Preemergence Herbicide with Burndown for Glyphosate- and ALS-Resistant Weeds

Product Characteristics

- Helps increase yield potential by providing cleaner fields
- Facilitates more timely Roundup PowerMAX® herbicide applications in Roundup Ready® soybeans
- Reduces the selection pressure for glyphosate- and ALS-tolerant weed biotypes
- Provides excellent crop safety
- Controls both small- and large-seeded broadleaf weeds
- May be applied with other crop protection chemicals and liquid fertilizers
- Extends weed spectrum and burndown when weeds have already emerged when added to Roundup PowerMAX and 2,4-D LVE

Soil-Applied Herbicides in Soybeans

Timing of Weed Removal (Soybean Growth Stage)

- V1
- V2
- V3
- V4
- V5
- V6
- V7
- R1
- R2
- R3

Soybean Yield Loss (Percent of Weed Controlled)

- 7.5" Rows
- 15" Rows
- 30" Rows
- 5% Yield Loss Line
Usage Recommendations

**Full Use Rate**

(needed for glyphosate-resistant weeds for longer residual control)

<table>
<thead>
<tr>
<th>Broadcast Rate (oz/A)</th>
<th>Coarse Soil Texture</th>
<th>Medium Soil Texture</th>
<th>Fine Soil Texture</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Organic Matter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.5 – 2.0%</td>
<td>Loamy Sand, Sandy Loam</td>
<td>Loam, Silt Loam, Silt, Sandy Clay Loam</td>
<td>Silty Clay Loam, Clay Loam, Clay</td>
</tr>
<tr>
<td>2.0 – 4.0%</td>
<td>5.0 – 6.0 oz/A</td>
<td>6.5 – 7.5 oz/A</td>
<td>7.0 – 8.0 oz/A</td>
</tr>
<tr>
<td></td>
<td>6.0 – 7.0 oz/A</td>
<td>7.0 – 8.8 oz/A</td>
<td>8.0 – 9.6 oz/A</td>
</tr>
</tbody>
</table>

Apply Authority® XL according to rate tables for types of application and specific geographic areas.

**Weed Spectrum**

**Controls**

- Carpetweed
- Chickweed**
- Cocklebur*
- Copperleaf
  - Hophornbeam
  - Virginia
- Florida Beggarweed
- Jimsonweed
- Kochia
- Lambquarters
- Mallow, Venice
- Marestail
- Morningglory
  - Annual
  - Ivyleaf
  - Entireleaf
  - Pitted*  
  - Smallflower
  - Tall
- Mustard, Wild  

**Suppresses**

- Barnyardgrass
- Burcucumber
- Crabgrass
- Foxtail Species
- Goosegrass
- Johnsongrass, Seedling
- Mexicanweeds
- Panicum
  - Texas
  - Fall
- Sicklepod
- Signalgrass, Broadleaf
- Nutsedge
  - Purple
  - Yellow
- Pigweed
  - Palmer Amaranth
  - Redroot
  - Smooth
  - Spiny Amaranth
- Poinsettia, Wild
- Prickly Sida (Teaweed)
- Purslane, Common
- Ragweed
  - Common
  - Ragweed, Giant*
- Senna, Coffee
- Smartweed, Annual
- Spurge, Spotted
- Sunflower, Wild
- Thistle, Russian
- Velvetleaf
- Waterhemp

Control of emerged weeds requires a burndown tank mix such as 2,4-D or Roundup.

* Weed species which can germinate deep in the soil, such as pitted morningglory, cocklebur and giant ragweed or other weeds, such as nutsedge, which may emerge at various times during the growing season, may require a cultivation or a follow-up application of postemergence herbicides.

** To deliver control the addition of Roundup PowerMAX or Express® herbicide is recommended.