## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

Edith Emory
Loveland Products, Inc.
P.O. Box 1286

Greeley, CO 80632
Subject: EPA Reg. 34704-1043 / Strut Herbicide Notification
Dear Ms. Emory:
The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated 2-9-11 for the product EPA Reg. 34704-1043 / Strut Herbicide. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions please call Erik Kraft at 703-308-9358 or email at Kraft.Erik@epa.gov.



EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete.

## Certification with Respect to Label Integrity

I certify that the information (including, but not limited to, text, tables, and graphics) contained in the electronic file identified below by file name and submitted with this certification is the same information as that on the paper copies of these documents included with this submission.

|  | PROPOSED LABEL |  |
| :---: | :---: | :---: |
| EPA Registration \# | Date Submitted <br> to EPA | Electronic file name |
| $34704-1043$ | $02 / 09 / 2011$ | 034704.01043.20110209.00049.NOTIF.STRUTBLKTXT.pdf <br> 034704.01043.20110209.00049.NOTI.STRUTREDTXT.pdf |

I certify that the statements that I have made on this form are true, accurate, and complete. I acknowledge that any knowingly false or misleading statements may be punishable by fine or imprisonment or both under applicable law.


Signature

Edith Emory
Name (typed)

Manager of Registrations, Loveland Products, Inc.
Title

02/09/2011
Date

February 9, 2011
U. S. Environmental Protection Agency

Office of Pesticide Programs (7504-P)
Document Processing Desk (NOTIF)
Attn: Kathryn Montague
2777 S. Crystal Drive, Room S-4900
Arlington, VA 22202-4501
RE: Strut Herbicide, EPA Reg. No. 34704-1043

## Dear Kathryn:

Loveland Products, Inc. is filing this notification of changes to the label for the subject registration.
In reviewing the label text, some errors were discovered in the tank mix partner rate tables on pages 22 and 23 of the enclosed specimen labels. A misplaced decimal in these rates appeared twice in each table. Please see the enclosed "red text" version for details.

In the enclosed package, please find the following documentation in support of this notification:

1. Form 8570-1 Application for Registration
2. Certification with Respect to Label Integrity
3. CD containing searchable PDF files both in red and black text versions
4. 1 printed copy of the corrected label with changes marked in red text
5. T printed copies of the corrected label with black text

As always, please feel free to call or contact me at 970-685-3389 or by email at edith.emory@cpsagu.com if there are any questions or concerns regarding this submission.

Sincerely,


Edith Emory
Manager of Registrations



## HERBICIDE

For weed control in asparagus, conservation reserve programs, corn, cotton, fallow croplands, farmstead (noncropland), sorghum, grass grown for seed, hay, proso millet, pasture, rangeland, small grains, soybean, sugarcane, and turf.

## ACTIVE INGREDIENT: <br> Diglycolamine salt of 3,6-dichloro-o-anisic acid* .................................. 56.5 <br> Other Ingredients ........................................................................ 43.2\% <br> TOTAL <br> 100.0\%

*Contains 38.5\% 3,6-dichloro-o-anisic acid (4 pounds acid equivalent per gallon or 480 grams per liter).

## KEEP OUT OF REACH OF CHILDREN CAUTION - PRECAUCION

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

FIRST AID

| If swallowed: | $\bullet$ Call a poison control center or doctor immediately for treatment advice. <br> - Have person sip a glass of water if able to swallow. <br> - DO NOT induce vomiting unless told to do so by a poison control center or <br> doctor. <br> - DO NOT give anything to an unconscious person. |
| :--- | :--- |
| If on skin <br> or clothing: | - Take off contaminated colthing. <br> - Rinse skin immediately with plenty of water for $15-20$ minutes. <br> - Call a poison control center or doctor for treatment advice. |
| If in eyes: | - Hold eye open and rinse slowly and gently with water for $15-20$ minutes. <br> - Remove contact lenses, if present, after first 5 minutes, then continue rinsing <br> eye. <br> - 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.

See inside booklet foor comílete First Aiä, Prec̄āutionāary Statements, Directions För Use, StāteSpecific Crop and/or Use Site Restrictions and CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY.

## STRUT TM

EPA REG. NO. 34704-1043

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION Causes moderate eye irritation. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing.

## Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are nitrile rubber and butyl rubber. If you want more options, follow the instructions for Category C on an EPA chemical-resistance category selection chart.

## All mixers, loaders, and applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves (except for applicators using groundboom equipment, pilots, and lagers)
- Shoes plus socks

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

## Engineering Controls Statement

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR $170.240(\mathrm{~d})(4-6)$ ); the handler PPE requirements may be reduced or modified as specified in the UPS.
Pilots must use cockpits in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240 (d)(4-6)).

## USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.


## 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 disposing of equipment washwaters or rinsate. Apply this product only as directed on the label.

This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

## Ground and Surface Water Protection

Point source contamination: To prevent point source contamination, DO NOT mix, load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. DO NOT apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at $110 \%$ that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment wash waters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.
Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills or c) improper disposal of excess pesticide, spray mixtures or rinsates. Check valves or antisiphoning devices must be used on all mixing equipment.

Movement by surface runoff or through soil: DO NOT apply under conditions which favor runoff. DO NOT apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for ground water contamination. Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. DO NOT apply to soils classified as sand with less than $3 \%$ organic matter and where ground water depth is shallow. To minimize the possibility of ground water contamination, carefully follow application rate listings as affected by soil type in the product information section of this label.

Movement by water erosion of treated soil: DO NOT apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

## Endangered Species Concerns

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law.

## 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.

Unless otherwise directed in supplemental labeling, all applicable directions, restrictions, precautons and CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY are to be followed. This labeling must be in the user's possession during application.

## 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 intervals. The requirements in this box only apply to uses of this product that are covered by the WPS.
DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of $\mathbf{2 4}$ hours.
PPE required for early 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 worn over short-sleeved shirt and short pants
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant headgear for overhead exposure
- Protective eyewear


## NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.
DO NOT enter or allow people (or pets) to enter the treated area until sprays have dried. 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.

## I. PRODUCT INFORMATION

This product is a water-soluble formulation intended for control and suppression of many annual, biennial, and perennial broadleaf weeds, as well as woody brush and vines listed in Table 1. Weed List, Including ALS- and Triazine-Resistant Biotypes. This product may be used for control of these weeds in asparagus, corn, cotton, conservation reserve programs, fallow cropland, grass grown for seed, hay, proso millet, pasture, rangeland, general farmstead (noncropland), small grains, sorghum, soybean, sugarcane, and turf.

