

HERBICIDE BRAND NAMES, ACTIVE INGREDIENTS, CHEMICAL FAMILIES, AND MODES OF ACTION

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Brand Names	Active Ingredient(s)	Chemical Family	Mode of Action ¹
AAtrex	atrazine	Triazine	5
Accent	nicosulfuron	Sulfonylurea	2
Acclaim Extra	fenoxaprop	Aryloxyphenoxy-propionate	1
Acumen	pendimethalin	Dinitroaniline	3
Aim	carfentrazone	Triazolinone	14
Alachlor	alachlor	Chloroacetamide	15
Alanap	naptalam	Phthalamate simicarbazone	19
Arrow	clethodim	Cyclohexanedione	1
Arsenal	imazapyr	Imidazolinone	2
Atrazine	atrazine	Triazine	5
Assure II	quizalofop	Aryloxyphenoxy-propionate	1
Axial	pinoxaden	phenylpyrazoline	1
Axiom	flufenacet + metribuzin	Oxyacetamide + triazinone	15 + 5
Authority First	sulfentrazone + cloransulam	Triazolinone + triazolopyrimidine	14 + 2
Authority MTZ	Sulfentrazone + metribuzin	Triazolinone + triazinone	14 + 5
Backdraft	glyphosate + imazaquin	Glycine + imidazolinone	9 + 2
Balan	benefin	Dinitroaniline	3
Balance Flexx	isoxaflutole	isoxazole	28
Banvel	dicamba	Benzoic acid	4
Banvel-K + Atrazine	dicamba + atrazine	Benzoic acid + triazine	4 + 5
Barricade	prodiamine	Dinitroaniline	3
Basagran	bentazon	Benzothiadiazinone	6
Basis	rimsulfuron + thifensulfuron	Sulfonylurea	2 + 2
Basis Gold	rimsulfuron + thifensulfuron + atrazine	Sulfonylurea + sulfonylurea + triazine	2 + 2 + 5
Beacon	primisulfuron	Sulfonylurea	2
Bensumec	bensulide	Unclassified	17
Beyond	imazamox	Imidazolinone	2
Bicep II Magnum	atrazine + s-metolachlor	Triazine + chloroacetamide	5 + 15
Blade	metsulfuron	Sulfonylurea	2
Boundary	s-metolachlor + metribuzin	Chloroacetamide + triazine	15 + 5
Brawl, Brawl II	s-metolachlor	Chloroacetamide	15
Brawl II ATZ	s-metolachlor + atrazine	Chloroacetamide + triazine	15 + 5
Breakfree	acetochlor	Chloroacetamide	15
Breakfree ATZ	acetochlor + atrazine	Chloroacetamide + triazine	15 + 5

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Brand Names	Active Ingredient(s)	Chemical Family	Mode of Action¹
Break-Up	pronamide	Benzamide	3
Buctril	bromoxynil	Nitrile	6
Bullet	alachlor + atrazine	Chloroacetamide + triazine	15 + 5
Butoxone	2,4-DB	Phenoxy-carboxylic acid	4
Butyrac	2,4-DB	Phenoxy-carboxylic acid	4
Cadet	Fluthiacet-methyl	thiadiazole	14
Cadre	imazapic	Imidazolinone	2
Callisto	mesotrione	Triketone	27
Camix	s-metolachlor + mesiotrione	Chloroacetamide + triketone	15 + 27
Canopy	metribuzin + chlorimuron	Triazinone + sulfonyleurea	5 + 2
Canopy EX	chlorimuron + tribenuron	Sulfonyleurea + sulfonyleurea	2 + 2
Canopy XL	sulfentrazone + chlorimuron	Diphenylether + sulfonyleurea	14 + 2
Caparol	prometryn	Triazine	5
Capreno	Thiencarbazone + tembotrione	Triazolone + triketone	2 + 27
Celebrity, Celebrity Plus	nicosulfuron + dicamba	Sulfonyleurea + benzoic acid	2 + 4
Celsius	Iodosulfuron + thiencarbazone + dicamba	Sulfonyleurea + triazolone + benzoic acid	2 + 2 + 4
Certainty	Sulfosulfuron	Sulfonyleurea	2
Charger Basic, Charger MAX	s-metolachlor	Chloroacetamide	15
Charger MAX ATZ	atrazine + s-metolachlor	Triazine + chloroacetamide	5 + 15
Chateau	flumioxazin	N-phenylphthalimide	14
Cimarron Max	metsulfuron + 2,4-D + dicamba	Sulfonyleurea + phenoxy-carboxylic acid + benzoic acid	2 + 4 + 4
Cimarron Plus	metsulfuron + chlorsulfuron	Sulfonyleurea	2 + 2
Cinch	s-metolachlor	Chloroacetamide	15
Cinch ATZ	s-metolachlor + atrazine	Chloroacetamide + triazine	15 + 5
Clarity	dicamba	Benzoic acid	4
Classic	chlorimuron	Sulfonyleurea	2
Clethodim	clethodim	Cyclohexanedione	1
Clopyr AG	clopyralid	Pyridine carboxylic acid	4
Cobra	lactofen	Diphenylether	14
Command	clomazone	Isoxazolidinone	13
Confidence	acetochlor	Chloroacetamide	15
Confidence Xtra	acetochlor + atrazine	Chloroacetamide + triazine	15 + 5
Confront	Clopyralid + triclopyr	Pyridine carboxylic acid + pyridine carboxylic acid	4 + 4
Corsair	sulfometuron	Sulfonyleurea	2
Cotoran	fluometuron	Urea	7

