effective MCPA formulation for larger and difficult to control species
- Tank-mix partner with sulfonylureas, dicamba and bromoxynil herbicides for prescription weed control
- Best effectiveness in low humidity areas

KEY USES

Barley, flax, oat, rye, wheat, fallow land and rangeland

KEY WEEDS CONTROLLED

Burdock, cocklebur, dandelion, field pennycress, lambsquarters, mustard (except blue mustard), pepperweed (except perennial), pigweed, plantain, purslane, ragweed (common and giant), shepherd's-purse, thistle (bull and Russian), yellow rocket
(see label for complete list)

Thistrol®

EPA REG. NO.	71368-5
ACTIVE INGR.	MCPB sodium salt (23.5% / 2 lbs ae/gal)
FORMULATION	liquid
CHEM. FAMILY	phenoxyacetic acid
GROUP NO.	4 REI 24 hours
SIGNAL WORD	warning
PACKAGE SIZE	2.5 gal container (2 per case), 250 gal tote

A Nufarm exclusive, Thistrol® is specifically designed to control post-emerge Canada thistle in green pea crops.

KEY PERFORMANCE BENEFITS

- Pre-emergent option for Canada thistle control or suppression that is safe to field peas
- May be mixed with other herbicides to expand weed spectrum

KEY USES

Peas and mint

KEY WEEDS CONTROLLED

Canada thistle
(see label for complete list)



Candor™

EPA REG. NO.	228-565
ACTIVE INGR.	triclopyr ester (16.5% / 1 lb ae/gal), 2,4-D ester (34.4% / 2 lbs ae/gal)
FORMULATION	liquid
CHEM. FAMILY	pyridinecarboxylic acid, phenoxycarboxylic acid
GROUP NO.	4 REI *See note below
SIGNAL WORD	caution
PACKAGE SIZE	1 gal container (6 per case), 2.5 gal container (2 per case)

*Do not allow worker entry until sprays have dried

Candor™ herbicide is an effective, low-volatile premix that controls most kinds of unwanted trees and brush as well as annual and perennial broadleaf weeds without harming desirable grasses. The post-emergence activity targets woody plants and brush including blackberries and poison ivy.

KEY PERFORMANCE BENEFITS

- Controls more than 100 tough annual and perennial broadleaf weeds and woody plants
- May be combined with liquid nitrogen fertilizer
- Except for lactating dairy animals, there are no grazing restrictions following applications of Candor
- Non-restricted use pesticide

KEY USES

CRP acres, fencerows, non-irrigation ditch banks, pastures, rangeland, roadsides and other non-crop areas

KEY WEEDS CONTROLLED

Burdock, chickweed (mouse-ear), clover, cocklebur, horseweed, kochia, kudzu, lambsquarters, lespedeza, mustard, oxalis, plantain, purslane, shepherd's-purse, spurge, vetch, white henbit, yellow rocket
(see label for complete list)

Clean Slate®

EPA REG. NO.	228-491
ACTIVE INGR.	clopyralid amine salt (40.9% / 3 lbs ae/gal)
FORMULATION	liquid
CHEM. FAMILY	pyridinecarboxylic acid
GROUP NO.	4 REI 12 hours
SIGNAL WORD	caution
PACKAGE SIZE	64 oz container (4 per case), 2.5 gal container (2 per case)

Highly selective, Clean Slate® controls noxious weeds without damaging most established grasses, hardwoods and conifers. Plus, it can be tank-mixed with other products to improve the spectrum of control. Labeled for multiple crops, it provides selective broadleaf weed control including outstanding post-emergent control of Canada thistle.

KEY PERFORMANCE BENEFITS

- Outstanding post-emergence control of tough weeds including kudzu, thistle, knapweed, ragweed, mimosa, redbud, locust, mesquite and others
- Perfect for forestry applications including conifer and hardwood plantations
- Selective to most desired established grasses, hardwoods and conifers
- Low volatility and rainfast in 2 hours
- Excellent tank-mix partner

KEY USES

Non-crop areas, rangeland and permanent grass pastures, wildlife openings including grazed areas on these sites
OTHER USES INCLUDE: Barley, oats, wheat, canola, corn (field, popcorn, sweet), oats, stone fruits, sugarbeet, Christmas trees

KEY WEEDS CONTROLLED

Burdock, clover, cocklebur, horseweed, knapweed, kudzu, locust, mesquite, mimosa, ragweed, redbud, sowthistle, thistle (see label for complete list)

Cleansweep™ M

EPA REG. NO.	71368-89
ACTIVE INGR.	MCPA ester (27.3% / 1.67 lbs ae/gal), bromoxynil ester (25.48% / 1.67 lbs ae/gal), fluroxypyr ester (10.08% / 0.67 lb ae/gal)
FORMULATION	emulsifiable concentrate
CHEM. FAMILY	phenoxycarboxylic acid, nitrile, pyridinecarboxylic acid
GROUP NO.	4 and 6 REI 24 hours
SIGNAL WORD	caution
PACKAGE SIZE	2.5 gal container (2 per case), 125 gal tote, 265 gal tote

Cleansweep™ M takes broadleaf weed control in cereals to new levels. It controls tough weeds like kochia with excellent tank-mix compatibility for fast, easy application. Plus, Cleansweep M gives you outstanding performance and convenience.

KEY PERFORMANCE BENEFITS

- Outstanding broad-spectrum broadleaf weed control
- Excellent compatibility with grass control herbicides
- Excellent crop safety
- Smart choice for weed resistance management with multiple modes of action

KEY USES

Barley, oat, wheat, CRP acres and fallow land

KEY WEEDS CONTROLLED

Buckwheat, canola, chamomile, chickweed, clover, cocklebur, coffeeweed, gromwell, hemp dogbane, henbit, horseweed, jimsonweed, knawel, knotweed, kochia, ladythumb, lambsquarters, marshelder, pigweed, puncturevine, purslane, shepherd's-purse, sowthistle, thistle, velvetleaf, waterhemp
(see label for complete list)

Comet™

EPA REG. NO.	71368-87
ACTIVE INGR.	fluroxypyr ester (26.2% / 1.5 lbs ae/gal)
FORMULATION	liquid
CHEM. FAMILY	phenoxycarboxylic acid
GROUP NO.	4 REI 12 hours
SIGNAL WORD	warning
PACKAGE SIZE	2.5 gal container (2 per case), 265 gal tote

Comet™ is a selective post-emergence herbicide that controls annual and perennial broadleaf weeds and volunteer potatoes in small grains, field corn, sweet corn, grain sorghum, fallow cropland, on-farm non-cropland and pome fruit.