## Mode of Action

This product is readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. This product interferes with the plant's growth hormones (auxins) resulting in death of many broadleaf weeds.

## STRUTTM

Table 1. Weed List, Including ALS- and Triazine-Resistant Biotypes ANNUALS

Alkanet
Amaranth, Palmer, Powell, Spiny
Aster, Slender
Bedstraw, Catchweed
Beggarweed, Florida
Broomweed, Common
Buckwheat, Tartary, Wild
Buffalobur
Burclover, California
Burcucumber
Buttercup, Corn, Creeping, Roughseed, Western Field
Carpetweed
Catchfly,
Nightflowering
Chamomile, Corn
Chervil, Bur
Chickweed, Common
Clovers
Cockle, Corn, Cow, White
Cocklebur, Common
Copperleaf, Hophornbeam
Cornflower (Bachelor Button)

BIENNIALS
Burdock, Common
Carrot, Wild (Queen Anne's Lace)
Cockle, White

Croton, Tropic, Woolly
Daisy, English
Dragonhead, American
Eveningprimrose, Cutleaf
Falseflax, Smallseed
Fleabane, Annual
Flixweed
Fumitory
Goosefoot, Nettleleaf
Hempnettle
Henbit
Jacobs-Ladder
Jimsonweed
Knawel (German Moss)
Knotweed, Prostrate
Kochia
Ladysthumb
Lambsquarters,
Common
Lettuce, Miners, Prickly
Mallow, Common, Venice
Marestail (Horseweed)
Mayweed
Morningglory, Ivyleaf,
Tall

Eveningprimrose, Common
Geranium, Carolina
Gromwell

Mustard, Black, Blue, Tansy, Treacle,
Tumble, Wild, Yellowtops
Nightshade, Black, Cutleaf
Pennycress, Field
(Fanweed,
Frenchweed, Stinkweed)
Pepperweed, Virginia (Peppergrass)
Pigweed, Prostrate, Redroot (Carelessweed), Rough, Smooth, Tumble
Pineappleweed
Poorjoe
Poppy, Red-horned
Puncturevine
Purslane, Common
Pusley, Florida
Radish, Wild
Ragweed, Common, Giant (Buffaloweed), Lance-Leaf
Rocket, London, Yellow

Knapweed, Diffuse, Spotted
Mallow, Dwarf
Plantain, Bracted
Ragwort, Tansy

Rubberweed, Bitter
(Bitterweed)
Salsify
Senna, Coffee
Sesbania, Hemp
Shepherdspurse
Sicklepod
Sida, Prickly
(Teaweed)
Smartweed, Green,
Pennsylvania
Sneezeweed, Bitter
Sowthistle, Annual, Spiny
Spanish Needles
Spikeweed, Common
Spurge, Prostrate, Leafy
Spurry, Corn
Starbur, Bristly
Starwort, Little
Sumpweed, Rough
Sunflower, Common
(Wild), Volunteer
Thistle, Russian
Velvetleaf
Waterhemp
Waterprimrose, Winged
Wormwood

Starthistle, Yellow
Sweetclover
Teasel
Thistle, Bull, Milk, Musk, Plumeless

## PERENNIALS

Alfalfa ${ }^{1}$
Artichoke, Jerusalem
Aster, Spiny, Whiteheath
Bedstraw, Smooth
Bindweed, Field, Hedge
Blueweed, Texas
Bursage, Woollyleaf ${ }^{1}$ (Bur Ragweed, Povertyweed)
Buttercup, Tall
Campion, Bladder
Chickweed, Field, Mouseear
Chicory ${ }^{1}$
Clover ${ }^{1}$, Hop
Dandelion ${ }^{1}$

## WOODY SPECIES

Alder
Ash
Aspen
Basswood
Beech
Birch
Blackberry ${ }^{2}$
Blackgum ${ }^{2}$
Cedar ${ }^{2}$
Cherry
Chinquapin
Cottonwood
Creosotebush ${ }^{2}$
Cucumbertree
Dewberry ${ }^{2}$

Dock ${ }^{1}$, Broadleaf (Bitterdock),Curly
Dogbane, Hemp
Dogfennel ${ }^{1}$
(Cypressweed)
Fern, Bracken
Garlic, Wild
Goldenrod, Canada, Missouri
Goldenweed,
Common
Hawkweed
Henbane, Black ${ }^{1}$
Horsenettle, Carolina Ironweed
Knapweed, Black, Diffuse, Russian ${ }^{1}$, Spotted

Dogwood²
Elm
Grape
Hawthorn
(Thornapple) $^{2}$
Hemlock
Hickory
Honeylocust
Honeysuckle
Hornbeam
Huckleberry
Huisache
Ivy, Poison
Kudzu

| Milkweed, Common, | Spurge, Leafy |
| :--- | :--- |
| Honeyvine, Western | Sundrop |
| Whorled | Thistle, Canada, |
| Nettle, Stinging | Scotch |
| Nightshade, Silverleaf | Toadflax, Dalmatian |
| (White Horsenettle) | Tropical Soda Apple |
| Onion, Wild | Trumpetcreeper |
| Plantain, Broadleaf, | (Buckvine) |
| Buckhorn | Vetch |
| Pokeweed | Waterhemlock, |
| Ragweed, Western | Spotted |
| Redvine | Waterprimrose, |
| Sericea Lespedeza | Creeping |
| Smartweed, Swamp | Woodsorrel¹, |
| Snakeweed, Broom | Creeping, Yellow |
| Sorrel1, Red (Sheep | Wormwood, Louisiana |
| Sorrel) | Yankeeweed |
| Sowthistle1, Perennial | Yarrow, Common |

Milkweed, Common,
Honeyvine, Western Whorled
Nettle, Stinging
Nightshade, Silverleaf (White Horsenettle)
Onion, Wild
Plantain, Broadleaf, Buckhorn
Pokeweed
Ragweed, Western
Redvine
Sericea Lespedeza
Smartweed, Swamp
Snakeweed, Broom
Sorrel ${ }^{1}$, Red (Sheep
Sowthistle ${ }^{1}$, Perennial

