

# HERBICIDE DRY FLOWABLE FOR USE ON WHEAT, BARLEY, OAT, TRITICALE, FALLOW, CORN, SOYBEANS AND AS A PRE-PLANT OR POST-HARVEST HERBICIDE

# KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.) Assure

#### **FIRST AID**

Take off contaminated clothing.
• Rinse skin immediately with plenty of water for 15 - 20 minutes.
Call a poison control center or doctor for treatment advice.
Hold eye open and rinse slowly and gently with water for
15 - 20 minutes.
• Remove contact lenses, if present, after the first five minutes,
then continue rinsing eye.
Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565.

EPA REG. NO. 34704-1003 EPA EST. NO. 352-IL-001 NET CONTENTS 10 OZS. (283,5 G)

IHT 043008 V4D 02Y09

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Caution! Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing.

## PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear: Long-sleeved shirt and long pants, chemical resistant gloves, Category A, (such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber), all ≥14 mils, and shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

## **USER SAFETY RECOMMENDATIONS**

Users should:

 Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

## **ENVIRONMENTAL HAZARDS**

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

#### PESTICIDE HANDLING

- Calibrate sprayers only with clean water away from the well site.
- Make scheduled checks of spray equipment.
- Assure accurate measurement of pesticides by all operation employees.
- Mix only enough product for the job at hand.
- Avoid over-filling of spray tank.
- Do not discharge excess material on the soil at a single spot in the field/grove or mixing/loading station.
- Dilute and agitate excess solution and apply at labeled rates/uses.

- Avoid storage of pesticides near well sites.
- When triple rinsing the pesticide container, be sure to add the rinsate to the spray mix.

## **GENERAL INFORMATION**

Thief™ is for selective postemergence control of certain broadleaf weeds in wheat (including durum), barley, oat, triticale, post-harvest burndown, pre-plant burndown, fallow, corn and soybeans. This product is a dry flowable granule to be mixed in water or other listed carrier and applied as a uniform broadcast spray. It is noncorrosive, nonflammable, nonvolatile and does not freeze.

## **BIOLOGICAL ACTIVITY AND ENVIRONMENTAL CONDITIONS**

Best results are obtained when this product is applied to young, actively growing weeds. The use rate will depend on weed spectrum and size of weed at time of application. The degree of control and duration of effect are dependent on rate used, sensitivity and size of target weed and environmental conditions at the time of and following application.

This product stops growth of susceptible weeds rapidly. However, typical symptoms of dying weeds (discoloration) may not be noticeable for 1 to 3 weeks after application (2 to 5 weeks for wild garlic) depending on the environmental conditions and weed susceptibility. Warm, moist conditions following treatment promote the activity of this product, while cold, dry conditions delay the activity. Weeds hardened-off by cold weather or drought stress will be less susceptible.

A vigorous growing crop will aid weed control by shading and providing competition for weeds. However, a dense crop canopy at time of application can intercept spray and result in reduced weed control. Weeds may not be adequately controlled in areas of thin crop stand or seeding skips.

Applications made to weeds that are in the cotyledon stage, larger than the size indicated, or to weeds under stress may result in unsatisfactory control.

This product may injure crops that are stressed from adverse environmental conditions (such as extreme temperatures or moisture), abnormal soil conditions, or cultural practices. In addition, different varieties of the crop may have differing levels of sensitivity to treatment with this product under otherwise normal conditions. Treatment of sensitive crop varieties may injure crops.

Weed control may be reduced if rainfall or snowfall occurs soon after application. Several hours of dry weather are needed to allow this product to be sufficiently absorbed by weed foliage.

To reduce the potential of crop injury in cereals, tank mix this product with 2,4-D (ester formulations perform best; see the TANK MIXTURES section of this label) and apply after the crop is in the tillering stage of growth.

## **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPÉ required for éarly entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls.
- Chemical resistant gloves, Category A, (such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber), all ≥14 mils,
- Shoes plus socks.

Do not apply this product through any type of irrigation system.

Thief should be used only in accordance with directions on this label or in separately published Loveland Products, Inc. directions.

Loveland Products, Inc. will not be responsible for losses or damages resulting from the use of this product in any manner not specified by Loveland Products, Inc.

This product is for use on wheat, barley, oat, triticale, fallow, corn, soybeans and as a pre-plant and/or post-harvest burndown herbicide in most states. Check with your state extension service or Department of Agriculture before use, to be certain this product is registered in your state.

# CEREALS, FALLOW AND PREPLANT BURNDOWN WEEDS CONTROLLED

Annual knawel
Annual sowthistle
Black mustard

Bushy wallflower/Treacle mustard

Carolina geranium Coast fiddleneck Common buckwheat Common chickweed\* Common groundsel

Common lambsquarters Corn chamomile

Corn spurry Cress (mouse-ear) Curly dock False chamomile

Field pennycress Flixweed Green smartweed Kochia† Ladysthumb London rocket Mallow (little) Marshelder Miners lettuce Mouseear chickweed Pennsylvania smartweed Prostrate knotweed

Redmaids Redroot pigweed Russian thistle†\*

Scentless chamomile/mayweed Shepherdspurse

Shepherdspurse Smallflower buttercup

Stinking mayweed/Dogfennel Swinecress

Tarweed fiddleneck Tumble/Jim Hill mustard Volunteer lentils Volunteer peas Volunteer sunflower\*

Wild buckwheat\*
Wild chamomile
Wild garlic\*
Wild mustard

#### PARTIAL CONTROL\*\*

Common cocklebur Mallow (common)
Common sunflower Prickly lettuce\*
Cutleaf eveningprimrose Tansymustard\*
Henbit Wild radish\*

- \* See SPECIFIC WEED PROBLEMS in the Cereals section below for more information.
- \*\*Partial control: A visual reduction of weed population as well as a significant loss of vigor for individual weed plants. For better results, use 0.5 or 0.6 ounce of this product per acre and include a tank mix partner such as 2,4-D, MCP, bromoxynil (such as Buctril®, Bison®, Bronate® or Bronate Advanced), or dicamba (such as Banvel/Clarity®), refer to the TANK MIXTURES section of this label.
- † Naturally occurring resistant biotypes of kochia, prickly lettuce and Russian thistle are known to occur. See the TANK MIXTURES and SPECIFIC WEED PROBLEMS sections of this label for additional details.

### **FALLOW**

#### **APPLICATION TIMING**

Apply this product in the spring, summer or fall when the majority of weeds have emerged and are actively growing. (See the CROP ROTATION section of this label for additional information).