KEY PERFORMANCE BENEFITS

- Provides excellent control of many annual and perennial broadleaf weeds
- Allows for crop rotation flexibility
- Highly compatible with a wide spectrum of tank-mix options

KEY USES

Field corn, grain sorghum, pome fruit, small grains, sweet corn, fallow cropland, on-farm non-cropland, pastures and rangeland

KEY WEEDS CONTROLLED

Chickweed, clover, cocklebur, coffeeweed, jimsonweed, morningglory, prickly lettuce, puncturevine, purslane, ragweed, sunflower, velvetleaf
(see label for complete list)

Relegate®

EPA REG. NO.	228-521		
ACTIVE INGR.	triclopyr ester (61.6% / 4 lbs ae/gal)		
FORMULATION	liquid		
CHEM. FAMILY	pyridinecarboxylic acid		
GROUP NO.	4	REI	12 hours
SIGNAL WORD	caution		
PACKAGE SIZE	1 gal container (4 per case), 2.5 gal container (2 per case), 30 gal drum, 250 gal tote		

Relegate® offers ranchers and producers flexible, long-lasting brush control specifically designed for range and pastures. With excellent grass tolerance, Relegate offers control of more than 60 woody plant species, plus many tough broadleaf weeds, ultimately leading to healthier pastures.

KEY PERFORMANCE BENEFITS

- Controls more than 60 woody plant species and many broadleaf weeds without harming desirable grasses
- May be applied as a foliar spray or as a basal bark or cut stump treatment to woody plants
- Compatible with many other broadleaf active ingredients
- May be tank-mixed with liquid nitrogen fertilizer and foliar applied

KEY USES

CRP acres, forests, pastures and rangeland

KEY WEEDS CONTROLLED

WOODY PLANTS: Alder, birch, blackberry, boxelder, cherry, dogwood, kudzu, mulberry, persimmon, salt cedar, sumac, trumpet creeper, wax myrtle, willow
ANNUAL / PERENNIAL BROADLEAF WEEDS: Black medic, burdock, chicory, clover, dandelion, ground ivy, lambsquarters lespedeza, matchweed, mustard, oxalis, plantain, purple loostripe, ragweed, vetch (see label for complete list)

Truslate®

EPA REG. NO.	71368-86		
ACTIVE INGR.	clopyralid MEA salt (11.3% / 0.75 lb ae/gal), fluroxypyr ester (12.3% / 0.75 lb ae/gal)		
FORMULATION	emulsifiable concentrate		
CHEM. FAMILY	pyridinecarboxylic acid		
GROUP NO.	4	REI	12 hours
SIGNAL WORD	caution		
PACKAGE SIZE	2.5 gal container (2 per case), 30 gal drum, 250 gal tote, bulk		

Truslate® is a selective post-emergence herbicide that controls annual and perennial broadleaf weeds in wheat, barley, and oats not underseeded with a legume. Difficult weeds like Canada thistle, kochia and wild buckwheat don't stand a chance against Truslate.

KEY PERFORMANCE BENEFITS

- Controls more than 60 broadleaf weeds and suppresses more than 15
- Controls large kochia and herbicide-tolerant biotypes of kochia, plus Canada thistle and wild buckwheat
- Readily absorbed by roots and foliage, disrupting plant cell growth
- Rapidly translocated
- Wide window of application
- Can be tank-mixed with most other broadleaf and grass herbicides

KEY USES

Barley*, corn (sweet, field), grass seed, oat*, permanent grasses in CRP non-cropland, wheat*

*not underseeded with a legume

KEY WEEDS CONTROLLED

Buckwheat, burdock, chamomile, chickweed, clover, cocklebur, daisy, dandelion, groundsel, hawksbeard, hawkweed, hemp dogbane, horseweed, jimsonweed, kochia, lentils, lettuce, morningglory, purslane, ragweed, sicklepod, sowthistle, thistle, velvetleaf (see label for complete list)

Truslate® Pro

EPA REG. NO.	71368-88		
ACTIVE INGR.	MCPA ester (30.73% / 1.75 lbs ae/gal), fluroxypyr ester (10.37% / 0.64 lb ae/gal), clopyralid acid (5.6% / 0.5 lb ae/gal)		
FORMULATION	emulsifiable concentrate		
CHEM. FAMILY	phenoxycarboxylic acid, pyridinecarboxylic acid		
GROUP NO.	4	REI	12 hours
SIGNAL WORD	warning		
PACKAGE SIZE	2.5 gal container (2 per case), 265 gal tote		

With three active ingredients in a convenient premix, Truslate® Pro offers unparalleled control of broadleaf weeds – including kochia, wild buckwheat, Canada thistle and lambsquarters – in cereal crops. It also offers excellent crop safety and outstanding tank-mix compatibility.

KEY PERFORMANCE BENEFITS

- Outstanding performance on tough broadleaf weeds including kochia, wild mustard, pigweed and lambsquarters
- Convenient premix of three active ingredients
- Developed to be tank-mix compatible with popular grass herbicides
- Excellent crop safety

KEY USES

Barley, oat, wheat

KEY WEEDS CONTROLLED

Buckwheat, canola, chickweed, clover, cocklebur, dandelion, horseweed, jimsonweed, kochia, lambsquarters, mallow, marshelder, morningglory, mustard, nightshade, pigweed, puncturevine, ragweed, Russian thistle, shepherd's-purse, smartweed, sunflower, thistle, velvetleaf, vetch (see label for complete list)

PREMIUM BURNDOWN HERBICIDES Flexible solutions with knockdown power and lasting residual



EPA REG. NO.	71368-131		
ACTIVE INGR.	rimsulfuron (16.7%), thifensulfuron (16.7%)		
FORMULATION	water-dispersible granule		
CHEM. FAMILY	sulfonylurea		
GROUP NO.	2	REI	4 hours
SIGNAL WORD	caution		
PACKAGE SIZE	60 oz bottle (8 per case) (20–40 treated acres per bottle)		

Leopard™ Herbicide delivers exceptional planting flexibility from fall to early preplant burndown for soybeans, field corn and cotton. Leopard's dual-active formulation boosts foliar activity and adds residual so that fields stay clean up to planting. If planting to field corn, you can apply at, and/or immediately after, planting.

KEY PERFORMANCE BENEFITS

- Dual-active formulation boosts post activity and provides residual control
- Excellent rotational tool with alternative MOA for resistance management
- Lasting early-season control of many broadleaves, grass and winter annuals
- Low-use rate and excellent tank mix partner for burndown herbicides
- Apply 30–45 days prior to planting for increased cropping flexibility; field corn can be planted immediately after application

KEY USES

Rotation crops (including corn, soybeans, peanuts), fall and preplant burndown

KEY WEEDS CONTROLLED

RESIDUAL: Barnyardgrass, henbit, kochia, lambsquarters, mare's tail, mustard, pigweed, signalgrass
BURNDOWN: Alfalfa, chickweed, crabgrass, curly dock, field pennycress, groundsel, knotweed, mustard, panicum, shepherd's-purse, velvetleaf, wild radish (see label for complete list)



This guide is intended to provide a product overview. See product labels for complete details and labeled use listing.
nufarm.com/uscrop



Longbow™ EC spans multiple row and specialty crops to strengthen control of broadleaf weeds. At very low use rates, Longbow is an excellent tank mix partner with most burndown, non-selective herbicides to add residual punch for long term broadleaf weed control. Registered as a harvest aid/defoliant for cotton, corn and 10 other crops.