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Brand Names	Active Ingredient(s)	Chemical Family	Mode of Action¹
Corvus	thiencarbazone + isoxaflutole	Triazolone + isoxazole	2 + 27
Crossbow	2,4-D + triclopyr	Phenoxy-carboxylic acid + pyridine carboxylic acid	4 + 4
Curbit	ethalfluralin	Dinitroaniline	3
Dacthal	DCPA	Benzoic acid	3
Define	flufenacet	Oxyacetamide	15
Degree	acetochlor	Chloroacetamide	15
Degree Xtra	acetochlor + atrazine	Chloroacetamide + triazine	15 + 5
Devrinol	napropamide	Acetamide	15
Diablo	dicamba	Benzoic acid	4
Dicamba	dicamba	Benzoic acid	4
Dimension	dithiopyr	Pyridine	3
Direx	diuron	Urea	7
Dismiss	sulfentrazone	Triazolinone	14
Distinct	dicamba + diflufenzopyr	Benzoic acid + semicarbazone	4 + 19
Diuron	diuron	Urea	7
Double Team	acetochlor + atrazine	Chloroacetamide + triazine	15 + 5
Drive, Drive XLR8	quinclorac	Quinaline carboxylic acid	4 - dicots
DSMA, numerous brands	DSMA	Organoarsenical	17
Dual II, Dual II Magnum	s-metolachlor	Chloroacetamide	15
Echelon	Prodiamine + sulfentrazone	Dinitroaniline + Triazolinone	3 + 14
Envoke	trifloxysulfuron	Sulfonylurea	2
Envoy	clethodim	Cyclohexanedione	1
Eptam	EPTC	Thiocarbamate	8
Equip	foramsulfuron + iodosulfuron	Sulfonylurea	2 + 2
Eradicane	EPTC	Thiocarbamate	8
Escalade	2,4-D + dicamba + fluroxypyr	Phenoxy + benzoic acid + pyridine carboxylic acid	4 + 4 + 4
Establish	dimethenamid-p	Chloroacetamide	15
Establish ATZ	dimethenamid-p + atrazine	Chloroacetamide + triazine	15 + 5
ET	pyraflufen ethyl	Phenylpyrazole	14
Evik	ametryne	Triazine	5
Exceed	primisulfuron + prosulfuron	Sulfonylurea + Sulfonylurea	2 + 2
Expert	glyphosate + s-metolachlor + atrazine	Glycine + chloroacetamide + triazine	9 + 15 + 5
Express	tribenuron	Sulfonylurea	2
Extreme	glyphosate + imazethapyr	Glycine + imidazolinone	9 + 2
Finesse	chlorsulfuron + metsulfuron	Sulfonylurea + sulfonylurea	2 + 2
Firestorm	paraquat	Bipyridylum	22