### **USE RATES**

This product may be used as a fallow treatment for burndown of emerged weeds, in combination with other suitable registered fallow herbicides (See the TANK MIX-TURES section of this label for additional information). Apply this product at 0.3 to 0.6 ounce per acre to fallow for control or partial control of the weeds listed below. Sequential treatments of this product may be made provided the total amount of this product applied does not exceed 1.0 ounce per acre.

## TANK MIXTURES IN FALLOW

This product, when used as a fallow treatment, should be tank mixed with other herbicides that are registered for use in fallow, including glyphosate (such as Roundup®), Landmaster® II, Fallow Master®, RT Master®, glyphosate plus 2,4-D (ester formulations work best), glyphosate plus dicamba (such as Banvel/Clarity), 2,4-D (ester formulations work best), or dicamba (such as Banvel/Clarity) alone.

## PREPLANT BURNDOWN

## APPLICATION TIMING

For burndown of emerged weeds, broadcast applications of this product may be applied before wheat (including durum), barley, oat, triticale, soybeans and field corn plants emerge. Before planting any other crop (such as sugarbeets, canola, rice, or grain sorghum) apply this product as a burndown treatment at least 45 days prior to planting. (See the CROP ROTATION section of this label for additional information).

Apply this product as burndown treatment in cotton when a majority of weeds have emerged. Allow at least 7 days after application before planting cotton. Allow at least 5 months between application of this product and cotton harvest.

#### **USE RATES**

This product may be used as a burndown treatment prior to planting any crop; or shortly after planting, but prior to emergence of, wheat (including durum), barley, oat, triticale, soybeans and field corn (See the APPLICATION TIMING section of this label for restriction on planting intervals).

Apply this product at 0.3 to 0.6 ounce per acre for control or partial control of the weeds listed below, except when planting to cotton where this product can be applied at 0.2 to 0.33 ounce per acre. Use the 0.6 ounce per acre rate when weed infestation is heavy and predominantly consists of those weeds listed under the WEEDS PARTIALLY CONTROLLED section of this label, or when application timing and environmental conditions are marginal. Sequential treatments of this product may also be made provided the total amount of this product applied during one season does not exceed 1.0 ounce per acre.

This product should be applied in combination with other suitable registered preplant burndown herbicides (See the TANK MIXTURES section of this label for additional information).

#### TANK MIXTURES IN PRE-PLANT BURNDOWN APPLICATIONS

This product may be used as a pre-plant burndown treatment alone or tank mixed with other herbicides that are registered for use as a pre-plant burndown product, including glyphosate (such as Roundup), Landmaster II, Fallow Master, RT Master, glyphosate plus dicamba (such as Banvel/Clarity) or dicamba (such as Banvel/Clarity) alone.

## **CEREALS**

## **APPLICATION TIMING**

Wheat (Including Durum), Barley, Triticale and Winter Oat

Make applications after the crop is in the 2-leaf stage, but before the flag leaf is visible.

#### Spring Oat

Make applications after the crop is in the 3-leaf stage, but before jointing. Do not use on Ogle, Porter or Premier varieties since crop injury can occur.

#### **USE RATES**

In cereals, do not use less than 0.3 ounce of this product per acre.

If predominant weed(s) in field is (are) one of those listed in WEEDS PARTIAL-LY CONTROLLED table below, always include a tank mix partner (refer to TANK MIXTURES section).

## Wheat, Barley and Triticale

Apply 0.5 ounce of this product per acre to wheat (including durum), barley or triticale for control or partial control of the weeds listed below.

Use 0.6 ounce of this product per acre when weed infestation is heavy and predominately consists of those weeds listed under partial control, or when application timing and environmental conditions are marginal (refer to the APPLICATION TIMING and GENERAL INFORMATION sections of this label).

Use 0.3 ounce of this product per acre when weed infestation is light and predominately consists of those weeds listed under WEEDS CONTROLLED, and when optimum application conditions occur.

Sequential treatments of this product may be made provided the total amount of this product applied to the crop does not exceed 1.0 ounce per acre.

## Oat (Spring and Winter)

Apply 0.3 to 0.4 ounce of this product per acre for control of the weeds listed in WEEDS CONTROLLED table.

If predominant weed(s) in field is(are) one of those listed in WEEDS PARTIALLY CONTROLLED table below, always include a tank mix partner (refer to TANK MIXTURES section).

Do not make more than one application of this product per crop season on oat.

## SPECIFIC WEED PROBLEMS

**Common chickweed and wild buckwheat:** For best results, apply a minimum of 0.5 ounce of this product per acre plus surfactant when all or the majority of weeds have germinated and are past the cotyledon stage. Weeds should be less than 3 inches tall or across at the time of this product application.

**Kochia:** Naturally occurring biotypes resistant to this product are known to occur. For best results, use this product in a tank mix with Starane®, Starane + Salvo®, Starane + Sword®, dicamba (such as Banvel/Clarity) and 2,4-D or MCP (ester or amine), or bromoxynil containing products (such as Buctril, Bison, Bronate, Bronate Advanced or Widematch®).

This product should be applied in the spring when kochia are less than 2 inches tall and are actively growing (refer to the TANK MIXTURES section of this label for additional details on rates and restrictions).

**Tansymustard:** For best results, use 0.5 to 0.6 ounce of this product per acre plus 2,4-D or MCPA. Refer to the TANK MIXTURES section of this label for more information.

Russian thistle, Prickly lettuce: Naturally occurring biotypes resistant to this product of these weeds are known to occur. For best results, use this product in a tank mix with dicamba (such as Banvel/Clarity) and 2,4-D or MCP (ester or amine), or bromoxynil containing product (such as Buctril, Bison, Bronate, Bronate Advanced or Rhino®) and 2,4-D (3/4 to 1 pint Buctril + 1/4 to 3/8 lb active 2,4-D ester)

This product should be applied in the spring when Russian thistle, and prickly lettuce are less than 2 inches tall or 2 inches across and are actively growing (refer to the TANK MIXTURES section of this label for additional details on rates and restrictions).

Wild garlic: For best results, apply 0.5 to 0.6 ounce of this product per acre plus surfactant when wild garlic plants are less than 12 inches tall with 2 to 4 inches of new growth. For severe infestations, use the 0.6 ounce per acre rate of this product. Control may be reduced when plants are hardened-off by cold weather and/or drought stress. Control is enhanced when applications are made during warm temperatures to actively growing wild garlic plants. Typical symptoms of dying wild garlic plants (discoloration and collapse) may not be noticeable for 2 to 5 weeks.

Thorough coverage of all garlic plants is essential.