Spurge, Leafy
Sundrop
Thistle, Canada,
Scotch
Toadflax, Dalmatian
Tropical Soda Apple
Trumpetcreeper
(Buckvine)
Vetch
Waterhemlock,
Spotted
Waterprimrose, Creeping Woodsorrel ${ }^{1}$, Creeping, Yellow
Wormwood, Louisiana
Yankeeweed
Yarrow, Common ${ }^{1}$

Locust, Black Sagebrush, Fringed²
Maple
Mesquite
Oak
Oak, Poison
Olive, Russian
Persimmon, Eastern
Pine
Plum, Sand (Wild Plum) ${ }^{2}$
Poplar
Rabbitbrush
Redcedar, Eastern ${ }^{2}$
Rose ${ }^{2}$, McCartney, Multiflora

Sassafras
Serviceberry
Spicebush
Spruce
Sumac
Sweetgum ${ }^{2}$
Sycamore
Tarbush
Willow
Witchhazel
Yaupon ${ }^{2}$
Yucca ${ }^{2}$
${ }^{1}$ Noted perennials may be controlled using lower rates of this product than those listed for other listed perennial weeds.
${ }^{2}$ Growth suppression only.

## Resistance Management

This product has a low probability of selecting for resistant weed biotypes.

## -Cleaning Spray Equipment

Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner, according to the manufacturer's directions, and then triple rinsing the equipment before and after applying this product.

## II. APPLICATION INSTRUCTIONS

This product can be applied to actively growing weeds as aerial, broadcast, band, or spot spray applications using water or sprayable fertilizer as a carrier. For application rates for control or sup-
pression by weed type and growth stage see Table 2. Strut ${ }^{\text {TM }}$ Application Rates for Control or Suppression by Weed Type and Growth Stage. For crop-specific application timing and other details, refer to section VI. Crop-Specific Information.

To avoid uneven spray coverage, this product should not be applied during periods of gusty wind or when wind is in excess of 15 mph .

Avoid off-target movement. Use extreme care when applying this product to prevent injury to desirable plants and shrubs.

## Cultivation

DO NOT cultivate within 7 days after applying this product.

## Sensitive Crop Precautions

This product may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes, and other broadleaf plants when contacting their roots, stems, or foliage. These plants are most sensitive to this product during their development or growing stage.

## To avoid herbicide drift

- Use coarse sprays (volume median diameter of 400 microns or more) to avoid potential herbicide drift. Select nozzles that are designed to produce minimal amounts of fine spray particles (less than 200 microns). Examples of nozzles designed to produce coarse sprays via ground applications are Spraying Systems XR (excluding $110^{\circ}$ tips) flat fans, Turbo Teejets®, Turbo Floodjets®, or large capacity flood nozzles such as D10, TK10, or greater capacity tips.
- Keep the spray pressure at or below 20 psi and the spray volume at or above 20 gallons per acre (for ground broadcast applications), unless otherwise required by the manufacturer of driftreducing nozzles. Consult your spray nozzle supplier concerning the choice of drift-reducing nozzles.
- Agriculturally approved drift-reducing additives may be used.

Aerial Application Methods and Equipment Water Volume: Use 1-10 gallons of water per acre (2-20 gallons of diluted spray per treated acre for preharvest uses). Use the higher spray volume when treating dense or tall vegetation.

Application Equipment: Select nozzles designed to produce minimal amounts of fine spray particles. Make aerial applications at the lowest safe height to reduce exposing the spray to evaporasion and wind.

The applicator must follow the most restrictive use cautions to avoid drift hazards, including those found in this labeling, as well as state and local regulations and ordinances.

DO NOT use aerial equipment if spray particles can be carried by the wind into areas where sensitive crops or plants are growing or when temperature inversions exist.

## Ground Application (Banding)

When applying this product by banding, determine the amount of herbicide and water volume needed using the following formula:

| Bandwidth in inches <br> Row width in inches | $x$ | Broadcast rate <br> per acre | $=\quad$ Banding herbicide rate per acre |
| :--- | :--- | :--- | :--- | :--- |
| Bandwidth in inches | $x$ | Broadcast <br> volume per acre | $=\quad$ Banding water volume per acre |

Table 2. Strut Application Rates for Control or Suppression by Weed Type and Growth Stage
Use rate limitations are given in sections V. and VI. Crop-Specific Information.

| Weed Type and Stage | Rate Per <br> Acre (fl oz) | Weed Type and Stage | Rate Per <br> Acre (fl oz) |
| :--- | :--- | :--- | :--- |
| Annual ${ }^{1}$ | $8-16$ | Perennial <br> Top growth suppression <br> Top growth control and root <br> suppression <br> Noted perennials (footnote 1 in <br> Table 1) <br> Established weed growth | Other perennials 3 |
| Biennial | Woody Brush \& Vines | $16-32$ |  |
| Rosette diameter 1 $-3 "$ <br> Rosette diameter 3" or more <br> Bolting$8-16$ <br> $16-32$ <br> 32 | Top growth suppression <br> Top growth control 2, 3 <br> Stems and stem suppression 3 | 32 |  |

${ }^{1}$ Rates below 8 fluid ounces per acre may provide control or suppression but should typically be applied with other herbicides that are effective on the same species and biotype.
2 Species noted in Table 2 will require tank mixes for adequate control.
${ }^{3}$ DO NOT broadcast apply more than 32 fluid ounces per acre for single application. Use the higher level of listed rate ranges when treating dense vegetative growth or perennial weeds with well established root growth. Rates higher than 32 fluid ounces per acre are for spot treatment only. DO NOT exceed 64 fluid ounces per acre per year.

## Ground Application (Broadcast)

Water Volume: Use 3-50 gallons of spray solution per broadcast acre for optimal performance. Use the higher spray volume when treating dense or tall vegetation.

Application Equipment: Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as is practical for good weed coverage.

## Ground Application (Wipers)

This product may be applied through wiper application equipment to control or suppress actively growing broadleaf weeds, brush, and vines. Use a solution containing 1 part Strut Herbicide to 1 part water. DO NOT contact desirable vegetation with herbicide solution. Wiper application may be made to crops (including pastures) and non-cropland areas described in this label with the exception of cotton, sorghum, and soybean.

## III. ADDITIVES

To improve postemergence weed control, agriculturally approved surfactants, sprayable fertilizers (urea ammonium nitrate, or ammonium sulfate), or crop oil concentrate may be added, particularly in dry growing conditions. (Refer to Table 3. Additive Rate Per Acre.)