EPA REG. NO.	71368-133
ACTIVE INGR.	carfentrazone-ethyl (22.3% / 2 lb ai/gal)
FORMULATION	emulsifiable concentrate
CHEM. FAMILY	triazolinone
GROUP NO.	14 REI 12 hours
SIGNAL WORD	caution
PACKAGE SIZE	1 quart container (4 per case)

Not registered for use in California

KEY PERFORMANCE BENEFITS

- Wide spectrum broadleaf weed control
- Fast-acting weed control
- Very broad crop spectrum
 - Compatible with more than 45 crops or crop groups
- Excellent tank-mix partner
- Low use rates
- Labeled for herbicide and harvest aid uses
- Convenient package size for easy handling

KEY USES

Alfalfa, corn, cotton, peanuts, sorghum, soybeans, spring and winter wheat, sunflowers, sugarcane, rice (southern states)

OTHER USES INCLUDE: Grape, potato, tree fruit, tree nut

KEY WEEDS CONTROLLED

Cocklebur, kochia, lambsquarters, morningglory, nightshade, Palmer amaranth, pigweed, Russian thistle, velvetleaf, waterhemp
(see label for complete list)



Panther® MTZ strikes the perfect balance, delivering a double punch of burndown and residual efficacy. With two modes of action, Panther MTZ gives growers a perfect resistance management tool on the most difficult broadleaf weeds including Palmer pigweed, waterhemp and marestail.

EPA REG. NO.	71368-125
ACTIVE INGR.	flumioxazin (7.32% / 0.67 lb ai/gal), metribuzin (32.77% / 3 lbs ae/gal)
FORMULATION	liquid (SC)
CHEM. FAMILY	triazinone, N-phenylphthalimide
GROUP NO.	14 and 5 REI 12 hours
SIGNAL WORD	caution
PACKAGE SIZE	2.5 gal container (2 per case), 125 gal tote, 265 gal tote

KEY PERFORMANCE BENEFITS

- Convenient liquid formulation makes mixing and loading faster and easier
- Wide range of application timings, providing crop rotation flexibility
- Provides both knockdown and residual weed control
- Contains optimal amount of metribuzin compared to other MTZ premixes
- Controls a broad spectrum of broadleaf and grass weed species

KEY USES

Soybeans, sugarcane, field corn, fallow

KEY WEEDS CONTROLLED

Carpetweed, chickweeds, coffee senna, common lambsquarters, common ragweed, dandelion, eclipta, field pennycress, filarees, henbit, kochia, marestail, morningglories, mustards, pigweeds, Russian thistle, shepherd's-purse, spotted spurge, velvetleaf, waterhemp, wild radish
(see label for complete list)



Panther® Pro Herbicide brings the power of three actives together in the first liquid flumioxazin premix. Labeled for preplant and pre-emerge use on soybeans, Panther Pro keeps fields clean with excellent residual control of more than 60 broadleaf weeds and grasses.

EPA REG. NO.	71368-120
ACTIVE INGR.	flumioxazin (7.11% / 0.67 lb ai/gal), metribuzin (31.83% / 3 lbs ae/gal), ammonium salt of imazethapyr (6.02% / 0.56 lb ae/gal)
FORMULATION	liquid
CHEM. FAMILY	triazinone, N-phenylphthalimide, imidazolinone
GROUP NO.	5, 14 and 2 REI 12 hours
SIGNAL WORD	caution
PACKAGE SIZE	2.5 gal container (2 per case), 125 gal tote, 265 gal tote

KEY PERFORMANCE BENEFITS

- First liquid flumioxazin premix – with three different modes of action
- Excellent broad-spectrum weed control for soybeans
- Lasting residual control of more than 60 broadleaf weeds and grasses including susceptible winter annuals and many glyphosate-resistant species
- Can be applied alone, or as part of a fall, fallow seedbed, or spring burndown program
- Also labeled for fallow and non-crop bare ground areas

KEY USES

Soybeans, fallow land, bare ground in non-crop farm areas

KEY WEEDS CONTROLLED

Carpetweed, chickweed, dandelion, eclipta, evening primrose, Florida beggarweed, Florida pusley, foxtail, henbit, kochia, lambsquarters, London rocket, mallow, marestail, morningglory, nightshades, pigweeds, prickly lettuce, prickly sida, puncturevine, purslane, radish, ragweed, redmaids, shepherd's-purse, smartweed, sowthistle, velvetleaf, waterhemp (see label for complete list)



Panther® SC Herbicide provides excellent residual control of tough broadleaf weeds while offering flexible rotation options to many crops. Apply in the fall, early preplant, or preplant or pre-emerge for residual control in Roundup Ready® systems.

EPA REG. NO.	71368-113
ACTIVE INGR.	flumioxazin (41.4% / 4 lbs/gal)
FORMULATION	liquid
CHEM. FAMILY	N-phenylphthalimide
GROUP NO.	14 REI 12 hours
SIGNAL WORD	none
PACKAGE SIZE	2.5 gal container (2 per case), 265 gal tote, bulk

KEY PERFORMANCE BENEFITS

- Convenient new liquid formulation makes mixing and loading faster and easier
- Controls a broad spectrum of annual broadleaf and grass weeds, including most broadleaf weeds resistant to glyphosate
- Offers long-lasting residual control
- Flexible rotation options
- Enhanced speed of control on a broader weed spectrum in labeled burndown programs

KEY USES

Cotton, dry beans, field corn, peanuts, soybeans, sugarcane, sweet potato, fallow land and bare ground in non-crop farm areas

KEY WEEDS CONTROLLED

Carpetweed, chickweed, dandelion, evening primrose, Florida beggarweed, hemp sesbania, henbit, jimsonweed, kochia, lambsquarters, marestail, mustard, nightshade, pigweed, puncturevine, shepherd's-purse, spurred anoda, Venice mallow, waterhemp
(see label for complete list)

Tuscany SC

EPA REG. NO.	71368-113
ACTIVE INGR.	flumioxazin (41.4% / 4 lbs/gal)
FORMULATION	liquid
CHEM. FAMILY	N-phenylphthalimide
GROUP NO.	14 REI 12 hours
SIGNAL WORD	none
PACKAGE SIZE	64 oz container (4 per case), 2.5 gal container (2 per case)

Tuscany® SC Herbicide's convenient liquid formula controls more than 60 weeds with lasting residual control. Liquid Tuscany SC stays where you put it, with low leaching or volatilization potential. Plus, it delivers excellent rotational flexibility and dependable control in various weather conditions.