Tank mixes of this product plus metribuzin may result in reduced control of wild garlic

Wild radish: For best results, apply 0.5 to 0.6 ounce this product per acre plus surfactant either in the fall or spring to wild radish rosettes less than 6 inches in diameter. Applications made later than 30 days after weed emergence will result in partial control. Fall applications should be made prior to hardening-off of plants

SU/IMI Tolerant Volunteer Sunflowers: Control may not be adequate because varieties resistant to SU and IMI products (Express®, Beyond®, Pursuit®, Raptor®) are under development. For best results, use this product in a tank mix with Starane, Starane + Salvo, Starane + Sword, dicamba (such as Banvel/Clarity) and 2,4-D or MCP (ester or amine), or bromoxynil containing products (such as Buctril, Bison, Bronate or Bronate Advanced).

## TANK MIXTURES

Read and follow all manufacturers' label instructions for any companion herbicides, fungicides, and/or insecticides. If those instructions conflict with this label, do not tank mix that product with this product. Read and follow all label instructions on timing, precautions, and warnings for any companion products before using these tank mixtures. Follow the most restrictive labeling.

## With 2,4-D (amine or ester) or MCPA (amine or ester)

This product may be tank mixed with the amine and ester formulations 2,4-D and MCPA herbicides for use on wheat, barley, oat, triticale or fallow.

For best results in the Red River Valley and adjacent areas of North Dakota and Minnesota, add the ester formulations of 2,4-D or MCPA herbicides to the tank at 3/8 lb active ingredient (such as 3/4 pint of a 4 lbs per gal product, 1/2 pint of a 6 lbs per gal product). No additional surfactant is needed with this mixture.

For best results, in other areas, add the ester formulations of 2,4-D or MCP herbicides to the tank at  $\frac{1}{4}$  to  $\frac{3}{8}$  lb active ingredient (such as  $\frac{1}{2}$  to  $\frac{3}{4}$  pint of a 4 lbs per gal product, 1/3 to 1/2 pint of a 6 lbs per gal product). Nonionic surfactant may be added to the mixture at ½ to 1 quart per 100 gals of spray solution (0.125 to 0.25% v/v); however, adding nonionic surfactant may increase the potential for crop injury, especially at the higher phenoxy rates. Higher rates of 2,4-D or MCP may be used, but do not exceed the highest rate allowed by those respective labels.

## With dicamba (such as Banvel/Clarity)

This product may be tank mixed with \$^{1/6}\$ to \$^{1/6}\$ lb active ingredient dicamba (such as 2 to 4 fluid ounces Banvel or 2 to 4 fluid ounces Clarity). Use higher rates when weed infestation is heavy. Nonionic surfactant may be added to the mixture at  $\frac{1}{2}$  to 1 quart per 100 gals of spray solution (0.125 to 0.25% v/v); however, adding nonionic surfactant may increase the potential for crop injury. Refer to the specific dicamba label for application timing and restrictions. Tank mixes of this product plus dicamba may result in reduced control of some broadleaf weeds.

## With 2,4-D (amine or ester) and Banvel/Clarity

This product may be applied in a 3-way tank mix with formulations of dicamba and 2,4-D or MCP. Make application of this product plus 1/16 to 1/8 lb active ingredient dicamba (such as 2 to 4 fluid ounces Banvel or 2 to 4 fluid ounces Clarity) plus 1/4 to 3/8 lb active ingredient 2,4-D or MCP ester or amine per acre. Use higher rates when weed infestation is heavy. Nonionic surfactant may be added to the mixture at ½ to 1 quart per 100 gals of spray solution (0.125 to 0.25% v/v); however, adding nonionic surfactant may increase the potential for crop injury. Apply this three-way combination to winter wheat and winter oat after the crop is tillering and prior to jointing (first node).

In Spring Wheat (including Durum) and Spring Oat, apply after the crop is tillering and before it exceeds the 5-leaf stage.

In Spring Barley, apply after the crop is tillering and before it exceeds the 4-leaf stage.

#### With Bromoxynil containing products (such as Buctril, Bison, Bronate, Bronate Advanced or Rhino)

This product may be tank mixed with bromoxynil containing herbicides registered for use on wheat, barley or triticale. For best results, add bromoxynil containing herbicides to the tank at 3/16 to 3/8 lb active ingredient per acre (such as Bronate or Bison at ¾ to 1½ pts per acre). Note that tank mixes of this product plus bromoxynil may result in reduced control of Canada thistle.

With Starane, Starane + Salvo, Starane + Sword
For improved control of Kochia (2 to 4 inches tall) this product may be tank mixed with  $^{1}$ /3 to  $1^{1}$ /3 pts per acre of Starane,  $^{2}$ /3 to  $2^{2}$ /3 pts per acre of Starane + Salvo,  $^{3}$ /4 to 234 pts per acre of Starane + Sword.

2,4-D and MCP herbicides (preferably ester formulations) may be tank mixed with this product plus Starane. Consult local guidance and the TANK MIXTURES section of this label for additional information.

#### With Maverick®

This product can be tank mixed with Maverick herbicide for improved control of weeds in wheat. Refer to the Maverick label for information regarding use restrictions, labeled crops, rotational cropping intervals, sprayer cleanup, use precautions and other information. The most restrictive provisions on either label will apply. Do not use the tank mix if any restrictions on the Maverick label conflict with the instructions on the Loveland Products, Inc. label.

This product can be tank mixed with Aim herbicide for improved control of weeds in wheat and barley. Refer to the Aim label for information regarding use restrictions, labeled crops, rotational cropping intervals, sprayer cleanup, use precautions and other information. The most restrictive provisions on either label will apply. Do not use the tank mix if any restrictions on the Aim label conflict with the instructions on the Loveland Products, Inc. label.

## With Stinger® or Curtail® or Curtail M or Widematch

This product can be tank mixed with Stinger or Curtail or Curtail M or WideMatch herbicide for improved control of weeds in wheat and barley. Refer to the Stinger or Curtail or Curtail M or WideMatch labels for information regarding use restrictions, labeled crops, rotational cropping intervals, sprayer cleanup, use precautions and other information. The most restrictive provisions on either label will apply. Do not use the tank mix if any restrictions on the Stinger or Curtail or Curtail M or WideMatch labels conflict with the instructions on the Loveland Products, Inc. label.

#### With Express or Express XP Herbicide

This product may be tank mixed with Express or Express XP based on local quidance.

#### With Ally® or Ally XP Herbicide

This product may be tank mixed with Ally or Ally XP based on local guidance.

#### With Assert® Herbicide or Avenge® Herbicide

This product can be tank mixed with Avenge or Assert. When tank mixing this product with Assert, always include another broadleaf weed herbicide with a different mode of action (for example 2,4-D ester, MCP ester, or bromoxynil (such as Buctril, Bison, Bronate or Bronate Advanced). Applications of this product plus Assert may cause temporary crop discoloration, stunting, or injury when heavy rainfall occurs shortly after application.