## Nitrogen Source

- Urea ammonium nitrate (UAN): Use 2-4 quarts of UAN (commonly referred to as $28 \%, 30 \%$, or $32 \%$ nitrogen solution) per acre. DO NOT use brass or aluminum nozzles when spraying URN.
- Ammonium sulfate (AMS): AMS at 2.5 pounds per acre may be substituted for UAN. Use high-quality AMS (spray grade) to avoid plugging of nozzles. Other sources of nitrogen are not as effective as those mentioned. Do not apply AMS, if applied in less than 10 gallons per acre because of potential problems with precipitation in reduced volumes. Use AMS only if it has been demonstrated to be successful in local experience.


## Nonionic Surfactant

The standard label rate is 1 pint of an $80 \%$ active nonionic spray surfactant per 100 gallons of water. For certain weeds, a higher spray surfactant rate may be needed.

## Oil Concentrate

A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all of the following criteria:

- be nonphytotoxic,
- contain only EPA-exempt ingredients,
- provide good mixing quality in the jar test, and
- be successful in local experience.

The exact composition of suitable products will vary; however, vegetable and petroleum oil concentrates should contain emulsifiers to provide good mixing quality. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. For additional information, see Compatibility Test for Mix Components.

Adjuvants containing crop oil concentrates may be used in preplant, preemergence, and preharvest application, as well as in pastures and noncropland. DO NOT use crop oil concentrate for postemergence in-crop applications unless specifically allowed in section VI. Crop-Specific Information of this label.

Table 3. Additive Rate Per Acre

| Additive | Rate Per Acre |
| :--- | :--- |
| Nonionic Surfactant | $1-2$ pints per 100 gallons |
| AMS | 2.5 pounds |
| UAN Solution | $2-4$ quarts |
| Crop Oil Concentrate | 1 quart* |
| *see manufacturer's label for specific rate listings |  |
| Compatibility Test for Mix Components |  |
| Before mixing components, always perform a compatibility jar test. |  |

For 20 gallons per acre spray volume, use 3.3 cups ( 800 ml ) of water. For other spray volumes, adjust accordingly. Only use water from the intended source at the source temperature.

Add components in the sequence indicated in the Mixing Order using 2 teaspoons for each pound or 1 teaspoon for each pint of listed label rate per acre.

Always cap the jar and invert 10 cycles between component additions.

When the components have all been added to the jar, let the solution stand for 15 minutes. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, DO NOT mix the ingredients in the same tank.

## Mixing Order

1) Water. Begin by agitating a thoroughly clean sprayer tank three-quarters full of clean water.
2) Agitation. Maintain constant agitation throughout mixing and application.
3) Inductor. If an inductor is used, rinse it thoroughly after each component has been added.
4) Products in PVA bags. Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
5) Water-dispersible products (dry flowables, wettable powders, suspension concentrates, or suspoemulsions).
6) Water-soluble products (such as this product).
7) Emulsifiable concentrates (such as oil concentrate when applicable).
8) Water-soluble additives (such as AMS or UAN when applicable).
9) Remaining quantity of water.

Maintain constant agitation during application.

## IV. PRODUCT TANK MIXING INFORMATION

## Tank Mix Partners/Components

The herbicide products listed may be applied with this product according to the specific tank mixing instructions in this label and respective product labels.

See section VI. Crop-Specific Information for more details. Read and follow the applicable Restrictions and Limitations and Directions For Use on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

This product may also be used in tank mixtures with foliar applied insecticides including synthetic pyrethroids such as Ambush $\left(\right.$ ®, Asana $®$, Pounce ${ }^{\circledR}$ and Warrior ${ }^{\circledR}$ insecticides or with the carbamate insecticide Furadan®. DO NOT apply this product in tank mixtures with Lorsban® insecticide.

Physical incompatibility, reduced weed control, or crop injury may result from mixing this product with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers. Do not use tank mixes other than those listed on Loveland Products, Inc. labeling. Local agricultural authorities may be a source of information when using tank mixes other than those listed on Loveland Products, Inc. labeling.

- Accent® (nicosulfuron)
- Ally Extra® (thifensulfuron + tribenuron + metsulfuron)
- Ally (®) XP (metsulfuron-methyl)
- Amber® (triasulfuron)
- Asulam
- Atrazine
- Axiom ${ }^{\text {M }}$ (flufenacet + metribuzin)
- Basagran® (bentazon)
- Beacon® (primisulfuron -methyl)
- Bicep II Magnum® (s-metolachlor + atrazine)
- Broclean® (bromoxynil)
- Bromac® (bromoxynil + MCPA)
- Bullet ${ }^{\circledR}$ ( alachlor + atrazine)
- Cāpärol® (prometryn)
- Crossbow ( 2,4 -D + triclopyr)
- Curtail® (clopyralid +2,4-D)
- Degree® (acetochlor)
- Degree Xtra® (acetochlor + atrazine)
- Dual Magnum® (s-metolachlor)
- Dual II Magnum® (s-metolachlor + atrazine)
- Eradicane® (EPTC)
- Evik® (ametryn)
- Express® (thifensulfuron + tribenuron-methyl)
- Fallow Master® (glyphosate + dicamba)
- Field Master ${ }^{R}$ (acetochlor + atrazine + glyphosate)
- Finesse ${ }^{\circledR}$ (chlorsulfuron + metsulfuron-methyl)
- FulTime ${ }^{\circledR}$ (acetochlor + atrazine)
- Garlon® (triclopyr)
- Glean® (chlorsulfuron)
- Gramoxone Inteon® (paraquat)
- Guardsman Max® (dimethenamid + atrazine)
- Harmony® Extra (thifensulfuron + tribenuron-methyl)
- Harness® (acetochlor)
- Harness ${ }^{\circledR}$ Xtra (acetochlor + atrazine)
- Intrro® (alachlor)
- Karmex® (diuron)
- Kerb® (pronamide)
- Landmaster® BW (glyphosate + 2,4-D)
- Lariat $®_{\text {( }}$ (alachlor + atrazine)
- Liberty ${ }^{\circledR}$ (glufosinate)
- Lightning ${ }^{\circledR}$ (imazethapyr + imazapyr)
- Mad Dog Plus® (glyphosate)
- Makaze ${ }^{\circledR}$ (glyphosate)
- MCPA
- Metribuzin 75
- Outlook® (dimethenamid-P)
- Paramount® (quinclorac)
- Peak® (prosulfuron)
- Permit $®$ (halosulfuron)
- Princep® (simazine)
- Python® (flumetsulam)
- Rifle® (dicamba)
- Rifle Plus® (dicamba + atrazine)
- Spirit® (primisulfuron + prosulfuron)
- Stealth® (pendimethalin)
- Stinger® (clopyralid)
- Surpass® (acetochlor)
- TopNotch $®$ (acetochlor)
- Tordon® 22K (picloram)
- Touchdown® (sulfosate)
- 2,4-D


## V. RESTRICTIONS AND LIMITATIONS

Maximum seasonal use rate: Refer to Table 4. Crop-Specific Restrictions and Limitations for crop-specific maximum seasonal use rates. DO NOT exceed 64 fluid ounces of this product (2 pounds acid equivalent) per acre, per year.