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Brand Names	Active Ingredient(s)	Chemical Family	Mode of Action¹
Firstrate	cloransulam	Triazolopyrimidine	2
Firstshot	Tribenuron + thifensulfuron	Sulfonylurea + Sulfonylurea	2 + 2
Flexstar	Fomesafen	Diphenylether	14
Flexstar GT	Fomesafen + glyphosate	Diphenylether + glycine	14 + 9
Fluometuron	fluometuron	Urea	7
ForeFront	aminopyralid + 2,4-D	pyridinecarboxylic acid + phenoxy-carboxylic acid	4 + 4
Freehand	Dimethenamid + pendimethalin	Chloroacetamide + dinitroaniline	15 + 3
FulTime	acetochlor	Chloroacetamide	15
Fusilade DX, II	fluazifop	Aryloxyphenoxy-propionate	1
Fusion	fluazifop + fenoxaprop	Aryloxyphenoxy-propionate + aryloxyphenoxy-propionate	1 + 1
Gallery	isoxaben	Benzamide	21
Galligan	oxyfluorfen	Diphenylether	14
Gangster	flumioxazin + cloransulam	N-phenylphthalimide + triazolopyrimidine	14 + 2
Garlon	triclopyr	pyridinecarboxylic acid	4
Glyphosate (numerous brands)	glyphosate	Glycine	9
Goal/GoalTender	oxyfluorfen	Diphenylether	14
Gramoxone	paraquat	Bipyridylum	22
Grazon P+D	2,4-D + picloram	Phenoxy-carboxylic acid + pyridinecarboxylic acid	4 + 4
Guardsman Max	dimethenamid-p + atrazine	Chloroacetamide + triazine	15 + 5
Gunslinger	2,4-D + picloram	Phenoxy-carboxylic acid + pyridinecarboxylic acid	4 + 4
Halex GT	mesiotrione + s-metolachlor + glyphosate	Triketone + chloroacetamide + glycine	27 + 15 + 9
Harmony Extra	thifensulfuron + tribenuron	Sulfonylurea + sulfonylurea	2 + 2
Harmony GT	thifensulfuron	Sulfonylurea	2
Harness	acetochlor	Chloroacetamide	15
Harness Xtra	acetochlor + atrazine	Chloroacetamide + triazine	15 + 5
Hoelon	diclofop	Aryloxyphenoxy-propionate	1
Huskie	Bromoxynil + pyrasulfotole	Nitrile + benzoylpyrazole	6 + 27
Hyvar	bromacil	uracil	5
Ignite, Ignite 280	glufosinate	Phosphinic acid	10
Illoxan	diclofop	Aryloxyphenoxy-propionate	1
Impact	topramezone	benzoylpyrazole	27
Image	imazaquin	Imidazolinone	2
Impose	imazapic	Imidazolinone	2
Intro	alachlor	Chloroacetamide	15
Karmex	diuron	Urea	7
Kerb	pronamide	Benzamide	3

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Brand Names	Active Ingredient(s)	Chemical Family	Mode of Action¹
Keystone	acetochlor + atrazine	Chloroacetamide + triazine	15 + 5
Lariat	alachlor + atrazine	Chloroacetamide + triazine	15 + 5
Laudis	tembotrione	Triketone	27
Layby Pro	diuron + linuron	Urea + urea	7 + 7
Lexar	mesotrione + s-metolachlor + atrazine	Triketone + chloroacetamide + triazine	27 + 15 + 5
Liberty	glufosinate	Phosphinic acid	10
Liberty ATZ	glufosinate + atrazine	Phosphinic acid + triazine	10 + 5
Lightning	imazethapyr + imazapyr	Imidazolinone + imidazolinone	2 + 2
Linex	linuron	Urea	7
Lontrel	Clopyralid	pyridinecarboxylic acid	4
Lorox	linuron	Urea	7
Lumax	mesotrione + s-metolachlor + atrazine	Triketone + chloroacetamide + atrazine	27 + 15 + 5
Manor	metsulfuron	Sulfonylurea	2
Marksman	dicamba + atrazine	Benzoic acid + triazine	4 + 5
Matrix	rimsulfuron	Sulfonylurea	2
Maverick	sulfosulfuron	Sulfonylurea	2
Medal, Medal II	s-metolachlor	Chloroacetamide	15
Me-Too-Lachlor, Me-Too-Lachlor II	metolachlor	Chloroacetamide	15
Metri	metribuzin	Triazinone	5
Metribuzin	metribuzin	Triazinone	5
Micro-Tech	alachlor	Chloroacetamide	15
Milestone	aminopyralid	pyridinecarboxylic acid	4
Monument	trifloxysulfuron	Sulfonylurea	2
Moxy	bromoxynil	Nitrile	6
MSMA (numerous brands)	MSMA	Organoarsenical	17
One-Time	Dicamba + MCPP + quinclorac	Benzoic acid + phenoxy + quinaline carboxylic acid	4 + 4 + 4
Option	foramsulfuron	Sulfonylurea	2
Osprey	mesosulfuron	Sulfonylurea	2
Oust	sulfometuron	Sulfonylurea	2
Outlaw	2,4-D + dicamba	Phenoxy-carboxylic acid + benzoic acid	4 + 4
Outlook	dimethenamid-p	Chloroacetamide	15
OxiFlo	oxyfluorfen	Diphenylether	14
Parallel, Parallel PCS	metolachlor	Chloroacetamide	15
Panoramic	imazapic	Imidazolinone	2
Parazone	paraquat	Bipyridylium	22

