

## Bareground weed control

# DuPont™ Landmark® XP

herbicide

*Get longer-lasting, broader-spectrum control of tough broadleaf weeds, thistles and grasses with one product*

DuPont™ Landmark® XP herbicide delivers long-lasting control of over 120 broadleaf weeds and grasses. That's more than twice the number of weeds controlled by DuPont™ Oust® XP herbicide. Landmark® XP is strong enough to control puncturevine, horsetail (*Equisetum spp.*), Canada thistle, perennial pepperweed, yellow starthistle, whitetop, Turkey mullein, marestalk and other broadleaf weeds that most products can't touch. It also provides excellent control of cheat, downy brome, medusahead, wild oat, volunteer wheat, ripgut brome and other problem grasses.

### Longer-lasting control tank mixed with DuPont™ Krovar® I DF

Use Landmark® XP in combination with Krovar® I DF to achieve unsurpassed weed control. This treatment is the broadest spectrum tank mix on the market today.

#### ■ High-level maintenance:

Tank mixing with Krovar® I DF controls perennial grasses in addition to kochia, Russian thistle (including resistant biotypes), prickly lettuce, puncturevine, horsetail (*Equisetum spp.*), and other tough-to-control weeds.

### A little goes a long way

Landmark® XP is applied at low rates, which means you can reduce the chemical load on the treated acres without compromising control. What's more, one case of Landmark® XP will treat more than 100 acres, so you'll be able to carry more product in each truckload.

### Benefits of using Landmark® XP

- Delivers long-lasting control of over 120 broadleaf weeds and grasses, including more than twice the weeds controlled by Oust® XP.
- Offers stronger residual control than Oust® XP to help fill key weed gaps and reduce the risk of weed escapes.
- Is stable under UV light conditions.
- Applied at low-use rates — minimizes the chemical load on the environment, also less likely to reach groundwater.
- Sets a new, higher standard for bareground weed control in your maintenance-level programs and helps reduce respray costs.
- Has pre and early postemergence activity.
- Supported and serviced by DuPont and our Authorized Service Centers.



### Landmark® herbicide now available in an XP formulation

Now, Landmark® herbicide features new XP technology, making it easier to mix and more accurate to measure and apply. The new formulation also resuspends faster to minimize downtime after rain and wind delays.

### The added value of DuPont XP technology

- **Easier measuring.** The extruded granule production process creates an end-use product that is more uniform in size and more stable. The uniform size of the granules improves the measuring accuracy.
- **Advanced suspendibility technology.** New formulations suspend faster, mix better and resuspend in solution more completely, for fewer problems after rain and wind delays.
- **Reduced applicator exposure.** Improved XP formulation features little or no dust.

## Use rates

- Apply DuPont™ Landmark® XP at the rate of 4.5 ounces per acre for reliable control of the weeds listed on the label.
- The product also may be applied at the higher rate of 9.0 ounces per acre to address specific weed problems or for extended residual control needs.

## Low-cost maintenance control tank mixed with Karmex® XP

- Tank mixing Landmark® XP with DuPont™ Karmex® XP herbicide will provide a low-cost, maintenance-level control program. Control length and weed spectrum will not equal a Landmark® XP plus DuPont™ Krovar® I DF program.
- Rainfall following application is required for optimum results.
- Refer to the Karmex® XP or Krovar® I DF label for specific rate recommendations.

## Weeds controlled

Applied at a rate of 4.5 ounces per acre, DuPont™ Landmark® XP delivers reliable control of 111 broadleaf weeds and grasses, including more than twice the weeds DuPont™ Oust® XP controls.