Preharvest Interval (PHI): Refer to section VI. Crop-Specific Information for preharvest intervals.

## Restricted-Entry Interval (REI): 24 hours

## Crop Rotational Restrictions:

The interval between application and planting rotational crop is given below. Always exclude counting days when the ground is frozen. Planting at intervals less than specified below may result in crop injury. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

Planting/replanting restrictions for Strut applications of 24 fluid ounces per acre or less: No rotational cropping restrictions apply at 120 days or more following application. Additionally, for annual crop uses in this label including corn, cotton, sorghum, and soybean, follow the preplant use directions in section VI. Crop-Specific Information. For barley, oat, wheat, and other grass seedings, the interval between application and planting is 15 days per 8 fluid ounces per acre applied east of the Mississippi River and 22 days per 8 fluid ounces per acre west of the Mississippi River.

Planting/replanting restrictions for applications of more than 24 fluid ounces and up to 64 fluid ounces of Strut Herbicide per acre: Corn, sorghum, cotton (east of the Rocky Mountains) and all other crops grown in areas with 30 " or more of annual rainfall may be planted 120 days or more after application. Barley, oat, wheat, and other grass seedings, may be planted if the interval from application to planting is 30 days per 16 fluid ounces per acre east of the Mississippi River and 45 days per 16 fluid ounces per acre west of the Mississippi River. For all other crops in areas with less than 30 " of annual rainfall, the interval between application and planting is 180 days or more.

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Rainfast period: Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce the effectiveness of this product.

Stress: DO NOT apply to crops under stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, insects, or widely fluctuating temperatures as injury may result.

DO NOT apply through any type of irrigation equipment. DO NOT treat irrigation ditches or water used for crop irrigation or domestic purposes.

Table 4. Crop-Specific Restrictions and Limitations ${ }^{1}$
\(\left.$$
\begin{array}{lllll}\hline \text { Crop } & \begin{array}{l}\text { Maximum Rate } \\
\text { Per Acre Per } \\
\text { Application (fl oz) }\end{array} & \begin{array}{l}\text { Maximum In-Crop } \\
\text { Rate Per Acre Per } \\
\text { Season (fl oz) }\end{array} & \begin{array}{l}\text { Livestock Grazing } \\
\text { or Feeding }\end{array} & \begin{array}{l}\text { Aircraft } \\
\text { Application } \\
\text { Allowed }\end{array}
$$ <br>

\hline Asparagus \& 16 \& 16 \& Yes \& Yes\end{array}\right]\)| Barley |  |  |  |
| :--- | :--- | :--- | :--- |
| Fall <br> Spring | 8 | 12 | Yes |
| Conservation <br> Reserve Program <br> (CR) | 8 | 11 | Yes |

${ }^{1}$ Refer to section VI. Crop-Specific Information for more details.
2 Once the crop reaches the ensilage (milk) stage or later in maturity.

## VI. CROP-SPECIFIC INFORMATION

## ASPARAGUS

Apply this product to emerged and actively growing weeds in 40-60 gallons of diluted spray per treated acre immediately after cutting the field, but at least 24 hours before the - next-cutting. Multiple applications may be made per growing season.

If spray contacts emerged spears, crooking (twisting) of some spears may result. If such crooking occurs, discard affected spears.

Rates: Apply 8-16 fluid ounces of this product to control annual sowthistle, black mustard, Canada and Russian thistle, and redroot pigweed (carelessweed).

Apply 16 fluid ounces of this product to control common chickweed, field bindweed, nettleleaf goosefoot, and wild radish. Multiple applications may be made per growing season. DO NOT exceed a total of 16 fluid ounces of this product per treated acre, per crop year.

DO NOT harvest prior to 24 hours after treatment.

DO NOT use in the Coachella Valley of California.

## Asparagus Tank Mixes

Apply 8-16 fluid ounces of this product with glyphosate (Makaze or Mad Dog Plus herbicide) or 2,4-D to improve control of Canada thistle and field bindweed.

## Between Crop Applications <br> Preplant Directions (Postharvest, Fallow, Crop Stubble, Set-Aside) For Broadleaf Weed Control:

This product can be applied either postharvest in the fall, spring, or summer during the fallow period or to crop stubble/set-aside acres. Apply this product as a broadcast or spot treatment to emerged and actively growing weeds after crop harvest (postharvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer.

See Crop-Rotational Restrictions in section V. Product Restrictions and Limitations for the listed interval between application and planting to prevent crop injury.

## Rates and Timings:

Apply 4-32 fluid ounces of this product per acre. Refer to Table $\mathbf{2}$ to determine use rates for apecific targeted weed species. For best performance, apply this product when annual weeds are less than $6^{\prime \prime}$ tall, when biennial weeds are in the rosette stage and to perennial weed regrowth in late summer or fall following a mowing or tillage treatment. The most effective control of upright perennial broadleaf weeds such as Canada thistle and Jerusalem artichoke occurs if this product is applied when the majority of weeds have at least $4-6$ " of regrowth or for weeds such as field bindweed and hedge bindweed that are in or beyond the full bloom stage.

Avoid disturbing treated areas following application. Treatments may not kill weeds that develop from seed or underground plant parts such as rhizomes or bulblets, after the effective period for this product. For seedling control, a follow-up program or other cultural practices could be instituted. For small grain in-crop uses of this product, refer to the small grain section for details.