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Brand Names	Active Ingredient(s)	Chemical Family	Mode of Action¹
Parrlay	metolachlor	Chloroacetamide	15
PastureGard	Triclopyr + fluroxypyr	pyridinecarboxylic acid	4 + 4
Peak	prosulfuron	Sulfonylurea	2
Pendant	pendimethalin	Dinitroaniline	3
Pendimax	pendimethalin	Dinitroaniline	3
Pendulum	pendimethalin	Dinitroaniline	3
Pennant	s-metolachlor	Chloroacetamide	15
Permit	halosulfuron	Sulfonylurea	2
Phoenix	lactofen	Diphenylether	14
Plateau	imazapic	Imidazolinone	2
Poast, Poast Plus	sethoxydim	Cyclohexanedione	1
Prefar	bensulide	Phosphorodithioate	8
Prefix	s-metolachlor + fomesafen	Chloracetamide + diphenylether	15 + 14
Princep	simazine	Triazine	5
Priority	carfentrazone + halosulfuron	Triazolinone + sulfonylurea	14 + 2
Prograss	ethofumesate	Benzofuran	16
Prometryn	prometryn	Triazine	5
Prowl, Prowl H2O	pendimethalin	Dinitroaniline	3
Pursuit	imazethapyr	Imidazolinone	2
Python	flumetsulam	Triazolopyrimidine	2
Q4	2,4-D + dicamba + quinclorac + sulfentrazone	Phenoxy + benzoic acid + quinaline carboxylic acid + triazolinone	4 + 4 + 4 + 14
Quincept	2,4-D + dicamba + quinclorac	Phenoxy + benzoic acid + quinaline carboxylic acid	4 + 4 + 4
QuickSilver	carfentrazone	Triazolinone	14
Raptor	imazamox	Imidazolinone	2
Reflex	fomesafen	Diphenylether	14
Remedy	triclopyr	pyridinecarboxylic acid	4
Resolve	rimsulfuron	Sulfonylurea	2
Resource	flumiclorac-pentyl	N-phenylphthalimide	14
Revolver	foramsulfuron	Sulfonylurea	2
Reward	diquat	Bipyridylum	22
Ro-Neet	cycloate	Thiocarbamate	8
Ronstar	oxadiazon	Oxadiazole	14
Sandea	halosulfuron	Sulfonylurea	2
Scepter	imazaquin	Imidazolinone	2
Sedgehammer	halosulfuron	Sulfonylurea	2
Select/Select Max	clethodim	Cyclohexanedione	1
Sethoxydim G- and E-Pro	sethoxydim	Cyclohexanedione	1

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Brand Names	Active Ingredient(s)	Chemical Family	Mode of Action¹
Sencor	metribuzin	Triazinone	5
Sequence	glyphosate + s-metolachlor	Glycine + chloroacetamide	9 + 15
Sharpen	saflufenacil	pyrimidinedione	14
Simazine	simazine	Triazine	5
Sim-Trol	simazine	Triazine	5
Sinbar	terbacil	Uracil	5
Sonalan	ethalfuralin	Dinitroaniline	3
Sonic	sulfentrazone + cloransulam	Triazolinone + triazolopyrimidine	14 + 2
Solicam	norflurazone	Pyridazinone	12
Spartan	sulfentrazone	Triazolinone	14
Spike	tebuthiuron	Urea	7
Spin-Aid	phenmedipham	Phenylcarbamate	5
Spotlight	fluroxypyr	pyridinecarboxylic acid	4
Squadron	imazaquin + pendimethalin	Imidazolinone + dinitroaniline	2 + 3
Stalwart, Stalwart C	metolachlor	Chloroacetamide	15
Stalwart Xtra	metolachlor + atrazine	Chloroacetamide + triazine	15 + 5
Staple	pyrithiobac	Pyrimidinyl(thio)benzoate	2
Starfighter	ozadiazon	oxadiazole	14
Status	dicamba + diflufenzopyr	Benzoic acid + semicarbazone	4 + 19
Steadfast	nicosulfuron + rimsulfuron	Sulfonylurea + sulfonylurea	2 + 2
Steadfast ATZ	nicosulfuron + rimsulfuron + atrazine	Sulfonylurea + sulfonylurea + triazine	2 + 2 + 5
Stealth	pendimethalin	Dinitroaniline	3
Sterling	dicamba	Benzoic acid	4
Stinger	clopyralid	Pyridine carboxylic acid	4
Storm	acifluorfen + bentazon	Diphenylether + benzothiadiazinone	14 + 6
Stout	nicosulfuron + thifensulfuron	Sulfonylurea + sulfonylurea	2 + 2
Strategy	ethalfuralin + clomazone	Dinitroaniline + isoxazolidinone	3 + 13
Strongarm	diclosulam	Triazolopyrimidine	2
Suprend	prometryn + trifloxysulfuron	Triazine + sulfonylurea	5 + 2
Surflan	oryzalin	Dinitroaniline	3
Surge	2,4-D + dicamba + MCPP + sulfentrazone	Phenoxy + benzoic acid + phenoxy + triazolinone	4 + 4 + 4 = 14
Surmount	picloram + fluroxypyr	pyridinecarboxylic acid	4
Sutan+	Butylate	Thiocarbamate	8
Surpass	acetochlor	Chloroacetamide	15
Synchrony XP	chlorimuron + thifensulfuron	Sulfonylurea + sulfonylurea	2 + 2