KEY PERFORMANCE BENEFITS

- Controls more than 60 annual broadleaf and grass weeds, including marestail, mallow, filaree and annual grasses
- Offers residual control in tree fruit, nut and grapes to keep weeds clear for months
- At least 1/4 inch rainfall or irrigation required to release activity

KEY USES

Many crops including; almond, grape, mint, pistachio, potato, non-bearing fruit and nut trees, fallow land and to maintain bare ground on non-crop areas of farms, orchards and vineyards

KEY WEEDS CONTROLLED

Chickweed, dandelion, filaree, groundsel, henbit, lambsquarters, little mallow, London rocket, marestail, mustard, nightshade, pigweed, puncturevine, purslane, radish, shepherd's-purse, waterhemp (see label for complete list)

GOAL BRANDS Gold standard weed control

Goal® 2XL

EPA REG. NO.	92894-2-71368
ACTIVE INGR.	oxyfluorfen (22.3% / 2 lbs/gal)
FORMULATION	liquid
CHEM. FAMILY	diphenyl ethers
GROUP NO.	14
REI	24 hours, 48 hours (onions, garlic, and horseradish)
SIGNAL WORD	warning
PACKAGE SIZE	2.5 gal (2 per case), 30 gal

Goal® 2XL delivers "extra long" control of many broadleaf and grassy weeds, including malva species. It works on contact and forms a lasting soil barrier to block emerging weeds for extended post- and pre-emerge control.

KEY BENEFITS:

- Proven pre- and post-emerge control
- Broad crop label and flexible application timings
- Long-lasting residual activity
- Excellent tankmix partner

KEY USES

Many crops including almond*, apple, cherry, cotton, grape**, citrus, olive, onion, pear, pecan, pistachio*, and walnut*

KEY WEEDS CONTROLLED

Burclover, cheeseweed (malva), fiddleneck, groundsel, henbit, knotweed, lambsquarters, miner's lettuce, morningglory spp., mustard, nettle, nightshade, pigweed, purslane, redmaids, sowthistle (see label for complete list)

*Includes non-dormant application in CA and AZ only

**Includes non-dormant application in CA only

GoalTender®

EPA REG. NO.	92894-3-71368
ACTIVE INGR.	oxyfluorfen (41% / 4 lbs/gal)
FORMULATION	liquid
CHEM. FAMILY	diphenyl ethers
GROUP NO.	14
REI	24 hours, 48 hours (onions, garlic, and horseradish)
SIGNAL WORD	caution
PACKAGE SIZE	1 gal (4 per case)

GoalTender® is a water-based formulation that holds well to soil and performs at lower rates with less environmental load. It delivers broadleaf weed burndown and lasting pre-emerge activity on broadleaves and grasses, making it ideal for residual herbicide programs.

KEY BENEFITS:

- Proven pre- and post-emerge control
- Long-lasting residual activity
- Holds well to soil with low volatility
- Low VOC meets California requirements
- Water-based formulation resulting in less environmental load

KEY USES

Many crops including almond*, apple, cherry, cotton, grape**, citrus, olive, onion, pear, pecan, pistachio*, and walnut*

KEY WEEDS CONTROLLED

Burclover, cheeseweed (malva), fiddleneck, groundsel, henbit, knotweed, lambsquarters, miner's lettuce, morningglory spp., mustard, nettle, nightshade, pigweed, purslane, redmaids, sowthistle (see label for complete list)

* Includes non-dormant application in CA and AZ only

** Includes non-dormant application in CA only

NOTES



>> NON-SELECTIVE HERBICIDES



GLUFOSINATE HERBICIDES Protect your high value horticultural crops



EPA REG. NO.	71368-112
ACTIVE INGR.	glufosinate ammonium (24.5% / 2.34 lbs/gal)
FORMULATION	liquid
CHEM. FAMILY	phosphinic acid
GROUP NO.	10
REI	12 hours
SIGNAL WORD	caution
PACKAGE SIZE	2.5 gal container (2 per case), 265 gal tote, bulk

Cheetah® non-selective, post-emergence herbicide provides fast, effective, control of the toughest broadleaf and grass weed challenges, including those resistant to glyphosate and multiple other herbicide classes.

KEY PERFORMANCE BENEFITS

- Fast, effective, non-selective control of tough grass, sedge, and broadleaf weeds
- Best glyphosate alternative, offering broad-spectrum weed control
- Directed sprays provide excellent control and crop safety in orchards and vineyards
- More consistent control than Gramoxone® on glyphosate-resistant weeds with no special handling restrictions
- For extended residual, tank mix with Tuscany® SC

KEY USES

Berry crops, citrus, grapes, olives, pome fruit, stone fruit, tree nuts, and potato vine desiccation

KEY WEEDS CONTROLLED

Chickweed, clover, crabgrass, dandelion, fleabane, foxtail, henbit, junglerice, kochia, lambsquarters, mallow, malva, marestalk, morningglory, nutsedge, purslane, ragweed, ryegrass, spurge, vetch, woodsorrel
(see label for complete list)

Row Crop Uses

Cheetah® can be used in a burndown program, as well as in “over-the-top” applications to all glufosinate tolerant cropping systems.

KEY PERFORMANCE BENEFITS

- Allows growers to rotate non-selective herbicides across multiple crops
- Non-selective, post-emergence broadleaf and grass weed control, including weeds resistant to glyphosate and multiple herbicide classes
- Fast control, kills weeds in days, minimizing weed competition for maximum yield

KEY USES

CROP POST-EMERGENCE: Soybeans, cotton, corn, and canola varieties with tolerance to glufosinate, including LibertyLink®, XtendFlex®, LLGT27, Enlist
BROADCAST BURNDOWN BEFORE PLANTING OR PRIOR TO CROP EMERGENCE: Any conventional or transgenic variety of canola, corn, cotton, soybeans, sugarbeets

KEY WEEDS CONTROLLED

CONTROLS MORE THAN 130 ANNUAL, BIENNIAL, PERENNIAL GRASS & BROADLEAF WEEDS INCLUDING: kochia, lambsquarters, marestalk, morningglory, waterhemp (see label for complete list)

MISCELLANEOUS HERBICIDES Outstanding weed control and harvest aid

Nufarm

Diquat 2L

EPA REG. NO.	228-675
ACTIVE INGR.	diquat dibromide (37.3%)
FORMULATION	liquid
CHEM. FAMILY	bipyridylium
GROUP NO.	22
REI	24 hours
SIGNAL WORD	caution
PACKAGE SIZE	2.5 gal container (2 per case), 250 gal tote

Nufarm Diquat 2L herbicide provides desiccation of green plant material on contact, enabling faster, cleaner, more efficient harvest. Diquat 2L may also be applied as a general herbicide or for site preparation in certain areas. It is water soluble, yet rainfast after 30 minutes.