#### With Discover® NG

This product can be tank mixed with Discover NG herbicide for improved control of weeds in spring wheat. Refer to the Discover NG label for information regarding use restrictions, labeled crops, rotational cropping intervals, sprayer cleanup, use precautions and other information. The most restrictive provisions on either label will apply. Do not use the tank mix if any restrictions on the Discover NG label conflict with the instructions on the Loveland Products, Inc. label.

## With Everest®

This product can be tank mixed with Everest herbicide for improved control of weeds in spring wheat. Refer to the Everest label for information regarding use restrictions, labeled crops, rotational cropping intervals, sprayer cleanup, use precautions and other information. The most restrictive provisions on either label will apply. Do not use the tank mix if any restrictions on the Everest label conflict with the instructions on the Loveland Products, Inc. label.

## With Hoelon®

A tankmix of Hoelon 3EC herbicide + this product can be applied for annual ryegrass (in the Pacific Northwest only), wild oat and broadleaf weed control in winter and spring wheat, and spring barley. The Hoelon 3EC herbicide rate should be 22/3 pints per acre with up to 0.5 ounce per acre of this product in spring and winter wheat.

A three-way tankmix of Hoelon 3EC herbicide + Buctril herbicide + this product can be applied for annual ryegrass (in the Pacific Northwest only), wild oat and broadleaf weed control in winter and spring wheat, and spring barley. The Hoelon 3EC herbicide rate should be 2 2/3 pts per acre with up to 0.5 ounce per acre of this product in winter wheat (up to 0.4 ounce per acre in spring wheat and spring barley). Buctril herbicide should be used at 1 pt per acre.

This tank mixture should only be used under good soil moisture conditions when wild oats are in the 1 to 4-leaf stage. Reduced control of foxtail is likely when tank mixing Hoelon with this product. When foxtail is the major grassy weed in the field, DO NOT tank mix Hoelon 3EC herbicide + this product; use sequential treatments. Be sure to follow all use directions, warnings and cautions on the EPA approved Hoelon 3EC and Buctril labels.

#### With Achieve®

This product can be tankmixed with Achieve for wild oat control. This tankmix may also include 2,4-D ester, MCPA ester, bromoxynil or bromoxynil/MCPA for greater spectrum of broadleaf control. See Achieve label for specific use directions and restrictions on tank mixes.

To minimize the reduction in wild oat control, use the higher rates of Achieve when using rates of this product greater than 0.3 ounce per acre.

Note: Green foxtail, yellow foxtail, Persian darnel and other grass weeds will not be controlled by this tankmix. Read and follow all label instructions on tank mixes, application timing, precautions, and warnings on the Achieve label.

#### With Puma®

This product can be tankmixed with Puma 1EC for control of some annual grass weeds. This tankmix may also include MCPA ester, bromoxynil or bromoxynil/MCPA for greater spectrum of broadleaf control. See Puma 1EC label for specific use directions and restrictions on tank mixes.

Read and follow all label instructions on the EPA approved Puma 1EC label for tank mixes, application timing, precautions, and restrictions. If those instructions conflict with this label, do not tank mix the product with this product.

#### With Other Grass Control Products

This product can be tankmixed with grass control products. Antagonism generally does not occur. However, Loveland Products, Inc. recommends that you first consult your state experiment station, university, or extension agent, agricultural dealer, or Loveland Products, Inc. representative as to the potential for antagonism before using the mixture. If no information is available, limit the initial use of this product and the grass product to a small area.

#### With Fungicides

This product may be tank mixed or used sequentially with fungicides registered for use on cereal grains.

#### With Insecticides

This product may be tank mixed or used sequentially with insecticides registered for use on cereal grains.

However, under certain conditions (drought stress, cold weather, or if the crop is in the 2 to 4-leaf stage), tank mixes or sequential applications of this product with organophosphate insecticides (such as Lorsban®) may produce temporary crop yellowing or, in severe cases, crop injury. The potential for crop injury is greatest when wide fluctuations in day/night temperatures occur just prior to or soon after application. Test these mixtures in a small area before treating large areas.

Do not apply this product within 60 days of crop emergence where an organophosphate insecticide has been applied as an in-furrow treatment because crop injury may result.

Do not use this product plus Malathion because crop injury will result.

## With Liquid Nitrogen Solution Fertilizer

Liquid nitrogen fertilizer solutions may be used as a carrier in place of water. Run a tank mix compatibility test before mixing this product in fertilizer solution.

This product must first be slurried with water and then added to liquid nitrogen solutions (e.g., 28-0-0, 32-0-0). Ensure that the agitator is running while the this product is added. Use of this mixture may result in temporary crop yellowing and stunting.

If using low rates of liquid nitrogen fertilizer in the spray solution (less than 50% of the spray solution volume), the addition of surfactant is necessary. Add surfactant at  $\frac{1}{2}$  pint to 1 quart per 100 gals of spray solution (0.06 to 0.25% v/v) based on local guidance.

When using high rates of liquid nitrogen fertilizer in the spray solution, adding surfactant increases the risk of crop injury. Consult your agricultural dealer, consultant, fieldsman, or Loveland Products, Inc. representative for a specific recommendation before adding an adjuvant to these tank mixtures.

If 2,4-D or MCPA is included with this product and the fertilizer mixture, ester formulations tend to be more compatible (see manufacturer's label). Additional surfactant may not be needed when using this product in tank mix with 2,4-D ester or MCP ester and liquid nitrogen fertilizer solutions. Consult your agricultural dealer, consultant, field advisor, or Loveland Products, Inc. representative for a specific recommendation before adding an adjuvant to these tank mixtures.

Note: In certain areas east of the Mississippi River unacceptable crop response may occur with use of straight or dilute nitrogen fertilizer carrier solutions where cold temperatures or widely fluctuating day/night temperatures exist. In these areas consult your agricultural dealer, consultant, field advisor, or Loveland Products, Inc. representative for a specific recommendation before using nitrogen fertilizer carrier solutions.

Liquid nitrogen fertilizer solutions that contain sulfur can increase crop response.

Do not use low rates of liquid fertilizer as a substitute for a surfactant.

Do not use with liquid fertilizer solutions with a pH less than 3.0.

#### SOYBEANS

## APPLICATION TIMING (POST EMERGENCE)

This product may be applied to soybeans any time after the first trifoliate has expanded fully. Apply no later than 60 days before harvest.

Early-season soybean injury may result from tank-mix applications with other registered herbicides. Injury may manifest itself as stunting (seen as a reduction in leaf size or internode length), yellowing leaves and/or red veins, and necrosis in the leaves and petioles. The potential for soybean injury is most pronounced with applications made during hot, humid conditions, under widely fluctuating weather or temperature conditions, or with applications to soybeans under stress.

