

Herbicide Brand Names, Active Ingredients, Chemical Families, and Mechanism of Action

Brand Names	Active Ingredient(s)	Chemical Family	Mechanism of Action ¹
AAtrex	atrazine	Triazine	5
Accent	nicosulfuron	Sulfonylurea	2
Acclaim Extra	fenoxaprop	Aryloxyphenoxy-propionate	1
Acumen	pendimethalin	Dinitroaniline	3
Aim	carfentrazone	Triazinone	14
Alachlor	alachlor	Chloroacetamide	15
Alanap	naptalam	Phthalamate simicarbazono	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	Triazinone + triazolopyrimidine	14 + 2
Backdraft	glyphosate + imazaquin	Glycine + imidazolinone	9 + 2
Balan	benefin	Dinitroaniline	3
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 + triazinone	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
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
Cadre	imazapic	Imidazolinone	2
Callisto	mesotrione	Triketone	28
Camix	s-metolachlor + mesiotrione	Chloroacetamide + triketone	15 + 28
Canopy	metribuzin + chlorimuron	Triazine + sulfonylurea	5 + 2
Canopy EX	chlorimuron + tribenuron	Sulfonylurea + sulfonylurea	2 + 2

Brand Names	Active Ingredient(s)	Chemical Family	Mechanism of Action¹
Canopy XL	sulfentrazone + chlorimuron	Diphenylether + sulfonyleurea	14 + 2
Caparol	prometryn	Triazine	5
Celebrity, Celebrity Plus	nicosulfuron + dicamba	Sulfonyleurea + benzoic acid	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
Corsair	sulfometuron	Sulfonyleurea	2
Cotoran	fluometuron	Urea	7
Crossbow	2,4-D + triclopyr	Phenoxy-carboxylic acid + pyridinecarboxylic acid	4 + 4
Curbit	ethalfuralin	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	Triazinone	14
Distinct	dicamba + diflufenzopyr	Benzoic acid + semicarbazone	4 + 19
Diuron	diuron	Urea	7
Double Team	acetochlor + atrazine	Chloroacetamide + triazine	15 + 5
Drive	quinclorac	Quinaline carboxylic acid	4 (dicots), 27
DSMA, numerous brands	DSMA	Organoarsenical	17
Dual II, Dual II Magnum	s-metolachlor	Chloroacetamide	15
Echelon	Prodiamine + sulfentrazone	Dinitroaniline + Triazinone	3 + 14
Envoke	trifloxysulfuron	Sulfonyleurea	2
Envoy	clethodim	Cyclohexanedione	1
Eptam	EPTC	Thiocarbamate	8
Equip	foramsulfuron + iodossulfuron	Sulfonyleurea	2 + 2

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Eradicane	EPTC	Thiocarbamate	8
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
Firstrate	cloransulam	Triazolopyrimidine	2
Flexstar	fomesafen	Diphenylether	14
Fluometuron	fluometuron	Urea	7
ForeFront	aminopyralid + 2,4-D	pyridinecarboxylic acid + phenoxy-carboxylic acid	4 + 4
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
Guardzman Max	dimethenamid-p + atrazine	Chloroacetamide + triazine	15 + 5
Gunslinger	2,4-D + picloram	Phenoxy-carboxylic acid + pyridinecarboxylic acid	4 + 4
Halex GT	mesiotrione + atrazine + glyphosate	Triketone + triazine + glycine	28 + 5 + 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
Hyvar	bromacil	uracil	5
Ignite, Ignite 280	glufosinate	Phosphinic acid	10
Illoxan	diclofop	Aryloxyphenoxy-propionate	1
Impact	topramezone	Triketone	28
Image	imazaquin	Imidazolinone	2
Impose	imazapic	Imidazolinone	2
Intrro	alachlor	Chloroacetamide	15
Karmex	diuron	Urea	7

Brand Names	Active Ingredient(s)	Chemical Family	Mechanism of Action¹
Kerb	pronamide	Benzamide	3
Keystone	acetochlor + atrazine	Chloroacetamide + triazine	15 + 5
Lariat	alachlor + atrazine	Chloroacetamide + triazine	15 + 5
Laudis	tembotrione	Triketone	28
Layby Pro	diuron + linuron	Urea + urea	7 + 7
Lexar	mesotrione + s-metolachlor + atrazine	Triketone + chloroacetamide + triazine	28+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	28+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
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	Bipyridylum	22
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