KEY PERFORMANCE BENEFITS

- Foliar-applied and fast-acting
- Water-soluble formulation makes mixing simple
- No specialized equipment required – can be applied using conventional ground or aerial sprayers
- No harmful soil residues
- Use with an adjuvant

KEY USES

Alfalfa, canola, clover, potatoes

Tree, vine, small fruit and vegetable crops (non-bearing) for site preparation and vegetation control

KEY WEEDS CONTROLLED

Any foliage contacted by Diquat 2L herbicide will be killed
(see label for complete list)



COTTON PLANT GROWTH REGULATORS Manage vegetative growth for maximum yield

Pentia®

EPA REG. NO.	7969-191
ACTIVE INGR.	mepiquat pentaborate (9.6%)
FORMULATION	soluble liquid
CHEM. FAMILY	quaternary ammonium compound
REI	12 hours
SIGNAL WORD	caution
PACKAGE SIZE	2.5 gal container (2 per case), 265 gal tote

Now exclusively available from Nufarm, Pentia® Plant Regulator is tailor-made to enhance the yield potential of your cotton crop. Turn to Pentia for improved rainfastness, height management, boll retention, earliness and yield potential compared to products containing mepiquat chloride.

KEY PERFORMANCE BENEFITS

- Improved fruit retention and height-to-node ratio compared to mepiquat chloride
- Rainfast in 2 hours or 1 hour with adjuvant
- Fast absorption, 25% faster than mepiquat chloride
- Enhanced boll set and earliness
- Increased harvestable bolls and harvest efficiency

KEY USES

Cotton*

*Not for use in California

Mepex®

EPA REG. NO.	228-608
ACTIVE INGR.	mepiquat chloride (4.2% / 0.35 lb/gal)
FORMULATION	liquid
CHEM. FAMILY	quaternary ammonium salt
REI	12 hours
SIGNAL WORD	caution
PACKAGE SIZE	2.5 gal container (2 per case), 265 gal tote

Mepex® is a foliar-applied plant growth regulator that allows growers to manage cotton plants for short-season production. Mepex reduces plant height, offers better boll retention and helps improve defoliation – leading to reduced risk of yield and quality loss due to prolonged harvest.

KEY PERFORMANCE BENEFITS

- Reduces excessive vegetative growth
- Optimizes boll development for higher yields
- Suitable for early season applications
- Can reduce risk of yield and quality loss due to delayed or prolonged harvest
- Helps improve defoliation and reduce trash

KEY USES

Cotton

Gin Out™

EPA REG. NO.	228-606
ACTIVE INGR.	mepiquat chloride (4.2%), kinetin (.0025%)
FORMULATION	liquid
CHEM. FAMILY	quaternary ammonium salt and cytokinin
REI	12 hours
SIGNAL WORD	caution
PACKAGE SIZE	2.5 gal container (2 per case)

Formulated with kinetin, Gin Out™ Plant Growth Regulator reduces excessive cotton growth and puts more emphasis on boll development. Mepiquat chloride delivers growth control and boll retention, while kinetin helps to stimulate leaf expansion, bud formation and delays leaf senescence.

KEY PERFORMANCE BENEFITS

- Reduces excessive vegetative growth
- Optimizes boll development for higher yields
- Suitable for early season applications
- Can reduce risk of yield and quality loss due to delayed or prolonged harvest
- Helps improve defoliation and reduce trash

KEY USES

Cotton

CottonQuik®

EPA REG. NO.	228-607
ACTIVE INGR.	ethephon (18.3%), urea sulfate (58.6%)
FORMULATION	liquid
CHEM. FAMILY	phosphonic acid, monocarbamide dihydrogen sulfate
REI	48 hours, 72 hours (if average rainfall is less than 25" per year)
SIGNAL WORD	danger
PACKAGE SIZE	2.5 gal container (2 per case), 250 gal tote

CottonQuik® Cotton Harvest Aid/Defoliant accelerates the opening of mature unopened cotton bolls over a wide range of temperatures, minimizing regrowth for a clean harvest. CottonQuik allows you to use a reduced rate of defoliant while improving consistency and speeding leaf drop.

KEY PERFORMANCE BENEFITS

- Superior boll opening that begins 3 to 5 days sooner than other products
- Delivers consistent results, even in cool weather, to help keep harvest on schedule
- Can help minimize regrowth
- Enhances defoliant activity to improve consistency and hasten leaf drop

KEY USES

Cotton

CutOut™

EPA REG. NO.	228-678
ACTIVE INGR.	diuron (6%), thidiazuron (12%)
FORMULATION	suspension concentrate
CHEM. FAMILY	urea
REI	12 hours
SIGNAL WORD	caution
PACKAGE SIZE	2.5 gal container (2 per case)

CutOut™ Cotton Defoliant promises fast defoliation even when cold fronts are in the forecast. CutOut removes mature leaves and new growth to reduce trash and preserve lint quality. Plus, it can be tank-mixed with other harvest aids to improve performance for a faster finish.

KEY PERFORMANCE BENEFITS

- Offers consistent, clean defoliation
- Defoliates with less desiccation
- Helps preserve lint quality by removing mature leaves and suppressing new growth
- Performs even in tough weather conditions
- Excellent tank-mix partner with Super Boll® or any other boll-opening products

KEY USES

Cotton

FreeFall® SC

EPA REG. NO.	228-653
ACTIVE INGR.	thidiazuron (41.4%)
FORMULATION	suspension concentrate
CHEM. FAMILY	urea
REI	12 hours
SIGNAL WORD	caution
PACKAGE SIZE	1 gal container (4 per case)

FreeFall® SC Cotton Defoliant removes juvenile growth while controlling re-growth, allowing for a no-stick, no-hassle harvest at optimum crop maturity. Thidiazuron, the active ingredient in FreeFall, is recognized as the long-time standard in effective defoliation.

KEY PERFORMANCE BENEFITS

- Offers excellent defoliation for less trash in cotton
- Provides excellent re-growth control and removes juvenile growth
- Enables harvest at maximum maturity
- Single active ingredient allows you to customize your defoliation program

KEY USES

Cotton

Super Boll®

EPA REG. NO.	228-659
ACTIVE INGR.	ethephon (55.4%)
FORMULATION	liquid
CHEM. FAMILY	phosphonic acid
REI	48 hours, 72 hours (if average rainfall is less than 25" per year)
SIGNAL WORD	danger
PACKAGE SIZE	2.5 gal container (2 per case), 250 gal tote

Super Boll® Plant Regulator hastens the opening of mature cotton bolls, enabling growers to harvest earlier and increase recoverable yield. When applied to tobacco, it reduces the yellowing time of harvested leaves.

KEY PERFORMANCE BENEFITS

- Promotes the opening of mature cotton bolls
- Enables growers to harvest earlier and increase recoverable yield

KEY USES

Cotton, tobacco





Terminate Cotton Harvest Aid increases the natural ethylene synthesis process to quickly and effectively promote leaf drop and open cotton bolls. As a single application premix, crops may be harvested up to 5 days faster – reducing risk from damaging weather.