## **USE RATES IN SOYBEANS**

Make a single application of this product at a rate of 0.083  $(^{1}/_{12})$  ounce per acre for selective postemergence broadleaf weed control on conventional soybean varieties.

This product at up to  $^{1/3}$  ounce per acre is recommended for use on soybeans designated "STS". Severe injury or death of soybeans will result if any soybeans not designated as STS are treated with more than  $^{1/12}$  ounce of this product. Multiple applications of this product may be applied to STS soybeans provided no more than a total of  $^{1/3}$  ounce is applied per season.

#### **SPRAY ADDITIVES**

Applications of this product in soybeans must include a nonionic surfactant or crop oil concentrate, and an ammonium nitrogen fertilizer. See SPRAY ADJUVANTS.

#### WEEDS CONTROLLED

When applied to soybeans as directed, this product will control the following weeds:

	Maximum
	Size (inches)
Weeds Controlled	at Application
Annual Smartweeds	6
Lambsquarters	4
Pigweed	
Rough (red root)	12
Other species	8
Velvetleaf	6
Wild Mustard	up to 4 inches in dia.
	Maximum
	Size (inches)
Partial Control*	at Application
Cocklebur	6
Jimsonweed	4
Wild Sunflower	6

\*Partial Control: A visual reduction of weed population as well as a significant loss of vigor for individual weed plants.

See WEEDS CONTROLLED in the CEREALS, FALLOW AND PREPLANT BURNDOWN section for a listing of weeds controlled using applications of  $^{1}/_{3}$  ounce of this product in STS soybeans.

## TANK MIXTURES IN SOYBEANS

This prodduct may be tank mixed with full or reduced rates of other products registered for use in soybeans. However, Loveland Products, Inc. will not warrant crop safety or weed control of this product's tank mixtures with any other pesticide or spray adjuvant except as specified in this label or other Loveland Products, Inc. supplemental labeling or technical bulletins.

Do not tank mix this product with organophosphate insecticides, or apply this product within 14 days before or after an application of an organophosphate insecticide, as severe crop injury may occur.

#### With Postemergence Grass Herbicides

This product may be tank mixed with postemergence grass herbicides such as Assure® II herbicide.

With postemergence grass herbicides, surfactant rate (concentration) should be 1 to 2 pints per 100 gallons of spray solution (0.125% to 0.25% v/v concentration). Use of a higher rate of nonionic surfactant, particularly under hot, humid conditions, may result in temporary crop injury. Do not use crop oil concentrate when tank mixing this product herbicide with postemergence grass herbicides unless specified on other Loveland Products, Inc. supplemental labeling. Include a nonionic surfactant with the tank mix of this product and post grass herbicides such as Assure II herbicide.

#### With Glyphosate

This product may be tank mixed with glyphosate for control of certain broadleaf weeds in Roundup Ready or Roundup Ready X "STS stacked trait" soybeans. For tank mixtures of this product plus glyphosate herbicide, always read and follow all use directions, restrictions, and precautions on the EPA approved labels. When tank mixing, the most restrictive labeling applies.

## Adjuvants

When tank mixing this product with glyphosate, it is recommended to add ammonium sulfate (AMS) at 4.25 to 17 lb per 100 gals of spray mixture. See the glyphosate manufacturer's label for specific ammonium nitrogen instructions. When velvetleaf is present, ammonium sulfate is required at a minimum rate of 2 lb per acre.

The addition of surfactant at 0.125 to 0.25% v/v (1 to 2 pts per 100 gals spray mixture) to some Thief plus glyphosate tank mixes will improve weed control when glyphosate products are used that do not contain built-in adjuvant systems. Glyphosate products differ in their adjuvant contents. Glyphosate products such as Glyphomax® or Roundup Original allow for the addition of surfactants. See the manufacturer's specific surfactant instructions.

#### SEQUENTIAL APPLICATIONS IN SOYBEANS

Before making applications of this product to soybeans previously treated with other herbicides, ensure that the soybeans are free from stress (herbicide or environmental) and actively growing.

#### **FIELD CORN**

Do not apply to sweet corn, popcorn or field corn grown for seed.

Do not apply this product through any type of irrigation systems.

Do not graze or feed forage or grain from treated field corn to livestock within 30 days of application.

#### RESTRICTION

This product is limited to ground application only in the State of New York. Do not apply by air in that state.

#### APPLICATION INFORMATION

This product may be applied to 2 to 6-leaf field corn (1 to 5 collars, up to 16 inches tall) at a rate of 0.083 ( $^{1}$ / $^{1}$ 2) ounce per acre. Do not apply to field corn taller than 16 inches or 5 collars, whichever is more restrictive.

This product may be applied as a tank mixture with labeled rates of atrazine and glyphosate. Do not tank mix with other corn herbicides unless specified on this product's labels or technical bulletins.

Apply this product to field corn hybrids with a Relative Maturity (RM) of 88 days or more, including "food grade" (yellow dent, hard endosperm), waxy and high-oil corn. Not all field corn hybrids of less than 88 days RM, not all white corn hybrids or Hi-Lysine hybrids have been tested for crop safety, nor does Loveland Products, noc. have access to all seed company data. Consequently, injury arising from the use of this product on these types of corn is the responsibility of the user. Consult with your seed supplier before applying this product to any of these corn types.

Do not make more than one application per season.

#### **TIMING TO WEEDS**

Apply to weeds whose first true leaves are expanded but before weeds exceed the sizes listed below.

When applied as directed, this product will control the following weeds:

WEED	Maximum Size (Inches)
Velvetleaf	6
Pigweed species	12
Lambsquarters	4
Annual smartweeds	6
Wild mustard	up to 4 inches in diameter

## **ADJUVANTS**

Always add either nonionic surfactant at 0.25% v/v (1 qt per 100 gals) or crop oil concentrate at 1% v/v (1 gal per 100 gal) plus either ammonium nitrogen solution such as 28% UAN (2 to 4 qts per acre) of ammonium sulfate (2 to 4 lbs per acre). Loveland Products, Inc. recommends using Activator 90 or Llberate® at .25% v/v or Quad 7 at 1% v/v or Herbimax® at 1% v/v.

When tank mixing this product with glyphosate, it is recommended to add ammonium sulfate (AMS) at 4.25 to 17 lbs per 100 gals of spray mixture. See the glyphosate manufacturer's label for specific ammonium nitrogen instructions. When velvetleaf is present, ammonium sulfate is required at a minimum rate of 2 lbs per acre.