## Between Crop Tank Mixes

In tank mixes with one or more of the following herbicides, apply 4-16 fluid ounces of this product per acre for control of annual weeds, or 16-32 fluid ounces of this product per acre for control of biennial and perennial weeds:

- Ally ® XP
- Amber ®
- Atrazine
- Curtail ®
- Fallow Master ®
- Finesse ${ }^{\circledR}$
- Glyphosate
- Paramount ®
(Mad Dog@ Plus, Makaze®) - Cordon 22K
- Gramoxone Inteon®
- Kerb •2,4-D
- Landmaster $($ B CW
- Metribuzin 75

Direct contact of this product with corn seed must be avoided. If corn seeds are less than $1.5^{\prime \prime}$ below the soil surface, delay application until corn has emerged.

Applications of this product to corn during periods of rapid growth may result in temporary leaning. Corn will usually become erect within 3-7 days. Cultivation should be delayed until after corn is growing normally to avoid breakage.

Corn may be harvested or grazed for feed once the crop has reached the ensilage (milk) stage or later in maturity. Up to 2 applications of this product may be made during a growing season. Sequential applications must be separated by 2 weeks or more.

DO NOT apply this product to seed corn or popcorn without first verifying with your local seed corn company (supplier) the selectivity of this product on your inbred line or variety of popcorn. This precaution will help avoid potential injury of sensitive varieties.

Avoid using crop oil concentrates after crop emergence as crop injury may result. Use crop oil concentrates only in dry conditions when corn is less than 5 " tall and when applying this product alone or tank mixed with atrazine.

Do not use sprayable fluid fertilizer as the carrier for applications of this product made after corn emergence.

This product is not registered for use on sweet corn.

## Preplant And Preemergence Application In No Tillage Corn:

Rates: Apply 16 fluid ounces of this product per acre on medium- or fine-textured soils containing $2.5 \%$ or greater organic matter. Use 8 fluid ounces of this product per acre on coarse soils (sand, loamy sand, and sandy loam) or medium- and fine-textured soils with less than $2.5 \%$ organic matter.

Timing: This product can be applied to emerged weeds before, during, or after planting a corn crop. When planting into a legume sod (e.g. alfalfa or clover), apply this product after 4-6" of regrowth has occurred.

## Preemergence Application In Conventional Or Reduced Tillage Corn:

Rates: Apply 16 fluid ounces of this product per treated acre to medium- or fine-textured soils that contain $2.5 \%$ organic matter or more. DO NOT apply to coarse-textured soils (sand, loamy sand, or sandy loam) or any soil with less than $2.5 \%$ organic matter until after corn emergence (see Early Postemergence uses below).

Timing: This product may be applied after planting and prior to corn emergence. Preemergence application of this product does not require mechanical incorporation to become active. Use a shallow mechanical incorporation if the application is not followed by adequate rainfall or sprinkler irrigation. Avoid tillage equipment (e.g. drags, harrows) that concentrate treated soil over seed furrow, as seed damage could result.

Preemergence control of cocklebur, jimsonweed, and velvetleaf may be reduced if conditions such as low temperature or lack of soil moisture cause delayed or deep germination of weeds.

## Early Postemergence Application In All Tillage Systems:

Rates: Apply 16 fluid ounces of this product per treated acre. Reduce the rate to 8 fluid ounces of this product per treated acre for corn grown on coarse-textured soils (sand, loamy sand, and sandy loam).

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Timing: Apply between corn emergence and the 5-leaf stage or 8 " tall, whichever occurs first. Refer to Late Postemergence Application if the sixth true leaf is emerging from whorl or the corn is greater than 8 " tall.

## Late Postemergence Application:

Rate: Apply 8 fluid ounces of this product per treated acre.
Timing: Apply this product from $8^{\prime \prime}-36^{\prime \prime}$ tall corn or 15 days before tassel emergence, whichever comes first. For best performance, apply when weeds are less than 3 " tall.

Apply directed spray when corn leaves prevent proper spray coverage, sensitive crops are growing nearby, or tank mixing with 2,4-D. DO NOT apply this product when soybeans are growing nearby if any of these conditions exist:

- corn is more than 24 " tall
- soybeans are more than 10 " tall
- soybeans have begun to bloom


## Corn Tank Mixes or Sequential Uses

When using tank mix or sequential applications with this product, always follow the companion product label to determine specific use rates by soil types, weed species, and weed or crop growth stage. In addition, follow precautions and restrictions including state and local use restrictions that may apply to specific products.

Apply this product prior to, in tank mix with, or after one or more of the following herbicides:

- Accent® 1
- Dual II Magnum®
- Intro®
- Rifle® 1
- Atrazine
- Eradicane®
- Liberty ${ }^{3}{ }^{3}$
- Rifle Plus® 1
- Axiom ${ }^{\text {™ }}$
- Field Master®
- Lightning ${ }^{(1)} 5$
- Stealth ${ }^{(1)}$
- Beacon®
- FulTime ${ }^{\circledR}$
- Mad Dog® Plus 4
- Spirita 1
- Bicep II Magnum®
- Bullet ${ }^{-}$
- Gramoxone Inteon®
- Makaze ${ }^{-1} 4$
- Stinger® 1
- Guardsman Max®
- Outlook®
- Surpass®
- Degree®
- Harness ${ }^{\circledR}$
- Permite 1
- TopNotch ${ }^{\circledR}$
- Degree Xtra®
- Dual Magnum®
- Harness ${ }^{\circledR}$ ) Xtra - Princep ${ }^{\circledR}$
- Touchdown®
- Hornet ${ }^{(8)} 1$
- Python®
-2,4-D ${ }^{1}$
${ }^{1}$ See Table 5. Specific Guidelines for Tank Mixes or Sequential Use Programs for additional limitations or restrictions that apply for tank mix or sequential use programs with these products.
${ }^{2}$ Sequential use only.
${ }^{3}$ Use only on Liberty Link $®$ (glufosinate tolerant) corn hybrids.
${ }^{4}$ Includes postemergence use on Roundup Ready® (glyphosate tolerant) corn hybrids.
${ }^{5}$ Use only CLEARFIELD® (imidazolinone tolerant) corn hybrids.

