

LibertyLink® Soybeans

IMPORTANT: READ PRIOR TO PLANTING

- Soybeans with the LibertyLink® trait have built-in tolerance to Liberty® herbicide, providing excellent crop safety.
- Liberty is a nonselective contact herbicide that provides post-emergence control of broadleaf and grass weeds, including weeds resistant to glyphosate and multiple herbicide classes.
- Liberty herbicide has a unique mode of action (Group 10) that offers a nonselective choice for Integrated Weed Management plans.

LIBERTY HERBICIDE RECOMMENDATION PROGRAM FOR SOYBEANS				
Program	Pre-emergence Residual	First Post Application	Second Post Application (if Needed)	Seasonal Maximum Rate
Guidelines	<ul style="list-style-type: none"> • Pre-plant • Pre-plant incorporated • At planting 	<ul style="list-style-type: none"> • Weeds <3" • Use a residual tankmix 	<ul style="list-style-type: none"> • Min. 5-10 days after first application 	
Recommended Program	Use pre-emergence residuals	Liberty 32 fl oz/A + residual	Liberty 32 fl oz/A + residual	87 fl oz/A
Extreme Application Conditions	If environmental conditions prevent timely application	Liberty up to 43 fl oz/A + residual	Liberty up to 43 fl oz/A + residual	87 fl oz/A

*Sequential applications should be at least five days apart.

A zero-tolerance weed management approach can greatly improve control from season to season. If tough-to-control weeds are present late in the season, it is recommended that they be removed before they can go to seed.

Liberty may be applied in tankmix combinations with labeled rates of other products, provided these products are labeled for the timing and method of application for the crop to be treated.

Tankmix partners for Liberty in soybeans may include:

PRE-EMERGENCE HERBICIDES*		POSTEMERGENCE HERBICIDES*	
PPO (14)	LFC (15)	Acetamide (15)	ACCase (1)
ALS (2)	PSII Inhibitors (5)	PPO (14)	
Authority® MTZ (5, 14)	Metolachlor (15)	Cobra® (14)	Zidua (15)
Authority First (2, 14)	Prefix® (14, 15)	Dual® (15)	Select Max® (1)
Boundary® (5, 15)	Valor® XLT (2, 14)	Blazer® (14)	Assure® (1)
Dual® (15)	Warrant® (15)	Flexstar® (14)	Fusilade® (1)
Envive® (2, 14)	Zidua® (15)	Prefix (14, 15)	
Fierce® (14, 15)		Warrant (15)	

*Weed Science Society of America site of action classification in parentheses.

S.T.O.P. Weeds with Liberty® Program Application Guidelines for Maximum Control:

S **TART CLEAN AND STAY CLEAN** Control emerged weeds prior to planting and control escapes throughout the season.

T **ARGET < 3" WEEDS** Small weeds are easier to control.

O **PTIMIZE COVERAGE** Follow the correct rate, water volume and droplet size.

P **AIR WITH RESIDUALS** Use multiple effective sites of action for pre- and post-residuals.



APPLICATION GUIDELINES

- Recommended Program — residual used pre-emergence, PPI or at planting:
 - a. Apply Liberty at 32 fl oz/A over the top of LibertyLink soybeans from emergence to 14 days after crop emergence or when weeds are no more than 3 inches tall.
 - b. Apply Liberty at 32 fl oz/A on an as-needed basis following the first application at 32 fl oz/A. If needed, apply Liberty at a minimum of five days after the first application at 32 fl oz/A.
- If environmental conditions prevent timely application and/or residuals are not activated:
 - a. A single application of up to 43 fl oz/A may be made.
 - b. If 43 fl oz/A is used for the first application, a second application of 43 fl oz/A can be made a minimum of five days after the first application. Increase water volume to 20 GPA if weed canopy is dense.
- Maximum per year: Up to 87 fl oz/A of Liberty can be applied on soybeans per growing season.
- Do not apply Liberty if soybeans show injury from prior herbicide applications or environmental stress.
- Make all Liberty applications before soybeans begin to bloom. Consult state Extension service for additional information on prebloom period for soybeans in the state.