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Phoenix	lactofen	Diphenylether	14
Plateau	imazapic	Imidazolinone	2
Poast, Poast Plus	sethoxydim	Cyclohexanedione	1
Prefar	bensulide	Phosphorodithioate	8
Prefix	s-metolachlor + fomesafen	Chloroacetamide + diphenylether	15 + 14
Princep	simazine	Triazine	5
Priority	carfentrazone + halosulfuron	Triazinone + sulfonyleurea	14 + 2
Prograss	ethofumesate	Benzofuran	16
Prometryn	prometryn	Triazine	5
Prowl, Prowl H ₂ O	pendimethalin	Dinitroaniline	3
Pursuit	imazethapyr	Imidazolinone	2
Python	flumetsulam	Triazolopyrimidine	2
QuickSilver	carfentrazone	Triazinone	14
Raptor	imazamox	Imidazolinone	2
Reflex	fomesafen	Diphenylether	14
Remedy	triclopyr	pyridinecarboxylic acid	4
Resolve	rimsulfuron	Sulfonyleurea	2
Resource	flumiclorac-pentyl	N-phenylphthalimide	14
Revolver	foramsulfuron	Sulfonyleurea	2
Reward	diquat	Bipyridylum	22
Ro-Neet	cycloate	Thiocarbamate	8
Ronstar	oxadiazon	Oxadiazole	14
Sandea	halosulfuron	Sulfonyleurea	2
Scepter	imazaquin	Imidazolinone	2
Sedgehammer	halosulfuron	Sulfonyleurea	2
Select/Select Max	clethodim	Cyclohexanedione	1
Sencor	metribuzin	Triazinone	5
Sequence	glyphosate + s-metolachlor	Glycine + chloroacetamide	9 + 15
Sethoxydim G- and E-Pro	sethoxydim	Cyclohexanedione	1
Simazine	simazine	Triazine	5
Sim-Trol	simazine	Triazine	5
Sinbar	terbacil	Uracil	5
Sonalan	ethalfuralin	Dinitroaniline	3
Sonic	sulfentrazone + cloransulam	Triazinone + triazolopyrimidine	14 + 2
Solicam	norflurazone	Pyridazinone	12
Spartan	sulfentrazone	Triazinone	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
Status	dicamba + diflufenzopyr	Benzoic acid + semicarbazone	4 + 19
Steadfast	nicosulfuron + rimsulfuron	Sulfonyleurea + sulfonyleurea	2 + 2

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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
Surmount	picloram + fluroxypyr	pyridinecarboxylic acid	4
Sutan+	Butylate	Thiocarbamate	8
Surpass	acetochlor	Chloroacetamide	15
Synchrony XP	chlorimuron + thifensulfuron	Sulfonylurea + sulfonylurea	2 + 2
Targa	quizalofop	Aryloxyphenoxy-propionate	1
TopNotch	acetochlor	Chloroacetamide	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	pyrimidinyloxybenzoic	2
Velpar	Hexazinone	Triazone	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

¹Mechanism of Action

- 1 ACCase inhibition
- 2 ALS inhibition
- 3 Microtubule assembly inhibition
- 4 Synthetic auxin
- 5 Photosystem II inhibition (different binding site than Groups 6 and 7)
- 6 Photosystem II inhibition (different binding site than Groups 5 and 7)
- 7 Photosystem II inhibition (different binding site than Groups 5 and 6)
- 8 Inhibition of lipid synthesis (not ACCase inhibition)
- 9 EPSP synthase inhibition
- 10 Glutamine synthetase inhibition
- 11 carotenoid-inhibiting, exact mechanism is unknown
- 12 Inhibition of carotenoid biosynthesis at phytoene desaturase (PDS)
- 13 Inhibition of carotenoid biosynthesis (unknown target)
- 14 PPO inhibition
- 15 Inhibition of very long-chain fatty acids
- 16 Unknown
- 17 Unknown
- 19 Auxin transport inhibition
- 21 Inhibitor of cell wall synthesis site B
- 22 Photosystem I electron transfer
- 23 inhibit cell division and microtubule organization and polymerization
- 27 Unknown
- 28 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, and Tim Murphy, The University of Georgia, April 2008. The WSSA Herbicide Handbook, 9th Edition (2007) was also used to update this table.