

Engenia®

Herbicide

The Most Flexible and Advanced Dicamba for Dicamba-Tolerant Crops

Engenia® Herbicide is a patented formulation developed specifically for use on your dicamba-tolerant cotton*



Palmer amaranth



waterhemp



ivy leaf
morningglory



marestail

* Dicamba-tolerant cotton sold under the trait name Bollgard II® XtendFlex® Cotton.



 **BASF**

We create chemistry

Technical Information Bulletin

Why Engenia® Herbicide?

Benefits of Engenia Herbicide

- Provides postemergence broadleaf weed control
 - Effective on over 200 broadleaf weeds
 - Including glyphosate, triazine, ALS, and PPO resistant broadleaf weeds
 - Up to two weeks residual
- Most flexible
 - Lowest use rate = 12.8 fl oz/A
 - 5 lbs ae/gal formulation
 - Convenient for use with direct injection
- Most advanced formulation
 - BAPMA salt reduces volatility potential

Handle Less Product Per Acre

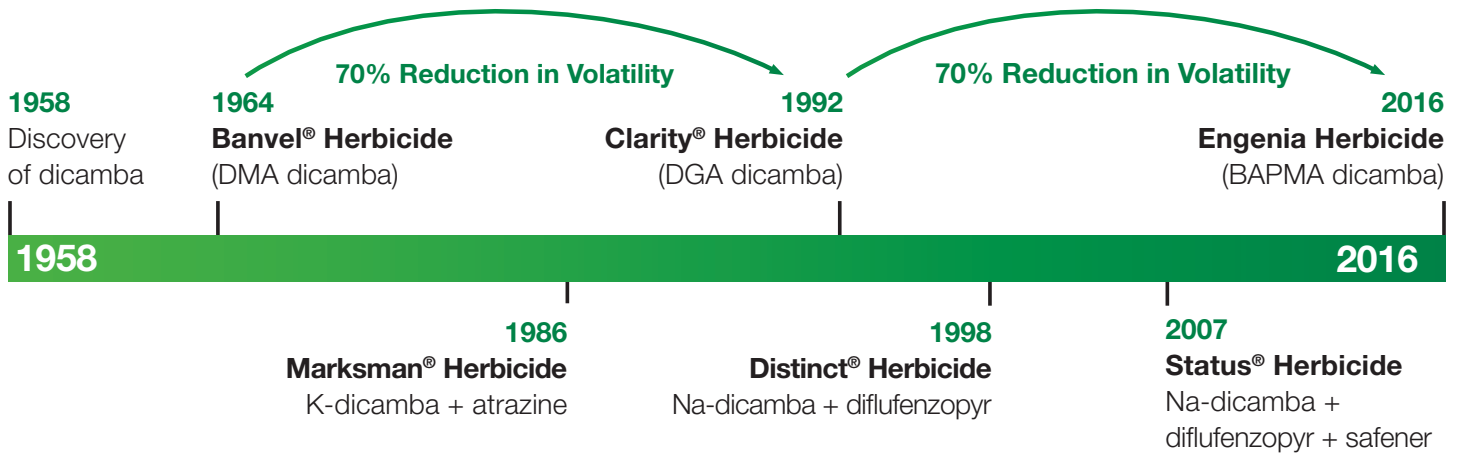


Engenia Herbicide
8 Jugs = 200 Acres



XtendiMax® Herbicide with VaporGrip® Technology
14 Jugs = 200 Acres

A 50+ Year History of Dicamba Innovation from BASF



Engenia[®] Herbicide

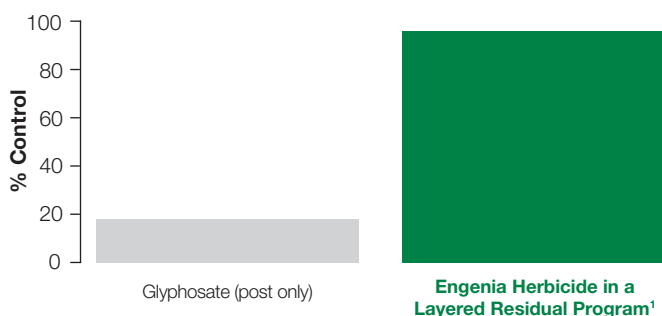
Weed Control Stewardship

Use a System Approach for Effective Weed Control

- Target weeds less than 4 inches tall
- Implement a residual herbicide program
- Use multiple, effective sites of action
- Maintain a vigorous crop

Why a System Approach in Cotton?

