

# Engenia herbicide

## technology sheet

dicamba-tolerant  
soybeans

An advanced dicamba formulation with lower volatility properties for improved broadleaf control in Roundup Ready 2 Xtend® and XtendFlex® soybeans.

- Highly concentrated liquid formulation for easier handling and a lower use rate
- Effective resistance management tool for Group 2-, triazine- and glyphosate-resistant biotypes

### Active ingredient

Dicamba – Group 4

### Formulation

Solution

### One case contains

2 x 8.09 L jugs  
Also available in 121.2 L shuttle

### Storage

Keep dry.

#### Weed control in Roundup Ready 2 Xtend® soybeans with glyphosate alone versus Engenia® herbicide plus glyphosate



On glyphosate-resistant Canada fleabane  
Source: University of Guelph research trial, Ridgetown, ON, 2015

#### Weed control in Roundup Ready 2 Xtend® soybeans with glyphosate alone versus Engenia plus Integrity® herbicide plus glyphosate plus Merge® adjuvant



On glyphosate-resistant Canada fleabane  
Source: University of Guelph research trial, Ridgetown, ON, 2015

### Crops

Roundup Ready 2 Xtend®  
and XtendFlex® soybeans<sup>1</sup>

### Staging

pre-plant, pre-emergence,  
early post-emergence

See the label for a complete list of other crops and applications.

### Weeds controlled<sup>2,3</sup>

Buckwheat (tartary, wild)  
Canada fleabane<sup>4</sup>  
Canada thistle<sup>5</sup>  
Cleavers  
Common chickweed<sup>6,7</sup>  
Corn spurry  
Cow cockle  
Eastern black nightshade<sup>7</sup>  
Field bindweed<sup>5</sup>  
Green smartweed  
Hairy nightshade<sup>6,8</sup>  
Kochia<sup>9</sup>  
Lady's thumb  
Lamb's quarters  
Mustards (including wild)  
Narrow-leaved hawk's beard<sup>6,7</sup>  
Perennial sow thistle<sup>5</sup>  
Ragweed (common, false, giant)  
Redroot pigweed  
Russian pigweed  
Velvetleaf  
Volunteer canola<sup>6,10</sup>

<sup>1</sup> Apply by ground ONLY to Roundup Ready 2 Xtend® and XtendFlex® soybeans. Soybean varieties that are not designated as dicamba-tolerant will be damaged or destroyed by this treatment.

<sup>2</sup> For a complete list of proper weed staging, please refer to the product label.

<sup>3</sup> Controlled by Engenia alone at 200 to 400 ml/ac (0.5 to 1 L/ha).

<sup>4</sup> Post-emergence only.

<sup>5</sup> Apply Engenia herbicide annually for three years at the flowering stage of bindweed and the budding stage of thistles.

<sup>6</sup> Suppression only.

<sup>7</sup> Including Group 2-resistant biotypes.

<sup>8</sup> When Engenia is applied at 283 to 400 ml/ac (0.7 to 1 L/ha).

<sup>9</sup> Including Group 2- and 9-resistant biotypes.

<sup>10</sup> Including conventional, Roundup Ready® and LibertyLink® cultivars, when Engenia is applied at 400 ml/ac (1 L/ha).

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## Dicamba stewardship

There are several factors to consider when using a dicamba herbicide such as:

**Nozzles** – use nozzles to ensure extremely coarse to ultra-coarse droplets

**Wind speed** – spray when wind speeds are between 3 to 15 km/h

**Ground speed** – maintain sprayer speed under 25 km/h

**Boom height** – keep spray boom height no higher than 50 cm above the crop canopy

**Sensitive crop awareness** – identify neighbouring crop species

**Application volume** – use a minimum spray volume of 10 GPA

**Additives/adjuvants** – only use as required or recommended on product label

**Sprayer cleanout** – triple rinse, use a detergent-based cleaner

<sup>11</sup>See label for a complete list of additional available tank mixes and their rates. Tank-mix options are not included in the case.

<sup>12</sup>See label for water rate for application.

<sup>13</sup>Engenia can be used alone or in tank mix with glyphosate for additional broadleaf and grassy weed control. See label for important details.

<sup>14</sup>For application to Roundup Ready 2 Xtend® and XtendFlex® soybeans, apply Engenia using nozzles that deliver extremely coarse to ultra-coarse spray droplets.

<sup>15</sup>The 400 ml/ac rate of Engenia is to be used only once a season and should be used pre-plant, pre-emergence or in-crop early post-emergence.

<sup>16</sup>793 ml/ac of Engenia is the maximum total to be applied in a single growing season.

<sup>17</sup>Only use glyphosate products registered for use in soybeans. Do not tank mix Engenia with glyphosate products where glyphosate is present as an ammonium salt.

## For more information:

Call **AgSolutions** Customer Care at 1-877-371-BASF (2273)

Visit **agsolutions.ca**

## Application rates

**One case will treat 40 to 80 acres of Roundup Ready 2 Xtend® and XtendFlex® soybeans, depending on rate. One shuttle will treat 303 to 606 acres, depending on rate.**

### Pre-plant, pre-emergence and early post-emergence<sup>11,12</sup>

Roundup Ready 2 Xtend® and XtendFlex® soybeans<sup>13,14,15,16</sup> 200 ml/ac to 400 ml/ac (480 ml/ha to 1000 ml/ha)

### Water volume

Ground application 40 L/ac (10 gal/ac) minimum  
Use higher water volumes to ensure adequate coverage.<sup>12</sup>

## Mixing order

1. Use a 50-mesh filter screen.
2. Fill clean tank with 1/2 of the required amount of clean water and agitate during the entire mixing procedure.
3. Add the required amount of Engenia herbicide.
4. If tank mixing, add the appropriate liquid tank-mix partner.
5. Add the rest of the water to the spray tank and maintain sufficient agitation during mixing and spraying to ensure a uniform spray mixture.

## Application tips

**Rainfastness** – 4 hours.

## Pre-harvest interval

For application to Roundup Ready 2 Xtend® and XtendFlex® soybeans: 7 to 10 days for soybean forage and 13 to 15 days for soybean hay.

## Follow crops

For Roundup Ready 2 Xtend® and XtendFlex® soybeans, a plant-back interval of 120 days is required for all crops not on the Engenia label.

## Tank mixes

**Herbicide for Roundup Ready 2 Xtend® and XtendFlex® soybeans:** Glyphosate<sup>17</sup>

Contact **AgSolutions®** Customer Care or your local BASF **AgSolutions** Retail Representative for additional information on supported tank mixes.

## Always read and follow label directions.

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**ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS.** It is a violation of federal law to use any pesticide product other than in accordance with its labeling. NOT ALL formulations of dicamba, glyphosate or glufosinate are approved for in-crop use with products with XtendFlex® Technology. ONLY USE FORMULATIONS THAT ARE SPECIFICALLY LABELED AND APPROVED FOR SUCH USES. Contact the Pest Management Regulatory Agency with any questions about the approval status of dicamba herbicide products for in-crop use with Roundup Ready 2 Xtend® soybeans or products with XtendFlex® Technology.

**Products with XtendFlex® Technology contains genes that confer tolerance to glyphosate, glufosinate and dicamba.** Glyphosate will kill crops that are not tolerant to glyphosate. Dicamba will kill crops that are not tolerant to dicamba. Glufosinate will kill crops that are not tolerant to glufosinate. Contact your Bayer retailer, refer to the Bayer Technology Use Guide, or call the technical support line at 1-888-283-6847 for recommended Roundup Ready® Xtend Crop System weed control programs.

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