EPA REG. NO.	228-727
ACTIVE INGR.	ethephon (51.8%), cyclanilide (3.2%)
FORMULATION	liquid
CHEM. FAMILY	phosphonic acid, malonanilate
REI	48 hours, 72 hours (if average rainfall is less than 25" per year)
SIGNAL WORD	danger
PACKAGE SIZE	2.5 gal container (2 per case), 250 gal tote

KEY PERFORMANCE BENEFITS

- Premix formula promotes both leaf drop and boll opening naturally
- Quick results allow harvest up to 5 days sooner
- Clean crops and preserved lint quality maximize profits
- Tank mix compatible with other plant growth regulators to meet the demands of challenging weather conditions

KEY USES

Cotton (defoliant and boll opener)

PLANT GROWTH REGULATORS Improve yield and crop quality



Plant growth regulator for apples and pears that increases size and thins fruit. Increases yield and reduces alternate bearing in pistachios.

EPA REG. NO.	71368-60
ACTIVE INGR.	6-benzyladenine (1.9%)
FORMULATION	liquid
CHEM. FAMILY	purine
REI	12 hours
SIGNAL WORD	caution
PACKAGE SIZE	1 gal container (4 per case)

KEY PERFORMANCE BENEFITS

- Increases size and thins fruit
- Increases yield
- Reduces alternate bearing in pistachios

KEY USES

Apples, pears, pistachios
(see label for complete list)



Typy® Plant Growth Regulator improves apple shape and weight; increases lateral bud break and shoot growth and improves branch angles on most bearing and non-bearing apple, non-bearing pear, and non-bearing sweet cherry varieties.

EPA REG. NO.	55146-78
ACTIVE INGR.	6-benzyladenine (1.8%), gibberellins A4A7 (1.8%)
FORMULATION	liquid
CHEM. FAMILY	gibberellins, synthetic cytokinin
REI	24 hours
SIGNAL WORD	warning
PACKAGE SIZE	32 fl oz container (12 per case)

KEY PERFORMANCE BENEFITS

- Improves apple shape and weight
- Increases lateral bud break and shoot growth and improves branch angles on most bearing and non-bearing apple, non-bearing pear, and non-bearing sweet cherry varieties

KEY USES

Apples, non-bearing pears,
non-bearing sweet cherries
(see label for complete list)



Verve™ Plant Growth Regulator is an ethephon formulation that offers a wide range of uses on tobacco, fruit crops, fruiting vegetables, and wheat/barley to improve quality, yield and harvestability.

EPA REG. NO.	228-660
ACTIVE INGR.	ethephon (21.7%)
FORMULATION	liquid
CHEM. FAMILY	phosphonic acid
REI	48 hours 72 hours (if average rainfall is less than 25" per year)
SIGNAL WORD	danger
PACKAGE SIZE	2.5 gal container (2 per case)

KEY PERFORMANCE BENEFITS

- Prevents formation of undesirable fruit
- Promotes earlier maturation and coloring of tobacco leaves

KEY USES

Apples, blackberries, blueberries,
cantaloupe, cucumber, cherries,
grapes, peppers, pumpkin and squash,
tobacco, tomatoes, walnuts
(see label for complete list)



INSECTICIDES Protect valuable crops from devastating insect pests



EPA REG. NO.	228-734	
ACTIVE INGR.	abamectin (2.0% / 0.15 lbs/gal)	
FORMULATION	micro emulsion concentrate (MEC)	
CHEM. FAMILY	avermectin	
GROUP NO.	6	REI 12 hours
SIGNAL WORD	caution	RESTRICTED-USE
PACKAGE SIZE	1 gal container (4 per case)	

Abamex™ packages the power of abamectin in a low-volatility, water-based formulation. It works quickly to affect pests within hours. And, selective chemistry makes it a useful resistance management rotation partner. Translaminar activity protects the entire leaf, inside and out.

KEY PERFORMANCE BENEFITS

- Control mites and leafminers, Colorado potato beetles and other insects
- Controls potato and citrus psyllids that vector diseases such as HLB (citrus greening) and zebra chip
- Flexible application timing in an easy-to-use, low-volatility liquid formulation
- Rainfast within hours of application

KEY USES

Avocados, beans, celeriac (apium graveolens), citrus fruit, cotton, cucurbit vegetables, fruiting vegetables, grapes and small fruits, guava, herbs, hops (except California), leafy vegetables, lychee, mint, onion, papaya, pineapple, pome fruit, stone fruit, strawberries, tree nuts, tuberous and corm vegetables

KEY PESTS CONTROLLED

Broad mite, carmine spider mite, citrus leafminer, citrus thrips, European red mite, leafminers, pear rust mite, thrips, (see label for complete list)

Abamex™ is an EPA Restricted-Use Pesticide. Always read and follow label directions.

Nufarm
Lambda-Cyhalothrin 1 EC

EPA REG. NO.	228-708	
ACTIVE INGR.	lambda-cyhalothrin (13%)	
FORMULATION	emulsifiable concentrate	
CHEM. FAMILY	pyrethroid	
GROUP NO.	3	REI 24 hours
SIGNAL WORD	warning	RESTRICTED-USE
PACKAGE SIZE	1 gal container (4 per case)	

Control more than 50 of the toughest insects with Lambda-Cyhalothrin 1 EC. It is labeled for use on a wide variety of crops, provides excellent residual control and offers the convenience of an easy-mixing formulation.

KEY PERFORMANCE BENEFITS

- Controls more than 50 of the toughest insects on a wide variety of crops
- Excellent residual control
- EC formulation ensures easy mixing

KEY USES

Alfalfa, apples, field corn, peanuts, pears, popcorn, rice, seed corn, wild rice

KEY PESTS CONTROLLED

Alfalfa caterpillar, army cutworm, bird cherry, green cloverworm, greenbug, leafhoppers, loopers, sap beetle, webworm (see label for complete list)

Nufarm Lambda-Cyhalothrin 1 EC is an EPA Restricted-Use Pesticide. Always read and follow label directions.

Nuprid® 4F MAX

EPA REG. NO.	228-528	
ACTIVE INGR.	imidacloprid (40.4%)	
FORMULATION	liquid	
CHEM. FAMILY	neonicotinoid	
GROUP NO.	4A	REI 12 hours
SIGNAL WORD	caution	
PACKAGE SIZE	2.5 gal container (2 per case), 265 gal tote	

Nuprid® 4F MAX systemic insecticide provides lasting broad-spectrum control. Labeled for both soil and foliar application on many different crops, it offers outstanding control of aphids, whiteflies, mealybugs, Colorado potato beetles, leafhoppers and many other piercing and sucking pests.