Better Weed Control To Prevent and Manage Weed Resistance



In 2015, BASF sponsored trials were placed in glyphosate resistant Palmer amaranth locations in AL (2), GA (2), MS (1), NC (2), TN (3), TX (2). 1) Prowl[®] H2O herbicide +/- Cotoran[®] or Reflex[®]. Engenia herbicide applied at 12.8 fl oz/A; Outlook[®] herbicide applied at 12-16 fl oz/A. All other herbicides applied at 1X use rates. Refer to www.engeniatankmix.com for a list of approved tank-mix combinations.

Engenia Herbicide Weed Control

Glyphosate Only



Engenia Herbicide in a Layered Residual Program



BASF sponsored trial, Texas A&M, Wayne Keeling, Lubbock, TX. Photos taken 42 days after 5 leaf application (7/21/15).



Engenia® Herbicide Application Stewardship

Reducing risk of off-target movement and sensitive plant injury is a result of effective application stewardship. The advanced dicamba formulation of Engenia herbicide, along with proper application, can provide maximum broadleaf weed control and effectively minimize off-target potential.

Label Summary – Only for Use on Dicamba-Tolerant Cotton:

- **Use Rate:** 12.8 fl oz/A
- **Application Timing:** Preplant, Preemerge, POST (up to 60 days after planting or mid-bloom, whichever comes first)
 - No more than 2 POST applications
- **Application Volume:** ≥ 15 GPA
- **Windspeed:** 3 to 10 MPH
- **Boom Height:** 24 inches or less above target
- **Sensitive Crops:** DO NOT spray if wind is blowing toward neighboring sensitive crops (like non-dicamba-tolerant soybeans) or residential areas
- **Sensitive Areas:** Leave 110' downwind buffer to bodies of water and non-residential, uncultivated areas that may harbor sensitive plant species
 - Consult www.epa.gov/espp or call 1-844-447-3813 and follow any county specific dicamba use restrictions for corresponding endangered species
- **Ground Speed:** ≤ 15 mph, recommend 5 mph on field edges
- **Use Only Approved Nozzles:** For a list of approved nozzles visit www.engeniatankmix.com
- **Tank Mixtures:** Visit www.engeniatankmix.com for a list of approved tank-mix partners and adjuvants
 - No acidifying water conditioners; DO NOT use ammonium additives (e.g., AMS, UAN)
- **Avoid Inversions:** DO NOT apply when temperature inversions exist at the field level
- **Daytime Spraying:** Only apply from 1 hour after sunrise until 2 hours before sunset
- **Training:** Complete annual dicamba or auxin specific training
- **Record Keeping:** Including application, planting date, buffer zone determination, and tank cleanout
- **Sprayer Cleanout:** Triple rinse, use a detergent-based commercial cleaner before and after application
- **Rain Free Interval:** DO NOT apply if expected rainfall within 24 hours after application will result in runoff
 - **Rainfast:** 4 hours

Training and Education

Applicator training requirements vary depending on the state. Visit www.engeniastewardship.com for BASF resources on proper application according to label requirements. Proper nozzle selection, calibration, boom height, weather conditions, and the use of approved tank-mixtures are all addressed.

To learn more, go to: www.engeniastewardship.com

Engenia Herbicide is a U.S. EPA Restricted Use Pesticide. Additional state restrictions may apply.

Turbo TeeJet® Induction TTI11004



To learn more about crop protection products from BASF, visit www.agproducts.basf.us

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