

Spartan® Charge Herbicide

Fall Residual Herbicide Application for Kochia Control

FALL BURNDOWN

Product Information:

Controlling herbicide-resistant weeds like kochia can prove to be a challenge for many growers in the Western Plains. Kochia plants are covered with dense hairs, making foliar control difficult. In addition, kochia can produce up to 30,000 seeds per plant and germinate as early as February.

Controlling a tough weed like kochia underscores the importance of a fall-applied residual herbicide to improve control of winter annuals as opposed to post-only burndown programs. It's an effective tool for growers who want to start clean. Due to kochia's mechanism of seed dispersal, resistant seed can end up in fields that have been properly managed in the past. In light of this, the Herbicide Resistance Action Committee recommends a soil-applied residual to control the weed prior to emergence.

A fall application of a residual herbicide like Spartan® Charge herbicide sets the stage for a clean start in the spring before planting.

Quick Facts:

- Spartan Charge herbicide controls troublesome and resistant weeds like kochia, Russian thistle and many other winter annuals.
- Foliar control of pigweeds, kochia, morning glories, nightshades, buffalo bur and many more.
- Contains two active ingredients for reliable contact and residual weed control.
- Offers tank-mix flexibility with preemergent grass herbicides.
- Fall application allows for flexible crop rotation of dry peas, dry beans, field corn, potatoes, rye, soybeans, sunflowers, wheat and other crops.

KEY CROP ROTATION INTERVALS*

Crop	Interval (Months)
Dry Shell Peas	Anytime
Dry Shell Beans	4
Field Corn	4
Potatoes	4
Rye	4
Soybeans	Anytime
Sunflowers	Anytime
Wheat	4

*Please see label for a complete list of crop rotation intervals



Fall Application Prior to Spring Corn Planting:

- Spartan® Charge herbicide 6 fl. oz./A + atrazine herbicide 1 lb./A + metribuzin herbicide 0.20 lb./A
- Authority® MTZ DF herbicide 10-12 fl. oz./A
- Follow in the spring with Anthem® MAXX herbicide 3-4 fl. oz./A + HPPD herbicide + atrazine herbicide for contact and residual control that can be applied PRE or POST.

Label:

Active Ingredients: Sulfentrazone and Carfentrazone-ethyl (Group 14) suspoemulsion (SE) formulation.

Fall Application Prior to Spring Soybean, Dry Peas, or Sunflower Planting:

- Spartan Charge herbicide 4 fl. oz./A.
- Follow in the spring with Authority® Elite herbicide 20 fl. oz./A.
- For best results, apply residual herbicides like Spartan Charge herbicide when soil temperatures are lower than 55 F and declining to prevent herbicide degradation.
- Use 15 GPA when treating fields with heavy crop residue or emerged weed populations for better coverage.
- If emerged weeds are present, include a quality spray adjuvant for optimal coverage.
- Tank mix with atrazine or metribuzin for extended residual in fall burndown applications prior to spring planting.
- Tank mix with other registered burndown herbicides like glyphosate, 2,4-D or dicamba for improved burndown and extended residual control of troublesome weeds.

Kochia and Russian Thistle Control 12 WAT: Spring Applied in Western Nebraska and Eastern Colorado in 2018 Dr. John Spring, Colorado State University

Product	Active Ingredient	lb./A	Rate oz./A	MOA	Kochia (plants/m ²)		Russian Thistle (plants/m ²)
					Akron	Sidney	
Glory® herbicide	<i>metribuzin</i>	5	11	5	0.01	1	0.6
Spartan Charge herbicide	<i>sulfentrazone</i>	0.16	6.5	14	0.02	0.03	0.01
Atrazine herbicide	<i>atrazine</i>	1	32	5	0.03	0.01	0.02
Valor® SX herbicide	<i>flumioxazin</i>	0.06	2	14	0.06	0.03	1.1
Scoparia® herbicide	<i>isoxaflutole</i>	0.08	5	27	0.4	0.09	1
Command® 3ME microencapsulated herbicide	<i>clomazone</i>	0.5	21	13	0.08	0.1	13
Prowl® H2O herbicide	<i>pendimethalin</i>	1.9	64	3	1.2	0.08	9
Clarity® herbicide	<i>dicamba</i>	0.5	16	4	2.4	0.4	8
Zidua® herbicide	<i>pyroxasulfone</i>	0.21	4	15	3.5	0.1	2.9
Milestone® herbicide	<i>aminopyralid</i>	0.02	1	4	12	0.7	3.2
Outlook® herbicide	<i>dimethenamid</i>	0.85	18	15	16	0.4	14
Sharpen® herbicide	<i>salfufenacil</i>	0.09	4	14	21	1.7	15
Callisto® herbicide	<i>mesotrione</i>	0.09	2	27	25	0.03	7.6
nontreated	-	-	-	-	25	2.1	15

To learn more about Spartan Charge herbicide, contact your FMC retailer or visit FMCCrop.com.

Atrazine and Scoparia herbicides are Restricted Use Pesticides. Always read and follow all label directions, precautions and restrictions for use. Some products may not be registered for sale or use in all states. FMC, the FMC logo, Anthem, Authority, Command and Spartan are trademarks of FMC Corporation or an affiliate. Glory is a trademark of Makhteshim Agan of North America. Valor is a trademark of Valent U.S.A. LLC. Scoparia is a trademark of Bayer CropScience. Prowl, Clarity, Zidua, Outlook and Sharpen are trademarks of BASF. Milestone is a trademark of Dow AgroSciences. Callisto is a trademark of Syngenta Group Company. ©2019 FMC Corporation. All rights reserved. 19-FMC-1705 09/19



An Agricultural Sciences Company