KEY PERFORMANCE BENEFITS

- Selective control of key piercing and sucking insects
- Expanded label allows for soil and foliar application on multiple crops
- Helps stop transmission of many insect-vector diseases
- Readily mixes with other tank-mix partners

KEY USES

Berry, bush and vine crops, citrus, cotton, field vegetables, fruit orchards, peanuts, potato seed piece treatment, potatoes, soybeans, tobacco, tree nuts

KEY PESTS / DISEASES VECTOR CONTROLLED

INSECTS: Aphids, fleahoppers, leafminers, mealybugs, mole crickets, plant bugs, sawflies, scales, thrips, white grub complex, wireworms
DISEASES (due to vector control): Bacterial wilt, pecan scab, potato yellows (see label for complete list)





COPPER PRODUCTS Proven disease control

Champ® Dry Prill

The only dry prill copper available for no-dust mixing and handling.

EPA REG. NO.	55146-57		
ACTIVE INGR.	copper hydroxide (57.6% / 37.5% metallic copper equiv.)		
FORMULATION	dry prill		
CHEM. FAMILY	inorganic		
GROUP NO.	M1	REI	48 hours
SIGNAL WORD	warning		
PACKAGE SIZE	20 lb bag		

KEY PERFORMANCE BENEFITS

- Only dry prill copper product on the market
- Made using a unique polymer process that results in a virtually dust-free formulation
- Mixes fast and easily
- Excellent control of key diseases

KEY USES

Citrus crops, field crops, small fruits, tree crops, vegetables and vines

KEY DISEASES CONTROLLED

Bacterial diseases, black spot, leaf spots, powdery mildew (see label for complete list)

Champ® Formula 2 Flowable

Champ® Formula 2 Flowable is an advanced copper formulation that delivers excellent disease control. Developed with a small particle size, Champ stays in suspension longer, mixes easier in water and covers plants better to deliver superior protection.

EPA REG. NO.	55146-64		
ACTIVE INGR.	copper hydroxide (37.5% / 4.5 lbs/gal)		
FORMULATION	flowable		
CHEM. FAMILY	inorganic		
GROUP NO.	M1	REI	48 hours
SIGNAL WORD	warning		
PACKAGE SIZE	2.5 gal container (2 per case), 165 gal tote		

KEY PERFORMANCE BENEFITS

- Excellent control of key diseases
- Consistently ideal crystal size combined with state-of-the-art surfactants
- Long shelf life
- Pours and mixes easily – even after extended storage

KEY USES

Berries, field crops, tree crops, sugarbeets, tropical crops, vegetable crops, vines and hops

KEY DISEASES CONTROLLED

Bacterial canker, blights, leaf spot, yellow rust (see label for complete list)

Champ® WG

Champ® WG is an effective copper hydroxide formulation that is easy and efficient to use. As a water-dispersible granule, it provides surface area coverage and fungicidal protection. Plus, Champ WG won't clog equipment and allows more acres to be covered per day.

EPA REG. NO.	55146-1		
ACTIVE INGR.	copper hydroxide (77% / 50% metallic copper equiv.)		
FORMULATION	water-dispersible granule		
CHEM. FAMILY	inorganic		
GROUP NO.	M1	REI	48 hours
SIGNAL WORD	danger		
PACKAGE SIZE	20 lb bag		

KEY PERFORMANCE BENEFITS

- Actively controls several disease-causing fungi
- Multi-site mode of action
- Excellent rainfastness
- Resistance management for strobilurins and sterol-inhibitors

KEY USES

Citrus, field crops (alfalfa, barley, oat, peanut, sugarbeet, wheat), tree crops (almond, apple, apricot, avocado, cherry, filbert, nectarine, peach, pear, pecan, plum, prune, walnut), vegetable (bean dry/green, carrot, celery, cucurbits, garlic, onion, pea, pepper, potato, tomato), vines (hops)

KEY DISEASES CONTROLLED

Various blights, mildews, leaf spots and other pathogens (see label for complete list)



Champion⁺⁺

EPA REG. NO.	55146-115
ACTIVE INGR.	copper hydroxide (46.1% / 30% metallic copper equivalent)
FORMULATION	water-dispersible granule
CHEM. FAMILY	inorganic
GROUP NO.	MI REI 48 hours
SIGNAL WORD	caution
PACKAGE SIZE	10 lb bag (4 per case), 30 lb bag



FUNGICIDES Control diseases to maximize yield and quality

Champion⁺⁺™ Fungicide/Bactericide has the smallest, most consistent copper ions (particles) of any WG copper formulation. The result: better coverage and better disease control. And, Champion⁺⁺ delivers all that with less environmental load than high dose copper products.

KEY PERFORMANCE BENEFITS

- Small particle size results in excellent coverage and disease protection
- Stable WG formula pours easily and disperses quickly
- High copper ion bioavailability product means lower use rates and smaller pack sizes
- Controls plant pathogenetic fungi and bacteria (non-public health bacteria)
- OMRI Listed® for use in organic crop production

KEY USES

Alfalfa, almonds, apples, apricots, avocado, barley, beans, berries, carrots, celery, cherries, citrus, garlic, grapes, hops, leek, oats, onions, peaches, pears, peas, pecans, peppers, pistachio, plums, potatoes, prunes, strawberries, tomatoes, walnuts, wheat

KEY DISEASES CONTROLLED

Various blights, mildews, leaf spots and other pathogens
(see label for complete list)

Agri Tin® Flowable

Cost-effective liquid TPTH that offers a superior choice in tin products.

EPA REG. NO.	55146-84
ACTIVE INGR.	triphenyltin hydroxide (40% / 4 lbs/gal)
FORMULATION	liquid
CHEM. FAMILY	triphenyltin
GROUP NO.	30 REI 48 hours
SIGNAL WORD	danger RESTRICTED-USE
PACKAGE SIZE	120 oz container (4 per case), 2.5 gal container (2 per case)

KEY PERFORMANCE BENEFITS

- Actively controls several disease causing fungi
- Multi-site mode of action
- Liquid formulation that offers superior coverage and control
- Excellent rainfastness
- Resistance management for strobilurins and sterol-inhibitors

KEY USES

Pecans, potatoes, sugarbeets

KEY DISEASES CONTROLLED

PECAN: Leaf blotch, scab
POTATO: Early and late blight
SUGARBEET: Cercospora leaf spot
(see label for complete list)

Agri Tin® Flowable is an EPA Restricted-Use Pesticide. Always read and follow label directions.

Phostrol®

Phostrol® Agricultural Fungicide is one of the few phosphorous acids labeled as a fungicide. A neutral pH requires no buffering and allows integration with many other fungicides. These traits allow for compatibility in tank mixes, making Phostrol an excellent fit for any disease management program.

