

Enlist and Xtend: What Are the Herbicide Rates?

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Key Points to Remember:

1. Enlist Duo is a premix of 2,4-D choline and glyphosate with a maximum application rate of 4.75 pints per acre.
2. Xtendimax with VaporGrip, Engenia, and FeXapan plus VaporGrip are dicamba-only herbicide products and contain no glyphosate.
3. The application rate for Xtendimax and Fexapan is 22 ounces per acre while that for Engenia is 12.8 ounces per acre.

The herbicide resistance traits in the Enlist Weed Control System confer resistance to glyphosate (Roundup PowerMAX, Roundup WeatherMAX, etc.), glufosinate (Liberty 280, Interline, etc), and 2,4-D choline. Enlist Duo is the only herbicide product that contains 2,4-D labeled for application in Enlist crops. Although Enlist Duo is labeled for application, not all exports of soybean with the Enlist trait have been approved. Enlist Duo is a premix of glyphosate and 2,4-D choline that contains 1.7 pounds of 2,4-D choline and 1.6 pounds of glyphosate per gallon of formulated product.



In both Enlist cotton and soybean, labeling allows two postemergence applications of Enlist Duo with rates ranging from a minimum of 3.5 to a maximum of 4.75 pints per acre for a single application. Sequential applications of Enlist Duo must be spaced at least 12 days apart. The maximum rate of Enlist Duo at 4.75 pints per acre provides the equivalent of 1 pound acid equivalent of 2,4-D choline and 0.95 pounds acid equivalent of glyphosate. For comparison, burndown applications of older formulations of 2,4-D are recommended at 1 pound acid equivalent per acre.

In the Roundup Ready Xtend Crop System, Bollgard II Xtendflex cotton varieties exhibit resistance to glyphosate, glufosinate, and dicamba; however, Roundup Ready 2 Xtend soybean varieties only exhibit resistance to glyphosate and dicamba with no resistance to glufosinate. Multiple herbicide products containing dicamba are labeled for application to Xtend cotton and soybean in Mississippi. Xtendimax with VaporGrip from Monsanto, Engenia from BASF, and FeXapan plus VaporGrip from DuPont are the dicamba herbicide products labeled for Xtend crops in Mississippi. These three herbicides contain only dicamba, and they are the only dicamba products that can be applied to Xtend cotton and soybean in Mississippi.

Xtendimax with VaporGrip and FeXapan plus VaporGrip contain 2.9 pounds of dicamba per gallon of formulated product. Engenia is more concentrated and contains 5 pounds of dicamba per gallon. Single applications of dicamba in Xtend crops are labeled at 0.5 pound acid equivalent per acre. For Xtendimax and FeXapan, this translates to 22 ounces of formulated product per acre. Because Engenia is more concentrated, its application rate is only 12.8 ounces of formulated product per acre.

Dicamba at 0.5 pound acid equivalent per acre is twice the rate normally used for dicamba applied during burndown. This is positive. Higher rates are always better, especially where herbicide resistance management is considered. Labeling allows two postemergence applications of Xtendimax, Engenia, or FeXapan in Xtend soybean,

but up to four postemergence applications are allowed in Xtend cotton. Sequential applications should be spaced at least seven days apart.

More information for each of these herbicide products can be found at the following sites:

Enlist Duo: www.enlisttankmix.com

Xtendimax with VaporGrip: www.xtendimaxapplicationrequirements.com

Engenia: www.engeniatankmix.com

FeXapan plus VaporGrip: www.fexapanapplicationrequirements.dupont.com

Mississippi producers interested in purchasing auxin-containing herbicides intended for in-crop use on 2,4-D- or dicamba-tolerant crops must first complete mandatory online training. The self-paced online training may be accessed 24/7 at <http://www.auxintraining.com> via most devices, including tablets and personal computers. In Mississippi, additional conditions placed on the use of these auxin herbicides prohibit producers from applying herbicides in wind speeds in excess of 10 miles per hour. Applicators are required to keep application records. Licensed pesticide dealers are required to keep records pertaining to the sales of these herbicides.