The addition of surfactant at 0.125 to 0.25% v/v (1 to 2 pts per 100 gals spray mixture) to some of this product plus glyphosate tank mixes will improve weed control when glyphosate products are used that do not contain built-in adjuvant systems. Glyphosate products differ in their adjuvant contents. Glyphosate products such as Glyphomax or Roundup Original allow for addition of surfactants. See the manufacturer's specific surfactant instructions.

## SOIL INSECTICIDE INTERACTIONS

This product may interact with certain insecticides previously applied to the crop. Crop response varies with field corn type, insecticide used, insecticide application method, and soil type.

This product may be applied to corn previously treated with Fortress®, Aztec®, Force® or non-organophosphate (OP) soil insecticides regardless of soil type.

- DO NOT APPLY this product to corn previously treated with Counter® 15G.
  Applications of this product to corn previously treated with Counter 20CR, Lorsban or Thimet® may cause unacceptable crop injury, especially on soils of
- less than 4% organic matter.

   Applications of this product to corn previously treated with Lorsban, or other organophosphate insecticides not listed above, may result in temporary crop injury.

## **POST HARVEST**

#### APPLICATION TIMING

This product may be used as a burndown treatment to crop stubble when the majority of weeds have emerged and are actively growing. (See the CROP ROTATION section of this label for additional information).

#### **USE RATES**

Apply this product at 0.3 to 0.6 ounce per acre to crop stubble after harvest. Use the 0.6 ounce per acre rate when weed infestation is heavy and predominantly consists of those weeds listed under the WEEDS PARTIALLY CONTROLLED section of this label or when application timing and environmental conditions are marginal. (See the APPLICATION TIMING section of this label for restriction on planting intervals). This product should be applied in combination with other suitable registered burndown herbicides (See the TANK MIXTURES section of this label for additional information).

Sequential treatments of this product may also be made provided the total amount of this product applied during one fallow/pre plant cropland season does not exceed 1.0 ounce per acre.

#### TANK MIXTURES IN POST HARVEST APPLICATIONS

This product may be used as a post harvest treatment to crop stubble, and should be tank mixed with other herbicides that are registered for use in fallow.

# GENERAL USE AND APPLICATION DIRECTIONS - ALL CROPS AND USES

#### **GROUND APPLICATION**

For best performance, select nozzles and pressure that deliver MEDIUM spray. Nozzles that deliver COARSE spray droplets may be used to reduce drift, provided spray volume is increased to maintain coverage on small weeds. For optimal product performance and minimal spray drift, adjust the spray boom to the lowest possible spray height listed in manufacturers' specifications.

Overlaps or starting, stopping, slowing, and turning while spraying may result in crop injury.

## WHEAT, BARLEY, OAT, TRITICALE, POST-HARVEST BURNDOWN, PRE-PLANT BURNDOWN AND FALLOW:

For flat-fan nozzles, use a spray volume of at least 5 gal per acre (GPA).

For flood nozzles on 30 inch spacings, use at least 10 GPA, flood nozzles no larger than TK10 (or the equivalent), and a pressure of at least 30 psi. For 40 inch nozzle spacings, use at least 13 GPA; for 60 inch spacings use at least 20 GPA. It is essential to overlap the nozzles 100% for all spacings.

Raindrop® RA nozzles are not recommended for this product's applications, as weed control performance may be reduced.

Use screens that are 50-mesh or larger.

# CORN AND SOYBEANS: Broadcast Application

• Use 10 to 25 gallons of water per acre.

Ensure that equipment is set up to avoid applying an excessive rate directly over the rows and into the corn plant whorl.

Overlaps or starting, stopping, slowing, and turning while spraying may result in crop injury.

Under heavy weed pressure or dense crop foliage, increase minimum spray volume to 15 to 25 gals per acre.

#### **Band Application**

For band applications, use proportionately less spray mixture.

To avoid crop injury, carefully calibrate the band applicator to not exceed the labeled rate.

Carefully follow the manufacturer's instructions for nozzle type (flat fans), orientation, distance of nozzles from the crop and weeds, spray volumes, calibration and spray pressure.

#### **AERIAL APPLICATION**

Do not apply during a temperature inversion, when winds are gusty, or when conditions favor poor coverage and/or off-target spray movement.

In wheat, barley, oats, triticale, post-harvest burndown, pre-plant burndown and fallow use 2 to 5 gals per acre; use at least 3 gals per acre in Idaho, Oregon and Utah.

In corn and soybeans, use a minimum of 5 gals per acre.

#### **SPRAY ADJUVANTS**

Always include a spray adjuvant with applications of this product. In addition to a spray adjuvant, an ammonium nitrogen fertilizer may be used. Do not use low rates of liquid nitrogen fertilizer solution as a substitute for surfactant. Antifoaming agents may be used if needed.

Consult your Ag dealer or applicator, local Loveland Products, Inc. fact sheets and technical bulletins prior to using an adjuvant system. If another herbicide is tank

When applying this product by air in areas adjacent to sensitive crops, use solid stream nozzles oriented straight back. Adjust the swath to avoid spray drift damage to sensitive crops downwind and/or use ground equipment to treat the border edge of fields. See the SPRAY DRIFT MANAGEMENT section of this label.

mixed with this product, select adjuvants authorized for use with both products. Products must contain only EPA-exempt ingredients (40 CFR 1001).

## Nonionic Surfactant (NIS)

- Apply 0.06 to 0.50% v/v (1/2 pt to 4 pts per 100 gals of spray solution).
- Surfactant products must contain at least 60% nonionic surfactant with a hydrophilic/lipophilic balance (HLB) greater than 12. See the TANK MIXTURES section of this label for additional information.

## Crop Oil Concentrate (COC) - Petroleum or Modified Seed Oil (MSO)

- Apply at 1% v/v (1 gal per 100 gals spray solution) or 2% under arid conditions.
   MSO adjuvants may be used at 0.5% v/v if specified on local Loveland
   Products, Inc. product literature or service policies.
- Oil adjuvants must contain at least 80% high quality, petroleum (mineral) or modified vegetable seed oil with at least 15% surfactant emulsifiers.

## Special Adjuvant Types

- Combination adjuvant products may be used at doses that provide the required amount of NIS, COC, MSO and/or ammonium nitrogen fertilizer. Consult product literature for use rates and restrictions.
- In addition to the adjuvants specified above, other adjuvant types may be used
  if they provide the same functionality and have been evaluated and approved
  by Loveland Products, Inc. product management. Consult separate Loveland
  Products, Inc. technical bulletins for detailed information before using adjuvant
  types not specified on this label.