Table 5. Specific Guidelines for Tank Mixes or Sequential Use Programs

Tank Mix Partner
Accent $®$ or Beacon $®$

Rifle ${ }^{\circledR}$ or Rifle Plus ®
2,4-D
Rifle ${ }^{\circledR}$ or Rifle Plus ${ }^{\circledR}$

Spirit $®$, Stinger $®$, Hornet $®$, or Permit ${ }^{\text {® }}$

## Rate Per Acre

When tank mixing, applications immediately following extreme day or night temperature fluctuations or applications when day time temperatures DO NOT exceed $50^{\circ} \mathrm{F}$ may result in decreased weed control or crop injury. Delay application until the temperatures warm and both weeds and crop resume normal growth.
To provide maximum crop safety after corn emergence, use this tank mix only after corn is greater than 8 " tall and when application can be made with drop pipes that direct spray beneath corn leaves and away from the whorl of the corn. The maximum rate of $2,4-\mathrm{D}$ that may be used in this tank mix is 0.25 pints per acre ( 0.125 pounds of acid equivalent per acre). Tank mixes with these products that contain dicamba must not exceed a total combined rate of 0.50 pounds of dicamba acid equivalent per acre ( 0.25 pound on coarse-textured soils or on any soil when corn is greater than 8 " tall). Sequential applications of these products must be separated by a minimum of 2 weeks (unless the combined rate is less than 0.5 pounds of dicamba acid equivalent and corn is 8 " tall or less) and must not exceed a combined total of 0.75 pounds dicamba acid equivalent per acre for in-crop use.
For improved control of velvetleaf, tank mix 0.5 ounce of Spirit or 0.17 - 0.33 ounce Permit per acre with this product. For improved control of Canada thistle, Stinger at 1.5-3 fluid ounces per acre or Hornet at 0.6-1.2 ounces per acre may be tank mixed with this product. Use the higher rate in the range for heavier infestations of these weeds.

## COTTON

## Preplant Application:

Apply up to 8 fluid ounces of this product per acre to control emerged broadleaf weeds prior to planting cotton in conventional or conservation tillage systems.

For best performance, apply this product when weeds are in the 2-4 leaf stage and rosettes are less than 2" across.

Following application of this product and a minimum accumulation of $1^{\prime \prime}$ of rainfall or overhead inrigation, a waiting interval of 21 days is required per 8 fluid ounces per acre or less. These intervals must be observed prior to planting cotton.

DO NOT apply preplan to cotton west of the Rockies.
DO NOT make this product preplant applications to cotton in geographic areas with-average-annual rainfall less than $25^{\prime \prime}$.

If applying a spring preplant treatment following application of a fall preplant (postharvest) treatment, then the combination of both treatments may not exceed 2 pounds acid equivalent per acre.

## Cotton Tank Mixes

For control of grasses or additional broadleaf weeds, this product may be tank mixed with Caparol $\circledR$, Gramoxone Inteon $®^{\circledR}$, Mad Dog ${ }^{\circledR}$ Plus and Makaze ${ }^{\circledR}$ herbicides.

GRASS GROWN FOR SEED
Apply 8-16 fluid ounces of this product per treated acre on seedling grass after the crop reaches the 3-5 leaf stage. Apply up to 32 fluid ounces of this product on well-established perennial grass. For best performance, apply this product when weeds are in the 2-4 leaf stage and rosettes are less than 2" across. Use the higher level of listed rate ranges when treating more mature weeds or dense vegetative growth.

To suppress annual grasses such as brome (downy and ripgut), rattail fescue, and windgrass, apply up to 32 fluid ounces of this product per treated acre in the fall or late summer after harvest and burning of established grass seed crops. Applications should be made immediately following the first irrigation when the soil is moist and before weeds have more than 2 leaves.

DO NOT apply this product after the grass seed crop begins to joint.:
Refer to the Pasture, Hay, Rangeland, and Farmstead section for grazing and feeding restrictions.

## Grass Seed Tank Mixes

This product may be applied in tank mixes with one or more of the following herbicides:

- Broclean ${ }^{\circledR}$
- Curtail ${ }^{\text {R }}$
- Express ${ }^{\circledR}$
- Karmex®
- MCPA amine
- Metribuzin 75
- Stinger®
- 2,4-D amine or ester


## PROSO MILLET <br> For use only within Colorado, Nebraska, North Dakota, South Dakota, and Wyoming.

This product combined with 2,4-D will provide control or suppression of the annual broadleaf weeds listed in Table 1.

Apply 4 ounces of this product with 0.375 pounds a.i. of $2,4-$ D. Apply the tank mix of this product + 2,4-D as a broadcast or spot treatment to emerged and actively growing weeds and when proso millet is in the 2-5 leaf stage. Use directions for 2,4-D products vary with manufacturers. Refer to a $2,4-$ D product with labeling consistent with the crop stage timing for this product. Some types of proso millet may be affected adversely by a tank mix of this product +2,4-D.

DO NOT apply unless possible proso millet crop injury will be acceptable.
Restrictions for proso millet that is grazed or cut for hay are indicated in Table 6. Timing Restrictions for Lactating Dairy Animals Following Treatment in Pasture, Hay, Rangeland, and-Farmstead section of this label.

PASTURE, HAY, RANGELAND, AND FARMSTEAD (NONCROPLAND)
This product is listed for use on pasture, hay, rangeland, and farmstead (noncropland) (including fencerows and non-irrigation ditchbanks) for control or suppression of broadleaf weed and brush species listed in Table 1.

This product may also be applied to non-cropland areas to control broadleaf weeds in noxious weed control programs, districts, or areas including broadcast or spot treatment of roadsides and highways, utilities, railroad, and pipeline rights-of-way. Noxious weeds must be recognized at the state level, but programs may be administered at state, county, or other level.

Uses for this product described in this section also pertain to grasses and small grains (forage, sorghum, rye, sudangrass, or wheat) grown for grass, forage, fodder, hay and/or pasture only. Grasses and small grains not grown for grass, forage, fodder, hay and/or pasture must comply with crop-specific uses in this label: Some perennial weeds may be controlled with lower rates of either this product or this product plus 2,4-D (refer to Table 2).

## Rates and Timings

Refer to Table 2 for rate selection based on targeted weed or brush species. Some weed species will require tank mixes for adequate control.

Rates above 32 fluid ounces of this product per acre are for spot treatments only. DO NOT broadcast apply more than 32 fluid ounces per acre.

DO NOT exceed a total of 32 fluid ounces of this product per treated acre during a growing season.