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Brand Names	Active Ingredient(s)	Chemical Family	Mode of Action ¹
Targa	quizalofop	Aryloxyphenoxy-propionate	1
Tenacity	mesotrione	triketone	27
TopNotch	acetochlor	Chloroacetamide	15
Tower	dimethenamid	chloracetamide	15
Transline	clopyralid	pyridinecarboxylic acid	4
TranXit	rimsulfuron	Sulfonylurea	2
Treflan	trifluralin	Dinitroaniline	3
Triangle	atrazine + metolachlor	Triazine + chloroacetamide	5 + 15
Trifluralin	trifluralin	Dinitroaniline	3
Trigger	clethodim	Cyclohexanedione	1
Trilin	trifluralin	Dinitroaniline	3
Trust	trifluralin	Dinitroaniline	3
Tupersan	siduron	Urea	7
Turflon Ester	triclopyr	pyridinecarboxylic acid	4
Ultra Blazer	acifluorfen	Diphenylether	14
Valor	flumioxazin	N-phenylphthalimide	14
Valor XLT	flumioxazin + chlorimuron	N-phenylphthalimide + sulfonylurea	14 + 2
Vanquish	dicamba	Benzoic acid	4
Velocity	Bispyribac-sodium	pyrimidunyoxybenzoic	2
Velpar	Hexazinone	Triazinone	5
Vision	dicamba	Benzoic acid	4
Volley	acetochlor	Chloroacetamide	15
Volley ATZ	acetochlor + atrazine	Chloroacetamide + triazine	15 + 5
Volunteer	clethodim	Cyclohexanedione	1
Weedmaster	2,4-D + dicamba	Phenoxy-carboxylic acid + benzoic acid	4 + 4
Yukon	halosulfuron + dicamba	Sulfonylurea + benzoic acid	2 + 4
2,4-D (numerous brands)	2,4-D	Phenoxy-carboxylic acid	4
2,4-DB (numerous brands)	2,4-DB	Phenoxy-carboxylic acid	4

¹Modes of Action

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|--|---|
| 1 ACCase inhibition | 12 Inhibition of carotenoid biosynthesis at phytoene desaturase (PDS) |
| 2 ALS inhibition | 13 Inhibition of carotenoid biosynthesis (unknown target) |
| 3 Microtubule assembly inhibition | 14 PPO inhibition |
| 4 Synthetic auxin | 15 Inhibition of very long-chain fatty acids |
| 5 Photosystem II inhibition (different binding site than Groups 6 and 7) | 16 Unknown mode of action |
| 6 Photosystem II inhibition (different binding site than Groups 5 and 7) | 17 Unknown mode of action |
| 7 Photosystem II inhibition (different binding site than Groups 5 and 6) | 19 Auxin transport inhibition |
| 8 Inhibition of lipid synthesis (not ACCase inhibition) | 21 Inhibitor of cell wall synthesis site B |
| 9 ESP synthase inhibition | 22 Photosystem I electron transfer |
| 10 Glutamine synthase inhibition | 27 Inhibition of HPPD |

Note: This table was originally prepared by Dr. Alan York, North Carolina State University and was updated by Drs. Eric Prostko, Stanley Culpepper, Tim Murphy, and Patrick McCullough, The University of Georgia, September 2009.