LIBERTY HERBICIDE QUICK FACTS

Application Timing	< 3" weeds"
Application Window	Emergence up to early bloom (R1)
Site of Action	Group 10 (Weed Science Society of America site of action classification.)
Activity	Nonselective, broadleaf and grasses
Adjuvant	Ammonium Sulfate (AMS) at 1.5 to 3 lbs/A*
Spray Water Volume	15 GPA; if dense weed canopy exists increase to 20 GPA
Nozzle	Medium-to-coarse droplet size
Ground Speed	< 10 mph to attain good coverage
Wind Speed	< 10 mph
Rainfast	Four hours
Additional Uses with Glyphosate	<ul style="list-style-type: none">• A tankmix of Liberty and glyphosate may result in reduced grass control• Arid: recommended sequential application of glyphosate to be >7 days after Liberty application, as reduced grass and broadleaf control may result under these environmental conditions

*Research has consistently shown AMS with Liberty herbicide improves weed control. AMS is especially needed for difficult-to-control weeds, such as velvetleaf and lambsquarters, under difficult environmental conditions (low relative humidity) or hard water.

YIELD LOSS DUE TO COMPETITION

Weeds that emerge with the crop or shortly thereafter, have the greatest potential to negatively affect yields. The yield loss associated with this flush of weeds is strongly influenced by the length of time weeds remain in the field and compete with crops for light, water and nutrients.

Residual herbicides can improve weed control, reduce problematic weeds and extend the time period between planting and the first postemergence treatment of Liberty herbicide. This allows for flexibility when weather conditions prevent timely postemergence applications. Additionally, using a residual herbicide in your weed-control program introduces another herbicide SOA in the field, improving your weed-management program.

A study conducted by the University of Nebraska⁴ determined that the critical period for weed removal in soybeans is based upon the soybean row spacing. For soybeans planted in 30-, 15- and 7.5-inch rows, the critical removal time is V3, V2 and first trifoliolate, respectively. Furthermore, the study shows there is a 2 percent yield loss for each soybean leaf-stage delay in applying a nonselective herbicide to the crop, during the critical time for weed removal.

PRODUCT USE STATEMENT:

These seeds contain the LibertyLink[®] trait. These seeds and the plants grown from these seeds produce the PAT (phosphinothricin acetyltransferase) protein that provides resistance to Liberty[®] herbicide (glufosinate). **YOU MUST SIGN THE TECHNOLOGY USE AGREEMENT AND READ THE PRODUCT USE GUIDE PRIOR TO PLANTING THESE SEEDS.** You acknowledge and agree that Bayer CropScience is a third party beneficiary of the 1) Technology Use Agreement, 2) the Use Restrictions, Limitation of Warranty and Liability; Other Terms on this bag, and 3) the product use statements attached to this bag, and may enforce the terms and conditions in all these agreements against the purchaser of this seed bag and all persons acting on his behalf.

WARNING: You may use any glufosinate herbicide, but only if it has federally approved label instructions for use over soybeans containing the Soybean Event, and the product and the use label for such soybeans have been approved by your specific state. Contact the product manufacturer, the local retailer or the local extension agent for confirmation that the product carries EPA and state approved labeling for this use. **BAYER DOES NOT MAKE ANY REPRESENTATIONS, WARRANTIES OR RECOMMENDATIONS CONCERNING THE USE OF GLUFOSINATE HERBICIDE(S) OTHER THAN THE BAYER GLUFOSINATE HERBICIDE (LIBERTY[®]) WHICH ARE LABELED FOR USE OVER SOYBEAN CONTAINING THE SOYBEAN EVENT. BAYER SPECIFICALLY DENIES ALL RESPONSIBILITY AND DISCLAIMS ANY LIABILITY FOR ANY DAMAGE FOR THE USE OF OTHER GLUFOSINATE HERBICIDES OVER-THE-TOP OF SOYBEANS CONTAINING THE SOYBEAN EVENT. ALL QUESTIONS AND COMPLAINTS CAUSED BY THE USE OF GLUFOSINATE HERBICIDES OTHER THAN LIBERTY[®] SHOULD BE DIRECTED TO THE SUPPLIER OF THE PRODUCT IN QUESTION. ACCIDENTAL APPLICATIONS OF INCOMPATIBLE HERBICIDES TO THIS VARIETY COULD RESULT IN TOTAL CROP LOSS.**

The herbicide resistance technology contained in these seeds is protected under one or more of the following U.S. patent number: RE44, 962 and may also be subject to other intellectual property rights. The conditional purchase of these seeds does not convey a license under said patents to perform a method covered by these patents or to use these seeds in any way, except to produce a single commercial crop (one-time use only) in the United States, and harvesting the grain solely for food or feed applications or for industrial processing. **In no event shall this seed be used in research or breeding or for production of planting seed.**

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