#### Ammonium Nitrogen Fertilizer

 Use 2 qts per acre of a high-quality urea ammonium nitrate (UAN), such as 28%N or 32%N, or 2 lbs per acre of a spray-grade ammonium sulfate (AMS). Use 4 qts per acre UAN or 4 lbs per acre AMS under arid conditions.

#### **CROP ROTATION**

Wheat, barley, oat, triticale, soybeans and field corn may be replanted anytime after the application of this product. Any other crop may be planted 45 days after the application of this product.

#### GRAZING

Do not graze or feed forage or hay from treated areas to livestock (harvested straw may be used for bedding and/or feed).

## MIXING INSTRUCTIONS

Do not use with spray additives that alter the pH of the spray solution below pH 5.0 or above pH 9.0, as rapid product degradation can occur. Spray solutions of pH 6.0 to 8.0 allow for optimum stability of this product.

- 1. Fill the tank  $\frac{1}{4}$  to  $\frac{1}{3}$  full of water.
- 2. While agitating, add the required amount of this product.
- 3. Continue agitation until the product is fully dispersed, at least 5 minutes.
- Once this product is fully dispersed, maintain agitation and continue filling tank with water. The product should be thoroughly mixed with water before adding any other material.
- 5. As the tank is filling, add tank mix partners (if desired) then add the required volume of spray adjuvant. Always add spray adjuvant last. Antifoaming agents may be used. Do not use with spray additives that alter the pH of the spray solution below pH 6.0 as rapid product degradation can occur. Spray solutions of pH 7.0 and higher allow for optimum stability of this product.
- If the mixture is not continuously agitated, settling will occur. If settling occurs, thoroughly re-agitate before using.
- Apply this product's spray mixture within 24 hours of mixing to avoid product degradation.
- 8. If this product and a tank mix partner are to be applied in multiple loads, preslurry the product in clean water prior to adding to the tank. This will prevent the tank mix partner from interfering with the dissolution of this product.

#### SPRAY EQUIPMENT

For specific application equipment, refer to the manufacturer's instructions for additional information on GPA, pressure, speed, nozzle types and arrangements, nozzle heights above the target canopy, etc.

Be sure to calibrate air or ground equipment properly before application. Select a spray volume and delivery system that will ensure thorough coverage and a uniform spray pattern with minimum drift. Use higher spray volumes to obtain better coverage when crop canopy is dense. Avoid swath overlapping, and shut off spray booms while starting, turning, slowing, or stopping, to avoid injury to the crop. Do not make applications using equipment and/or spray volumes or during weather conditions that might cause spray to drift onto nontarget sites. For additional information on spray drift refer to the SPRAY DRIFT MANAGEMENT section of this label. Continuous agitation is required to keep this product in suspension.

### SPRAYER CLEANUP

The spray equipment must be cleaned before this product is sprayed. Follow the cleanup procedures specified on the labels of the previously applied products. If no

directions are provided, follow the six steps outlined in the AFTER SPRAYING THIEF section of this label.

#### AT THE END OF THE DAY

It is recommended that during periods when multiple loads of this product are applied, at the end of each day of spraying the interior of the tank be rinsed with fresh water and then partially filled, and the boom and hoses flushed. This will prevent the buildup of dried pesticide deposits which can accumulate in the application equipment.

# AFTER SPRAYING THIS PRODUCT AND BEFORE SPRAYING CROPS OTHER THAN WHEAT, BARLEY, OAT, TRITICALE, FIELD CORN AND SOYBEANS

To avoid subsequent injury to desirable crops, thoroughly clean all mixing and spray equipment immediately following applications of this product as follows:

- Drain tank; thoroughly rinse spray tanks, boom, and hoses with clean water. Loosen and physically remove any visible deposits.
- 2. Fill the tank with clean water and 1 gal of household ammonia\* (contains 3% active ingredient) for every 100 gals of water. Flush the hoses, boom, and nozzles with the cleaning solution. Then add more water to completely fill the tank. Circulate the cleaning solution through the tank and hoses for at least 15 minutes. Flush the hoses, boom, and nozzles again with the cleaning solution, and then drain the tank.
- Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.
- 4. Repeat step 2.
- 5. Rinse the tank, boom, and hoses with clean water.
- 6. If only ammonia is used as a cleaner, the rinsate solution may be applied back to the crop(s) specified on this label. Do not exceed the maximum labeled use rate. If other cleaners are used, consult the cleaner label for rinsate disposal instructions. If no instructions are given, dispose of the rinsate on site or at an approved waste disposal facility.
  - Equivalent amounts of an alternate-strength ammonia solution or a Loveland Products, Inc. approved cleaner can be used in the cleanout procedure. Carefully read and follow the individual cleaner instructions. Consult your Ag dealer, applicator, or Loveland Products, Inc. representative for a listing of approved cleaners.

#### Notes:

- CAUTION: Do not use chlorine bleach with ammonia because dangerous gases will form. Do not clean equipment in an enclosed area.
- Steam-cleaning aerial spray tanks is recommended prior to performing the above cleanout procedure to facilitate the removal of any caked deposits.
   When this product is tank mixed with other pesticides, all cleanout procedures
- When this product is tank mixed with other pesticides, all cleanout procedures for each product should be examined and the most rigorous procedure should be followed.
- In addition to this cleanout procedure, all precleanout guidelines on subsequently applied products should be followed as per the individual product labels.
- 5. Where routine spraying practices include shared equipment frequently being switched between applications of this product and applications of other pesticides to Thief sensitive crops during the same spray season, it is recommended that a sprayer be dedicated to this product to further reduce the chance of crop injury.

### SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

## IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets (>150 - 200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See Wind, Temperature and Humidity, and Temperature Inversions sections of this label.

## **Controlling Droplet Size - General Techniques**

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Use the lower spray pressures recommended for the nozzle.
   Higher pressure reduces droplet size and does not improve canopy penetration.
   WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY
   NOZZLE INSTEAD OF INCREASING PRESSURE.
- Nozzle Type Use a nozzle type that is designed for the intended application.
   With most nozzle types, narrower spray angles produce larger droplets.
   Consider using low-drift nozzles.

## Controlling Droplet Size - Aircraft

- Number of Nozzles Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- Nozzle Orientation Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations.
- Nozzle Type Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- Boom Length The boom length should not exceed ¾ of the wing or rotor length, longer booms increase drift potential.

 Application Height - Application more than 10 ft above the canopy increases the potential for spray drift.

#### **BOOM HEIGHT**

Setting the boom at the lowest referenced height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal hounce

#### WIND

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. AVOID APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS.

**Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

## TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

#### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

#### AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring. Note: Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the SPRAY EQUIPMENT section of this label to determine if use of an air assist sprayer is recommended.