EPA REG. NO.	55146-83
ACTIVE INGR.	mono- and dibasic sodium potassium and ammonium phosphites (53.6%)
FORMULATION	liquid
CHEM. FAMILY	phosphite
GROUP NO.	33 REI 4 hours
SIGNAL WORD	caution
PACKAGE SIZE	2.5 gal container (2 per case), 250 gal tote

KEY PERFORMANCE BENEFITS

- Provides prevention and control of a broad spectrum of diseases
- Clear, virtually odorless formulation
- No buffer necessary

KEY USES

Asparagus, avocado, blueberries, citrus, cranberries, cucurbit crops, grapes, hops, leafy vegetables, nut crops, onions, potatoes, tomatoes

KEY DISEASES CONTROLLED

FOLIAR APPLICATION: Late blight, pink rot, Pythium leak
POST-HARVEST: Late blight, pink rot, silver scurf (see label for complete list)

Nufarm T-Methyl 4.5 F

Thiophanate-methyl, the active ingredient in Nufarm T-Methyl 4.5 F fungicide, effectively protects a broad spectrum of crops against a wide range of diseases including powdery mildew, rusts, brown spot, brown rot, Fusarium and Rhizoctonia root rot with effective, systemic disease control.

EPA REG. NO.	228-652
ACTIVE INGR.	thiophanate-methyl (46.2%)
FORMULATION	liquid
CHEM. FAMILY	thiophanates
GROUP NO.	1 REI 12 hours
SIGNAL WORD	caution
PACKAGE SIZE	2.5 gal container (2 per case), 250 gal tote

KEY PERFORMANCE BENEFITS

- Offers thorough protection against a broad spectrum of diseases across dozens of crops
- Excellent tank-mix option
- Works systemically to protect new growth

KEY USES

Almonds, apples, beans, cherries, cucurbits, peaches, peanuts, pecans, pistachios, potatoes, soybeans, strawberries

KEY DISEASES CONTROLLED

Black pox, black rot, blossom blight, brooks fruit spot, brown rot, flyspeck, leaf spot, limb rot, powdery mildew, rust, scab, sooty blotch, web blotch
(see label for complete list)



Ultra Flourish®

EPA REG. NO.	55146-73		
ACTIVE INGR.	mefenoxam (25.1% / 2 lbs/gal)		
FORMULATION	emulsifiable concentrate		
CHEM. FAMILY	phenylamide		
GROUP NO.	4	REI	48 hours
SIGNAL WORD	warning		
PACKAGE SIZE	1 gal container (4 per case), 2.5 gal container (2 per case)		

Ultra Flourish® Agricultural Fungicide protects many crops from harmful soil diseases caused by *Pythium* and *Phytophthora* species. Ultra Flourish's systemic mode of action prevents spore production and inhibits mycelial growth of fungus and improves crop health and vigor.

KEY PERFORMANCE BENEFITS

- Highly active fungicide formulation
- Can be applied in combination with liquid fertilizers or saturated into dry fertilizers
- Excellent crop safety
- Provides efficient control of foliar and soil diseases in a wide variety of crops

KEY USES

Asparagus, citrus, cole crops, cucurbit vegetables, eggplant, leafy vegetables, onions, peppers, potatoes, root and tuber vegetables, sugarbeets, tobacco, tomatoes

KEY DISEASES CONTROLLED

Brown rot, citrus foot rot, crown rot, gummosis, root rot, spear rot (see label for complete list)

BACTERICIDES Industry standard for bacterial disease control

Agri-Mycin® 50

EPA REG. NO.	55146-98		
ACTIVE INGR.	streptomycin sulfate (65.8% / equivalent to 50% streptomycin)		
FORMULATION	wettable powder		
CHEM. FAMILY	glucopyranosyl		
GROUP NO.	25	REI	12 hours
SIGNAL WORD	caution		
PACKAGE SIZE	3 lb bag (6 per case)		

Agri-Mycin® 50 protects apples, pears and other crops against bacterial diseases such as fire blight.

KEY PERFORMANCE BENEFITS

- Protectant bactericide
- Provides 3 to 4 days of dependable protection
- Easy on plants and animals
- Compatible with most pesticide

KEY USES

Apples, celery, pears, pepper, potato, tobacco, tomato, tree crops

KEY DISEASES CONTROLLED

Bacterial blight, bacterial spot, blue mold, fire blight, soft rot blackleg, wildfire (see label for complete list)

BlightBan® A506

EPA REG. NO.	228-710		
ACTIVE INGR.	<i>pseudomonas fluorescens</i> A506 (71%)		
FORMULATION	wettable powder		
BIO. FAMILY	pseudomonadaceae		
GROUP NO.	N/A	REI	4 hours
SIGNAL WORD	caution		
PACKAGE SIZE	10.5 oz package (10 per case)		

BlightBan® A506 suppresses fire blight and reduces fruit russetting. OMRI Listed® for use in organic agriculture, BlightBan A506 offers an unparalleled degree of crop safety and can be used in tank mixes and rotations as part of an integrated resistance management program.

KEY PERFORMANCE BENEFITS

- Provides fire blight and fruit russet suppression in pears and apples
- Offers frost protection for a variety of crops
- Essential part of resistance management programs
- Gentle on crops

KEY USES

Apples, pears

Frost protection for almond, cherry, peach, potato, strawberry, tomato and sour rot protection for grapes

KEY DISEASES CONTROLLED

Suppresses fire blight and reduces fruit russetting, plus offers frost protection (see label for complete list)



Mycoshield® controls fire blight in apples and pears and bacterial spot in nectarines and peaches. Can be used in combination or rotation with Agri-Mycin® and other bactericides, and is compatible with most pesticides commonly used in orchards. Mycoshield provides suppression of Huanglongbing (HLB) and citrus canker in citrus trees.

EPA REG. NO.	55146-97		
ACTIVE INGR.	calcium oxytetracycline (17.7% / equivalent to 17% oxytetracycline)		
FORMULATION	wettable powder		
BIO. FAMILY	tetracycline bactericide		
GROUP NO.	41	REI	12 hours
SIGNAL WORD	warning		
PACKAGE SIZE	2 lb bag (10 per case)		

KEY PERFORMANCE BENEFITS

- Controls fire blight in apples and pears and bacterial spot in peaches and nectarines
- Provides suppression of HLB and citrus canker
- Essential part of resistance management programs
- Gentle protectant bactericide – does not alter appearance or growth of fruit
- Long-lasting preventive control

KEY USES

Apples, citrus, nectarines, peaches, pears

KEY DISEASES CONTROLLED

Bacterial spot (on nectarines and peaches), canker (on citrus), fire blight (on apples and pears), HLB and citrus canker suppression (on citrus) (see label for complete list)

We're in This Together.

Nufarm is committed to offering crop protection products that solve problems affecting American farmers and better their ability to feed, clothe and house the World.

WE ARE GROWING WITH YOU: STAY INFORMED

With a healthy pipeline of new innovations, we recommend that you check our website often for newly registered products.

nufarm.com/uscrop



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Abamex™, Agri Tin® Flowable, Nufarm Lambda-Cyhalothrin 1 EC Insecticide, Trooper® P+D Herbicide and Trooper® 22K Herbicide are EPA Restricted-Use Pesticides. Always read and follow label directions.

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