Broadleaf weed species	Weeds controlled*	
	Oust® XP	Landmark® XP
Annual sowthistle	✓	✓
Bedstraw		✓
Black mustard	✓	✓
Blue mustard		✓
Buckhorn plantain	✓	✓
Burclover	✓	✓
Buttercup		✓
<b>Canada thistle</b>		✓
<b>Clover</b>		✓
Cocklebur		✓
Common chickweed	✓	✓
<b>Common groundsel</b>		✓
Common lambsquarters		✓
<b>Common mallow</b>		✓
Common purslane	✓	✓
Common ragweed	✓	✓
<b>Common sunflower</b>	✓	✓
Common tarweed		✓
Common yarrow	✓	✓
<b>Curly dock</b>	✓	✓
Dandelion	✓	✓
Dogfennel	✓	✓
Erect knotweed		✓
Field pennycress		✓
Fleabane		✓
Flixweed		✓
Goldenrod	✓	✓
Hairy vetch	✓	✓
Henbit		✓
Jim Hill mustard		✓
London rocket		✓
<b>Marestail/horseweed</b>		✓
Musk thistle		✓
* Partial list		

Broadleaf weed species	Weeds controlled*	
	Oust® XP	Landmark® XP
Oxeye daisy	✓	✓
Pepperweed (perennial)		✓
Prairie groundsel		✓
Prostrate knotweed		✓
<b>Puncturevine</b>		✓
Redroot pigweed		✓
<b>Redstem filaree</b>		✓
Salsify		✓
Scotch thistle		✓
Shepherd's-purse		✓
Smallseed falseflax		✓
Spanish needles		✓
Tansymustard	✓	✓
Tansy ragwort	✓	✓
Tarweed, fiddleneck		✓
Tumble mustard	✓	✓
<b>Turkey mullein</b>		✓
Velvetleaf		✓
Whitetop		✓
Wild buckwheat		✓
<b>Wild carrot</b>	✓	✓
Wild teasel		✓
* Partial list		

### Landmark® XP tank mixes

DuPont™ Landmark® XP tank-mix combinations provide foliar and soil activity to assure performance and provide long-lasting control.

The extended residual control of these weeds helps to minimize the need for respray treatments, saving you time and money.

Grass species	Grasses controlled*	
	Oust® XP	Landmark® XP
Annual bluegrass	✓	✓
Annual ryegrass	✓	✓
Barnyardgrass	✓	✓
Bulbous bluegrass		✓
Cheat	✓	✓
<b>Crabgrass</b>		✓
Downy brome	✓	✓
Foxtails (except green)	✓	✓
Italian ryegrass	✓	✓
Itchgrass		✓
Jointed goatgrass	✓	✓
Medusahead	✓	✓
Red brome	✓	✓
Red fescue		✓
Ripgut brome	✓	✓
Signalgrass	✓	✓
Sprangletop (annual)	✓	✓
Wheat (volunteer)	✓	✓
Wild oat	✓	✓
Witchgrass		✓
* Partial list		

## Biological activity

DuPont™ Landmark® XP is a member of the sulfonylurea family of herbicides. Sulfonylurea herbicides inhibit the activity of acetolactate synthase, or ALS, a key enzyme for plant cell growth. Animals do not possess this enzyme to synthesize proteins.

## Environmental fate

### Soil dissipation and biodegradability

With Landmark® XP, the most common and significant breakdown processes are chemical hydrolysis and microbial degradation. Hydrolysis is followed by complete metabolism to nonphytotoxic, low-molecular weight compounds through normal soil microbial processes.

### Water quality

Landmark® XP is used at low rates. It is unlikely to reach groundwater sources. Similarly, it has a very low potential to adversely impact surface water quality, due to its environmental and toxicological characteristics. Do not apply directly to water, or to areas where surface water is present.

## For more information

Contact your DuPont Vegetation Management Service Center or DuPont Vegetation Management Representative to learn more about Landmark® XP herbicide from DuPont. And be sure to visit us on the Web at [vm.dupont.com](http://vm.dupont.com).

*This reference guide is not intended as a substitute for the product label for the product(s) referenced herein. Product labels for the above product(s) contain important precautions, directions for use and product warranty and liability limitations that must be read before using the product. Applicators must be in possession of the product label(s) at the time of application. Always read and follow all label directions and precautions for use when using any pesticide alone or in tank mix combinations.*

*The DuPont Oval Logo, DuPont™, The miracles of science™, Landmark®, Karmex®, Krovar® and Oust® are trademarks or registered trademarks of DuPont or its affiliates.*

*Copyright © 2001-2007 E.I. du Pont de Nemours and Company. All Rights Reserved. 9/07  
Reorder No.: K-14705 (Replaces K-14317)*



*The miracles of science™*