## RESISTANCE

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of

To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to change cultural practices within and between crop seasons such as using a combination of tillage, retreatment, tank-mix partners and/or sequential herbicide applications that have a different site of action. Weed escapes that are allowed to go to seed will promote the spread of resistant biotypes. See the Weeds Controlled section of this label for additional information on managing herbicide resistant weed biotypes.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative cultural practices or herbicide instructions available in your area.

## INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

## **PRECAUTIONS**

 Injury to or loss of desirable trees or vegetation may result from failure to observe the following:

Do not apply, drain or flush equipment on or near desirable trees or other plants or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.

Do not use on lawns, walks, driveways, tennis courts, or similar areas. Prevent drift of spray to desirable plants.

- Injury to or loss of adjacent sensitive crops and vegetation may result from failure to observe the following:
  - Take all necessary precautions to avoid all direct or indirect contact (such as spray drift) with non-target plants or areas.
  - Carefully observe all sprayer cleanup instructions both prior to and after using this product, as spray tank residue may damage crops other than wheat, barley, oat, triticale, corn, or soybeans.
- Wheat, barley, oat, triticale, corn and soybean varieties may differ in their
  response to various herbicides. Loveland Products, Inc. recommends that you
  first consult your state experiment station, university, or extension agent as to
  sensitivity to any herbicide. If no information is available, limit the initial use of
  this product to a small area.
- For wheat, barley, oat, and triticale, under certain conditions such as heavy rainfall, prolonged cold weather (daily high temperature less than 50° F.), or wide fluctuations in day/night temperatures prior to or soon after this product's application, temporary discoloration and/or crop injury may occur. To reduce the potential of crop injury, tank mix this product with 2,4-D (ester formulations perform best— see the TANK MIXTURES section of this label) and apply after the crop is in the tillering stage of growth.
- This product should not be applied to corn, oat, wheat, barley, triticale or soy beans that are stressed by severe weather conditions, drought (including low levels of subsoil moisture), low fertility, water-saturated soil, disease, or insect damage, as crop injury may result. Risk of injury is greatest when the cereal crop is in the 2 to 5-leaf stage. Severe winter stress, drought, disease, or insect damage following application also may result in crop injury.
- Do not apply to wheat, barley, oat or triticale crops underseeded with another crop
- For ground applications applied to weeds when dry, dusty field conditions exist, control of weeds in wheel track areas may be reduced.

## STORAGE AND DISPOSAL

**PESTICIDE STORAGE:** Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in a cool, dry place

**PÉSTICIDE DISPOSAL:** Do not contaminate water, food, or feed by disposal. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: For Plastic Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. For Fiber Sacks: Completely empty fiber sack by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into manufacturing or application equipment. Then dispose of sack in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Container Refilling and Disposal (For Containers up to 250 gallons): This is a refillable container. If the container is to be refilled, do not rinse with any material or introduce any pesticide other than Thief. Reseal and return the container to any authorized Loveland Products, Inc. refilling facility. If the container is not to be refilled, triple rinse (or equivalent) and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire or other emergency, call 1-800-424-9300 day or night.

Container Disposal for Bulk Containers: When this container is empty, replace the cap and seal all openings that have been opened during use, and return the container to the point of purchase or to a designated location named at time of purchase of this product. The container must only be refilled with this pesticide product. DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transporting. Do not transport if this container is damaged or leaking. If the container is damaged, leaking or obsolete, contact Loveland Products, Inc. at 1-888-574-2878. If not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling. Disposal of this container must be in compliance with state and local regulations.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC – 1-800-424-9300.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVE-LAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL, THIS PRODUCT IS SOLD AS IS TO THE EXTENT ALLOWED BY APPLICABLE LAW. LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT LOVELAND PRODUCTS, INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL, BUYER OR USER MUST SEND, TO THE EXTENT REQUIRED BY APPLICABLE LAW, WRITTEN NOTICE OF SUCH CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, 7251 WEST 4TH STREET, GREELEY, CO 80634.

TO THE EXTENT ALLOWED BY APPLICABLE LAW, THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT, INCLUDING BUT NOT LIMITED TO CLAIMS OF BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORTS, SHALL BE LIMITED TO ONE OF THE FOLLOWING, AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT. TO THE EXTENT ALLOWED BY APPLICABLE LAW, LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES, OR DAMAGES IN THE NATURE OF A PENALTY.

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## THIEF HIGHLIGHTS

- May be applied by ground or by air.
- Wheat, Barley, Oat, Triticale, Soybeans and Field Corn may be replanted anytime after the application of this product. Any other crop may be planted 45 days after the application of this product.
- Certain environmental conditions, such as cool and dry, or hot and humid weather, affect the performance of this product. (See Environmental Conditions.)
- Consult label text for complete instructions. Always read and follow label directions for use.

#### Cereals

- For selective postemergence broadleaf weed control in Wheat (including Durum wheat), Barley, Oat, Triticale, Post-harvest Burndown, Pre-plant Burndown and Fallow
- Apply at the rate of 0.3 to 0.6 ounce per acre on Wheat, Barley, Triticale, Postharvest Burndown, Pre-plant Burndown and Fallow; 0.3 to 0.4 ounce per acre on Oat (see Cereals Application Information).
- Apply after the crop is in the 2-leaf stage, but before the flag leaf is visible on Wheat, Barley, Triticale and Winter Oat. On Spring Oat, apply after the crop is in the 3-leaf stage, but before jointing.
- Use in tank mixtures with other registered herbicides for broader spectrum weed control (see Cereals Tank Mixtures).

#### Soybeans

- For selective postemergence broadleaf weed control in soybeans.
- Apply at the rate of 0.083 (1/12) ounce per acre on conventional soybean varieties. Use up to 1/3 ounce per acre on soybean varieties designated as "STS".
- Include a spray additive recommended in this label. (See Spray Additives).
- Include a nitrogen fertilizer (example: 4 to 8 pints of 28-0-0). (see Spray Additives.)
- For ground application to optimize this product's performance, use flat fan nozzles and apply in 10 to 25 gallons of water at 25 to 60 psi.

- Apply to actively growing weeds at the recommended sizes. (See Soybeans Weeds Controlled.)
- Tank mix only with pesticides specified by this or other supplemental labeling. (See Soybeans Tank Mix Applications.)

#### Corn

- · For selective postemergence broadleaf weed control in corn.
- Apply at the rate of 0.083 (1/12) ounce per acre on corn hybrids of greater than 88-days Relative Maturity.
- Include a spray additive recommended in this label. (See Spray Additives)
- Include a nitrogen fertilizer (example: 4 to 8 pints of 28-0-0) (see Spray Additives).
- Use in tank mixtures with other registered herbicides for broader spectrum weed control (see Corn Tank Mixtures).

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