## Crop-Specific Restrictions and Limitations

DO NOT apply more than 16 fluid ounces of this product per acre to small grains grown for pasture.
Newly seeded areas may be severely injured if more than 16 fluid ounces of this product is applied per acre.

Established grass crops growing under stress can exhibit various injury symptoms that may be more pronounced if herbicides are applied. Bentgrass, carpetgrass, buffalograss, and St. Augustinegrass may be injured if more than 16 fluid ounces of this product is applied per acre. Usually colonial bentgrasses are more tolerant than creeping types. Velvetgrasses are most easily injured. Treatments will kill or injure alfalfa, clovers, lespedeza, wild winter peas, vetch, and other legumes.

Table 6 lists the timing restrictions for grazing or harvesting hay from treated fields. There are no grazing restrictions for animals other than lactating dairy animals.

Table 6. Timing Restrictions for Lactating Dairy Animals Following Treatment

| Strut Rate per <br> Treated Acre (pts) | Days Before <br> Grazing (days) | Days Before Hay <br> Harvest (days) |
| :---: | :---: | :---: |
| Up to 1 | 7 | 37 |
| Up to 2 | 21 | 51 |
| Up to 4 | 40 | 70 |

This product can be applied using water, oil in water emulsions including invert systems, or srayable-fluid fertilizer as a carrier (refer to the Compatibility Test for Mix Cömponents).

To prepare oil in water emulsions, half-fill spraytank with water then add the appropriate amount of emulsifier. With continuous agitation, slowly add the herbicide and then the oil (such as diesel oil or fuel oil) or a premix of oil plus additional emulsifier to spray tank. Complete filling of spray tank with water. Maintain vigorous agitation during spray operation to prevent oil and water from forming separate layers. This product may be applied broadcast using either ground or aerial application equipment.

## Aerial Application:

- Spray Volume: Use 2-40 gallons of diluted spray per treated acre in a water-based carrier.


## Ground Application:

- Spray Volume: Use 3-600 gallons of diluted spray per treated acre. The volume of spray applied will depend on the height, density, and type of weeds or brush being treated and on the type of equipment being used.
- Spot Treatments: This product may be applied to individual clumps or small areas of undesirable vegetation using handgun or similar types of application equipment. Apply diluted sprays to allow complete wetting (up to runoff) of foliage and stems.


## Cut Surface Treatments:

This product may be applied as a cut surface treatment for control of unwanted trees and prevention of sprouts of cut trees.

Rate: Mix 1 part this product with 1-3 parts water to create the application solution. Use the lower dilution rate when treating difficult-to-control species.

- For Frill or Girdle Treatments: Make a continuous cut or a series of overlapping cuts using an axe to girdle tree trunk. Spray or paint the cut surface with the solution.
- For Stump Treatments: Spray or paint freshly cut surface with the water mix. The area adjacent to the bark should be thoroughly wet.
Note: For more rapid foliar effects, 2,4-D may be added to the solution.


## Applications For Control of Dormant Multiflora Rose:

This product can be applied when plants are dormant as an undiluted spot treatment directly to the soil or as a Lo-Oil basal bark treatment using an oil-water emulsion solution.
Spot treatments: Spot treatment applications of this product should be applied directly to the soil as close as possible to the root crown but within 6-8" of the crown. On sloping terrain, apply this product to the uphill side of the crown. DO NOT apply when snow or water prevents applying this product directly to the soil. The use rate of this product depends on the canopy diameter of the multiflora rose.
Examples: Use $0.25,1.0$, or 2.35 fluid ounces of this product respectively, for 5,10 , or 15 feet canopy diameters.
Lo-Oil basal bark treatments: For Lo-Oil basal bark treatments, apply this product to the basal stem region from the ground line to a height of $12-18^{\prime \prime}$. Spray until runoff, with special emphasis on covering the root crown. For best results, apply this product when plants are dormant. DO NOT apply after bud break or when plants are showing signs of active growth. DO NOT apply when snow or water prevents applying this product to the ground line.

To prepare approximately 2 gallons of a Lo-Oil spray solution:

1) Combine 1.5 gallons of water, 1 ounce of emulsifier, 16 fluid ounces of this product, and 2.5 pints of No. 2 diesel fuel.
2) Adjust the amounts of materials used proportionately to the amount of final spray solution desired.
DO NOT exceed 8 gallons of spray solution mix applied per àcree, per year.

## Pasture Tank Mixes

This product may be applied in tank mixes with one or more of the following herbicides:

- Ally $\mathbb{B}$ XP
- Curtail ${ }^{(8)}$
- Amber®
- Garlon®
- Mad Dog® Plus
- Tordon® 22K
- Crossbow®
- Gramoxone Inteon®
- Makaze® ${ }^{(8)}$-2, D
- Stinger®


## Conservation Reserve Program (CRP)

This product is listed for use on both newly seeded and established grasses grown in Conservation Reserve or federal Set-Aside Programs. Treatments of this product will injure or may kill alfalfa, clovers, lespedeza, wild winter peas, vetch, and other legumes.

## Newly Seeded Areas

This product may be applied either preplan or postemergence to newly seeded grasses or small grains such as barley, oats, rye, sudangrass, wheat, or other grain species grown as a cover crop. Postemergence applications may be made after seedling grasses exceed the 3 -leaf stage. Rates of this product greater than 16 fluid ounces per treated acre may severely injure newly seeded grasses.

Preplant applications may injure new seedings if the interval between application and grass planting is less than 45 days per 16 fluid ounces of this product applied per treated acre west of the Mississippi River or 20 days per 16 fluid ounces applied east of the Mississippi River.

## Established Grass Stands

Established grass stands are perennial grasses planted one or more seasons prior to treatment. Certain species (bentgrass, carpetgrass, smooth brome, buffalograss, or St. Augustinegrass) may be injured when treated with more than 16 fluid ounces of this product per treated acre.

When applied at listed rates, this product will control many annual and biennial weeds and provide control or suppression of many perennial weeds.

## Rates and Timings

Apply 4-32 fluid ounces of this product per acre. Refer to Table 2 for rates based on target weed species. This product may be tank mixed or applied sequentially with other products labeled for use in Conservation Reserve Programs such as atrazine, glyphosate (Mad Dog ® Plus or Makaze®), Gramoxone Inteon $®$, Touchdown $®$, or 2,4-D.

DO NOT exceed a total of 64 fluid ounces ( 4 pints) of this product per acre per year.

## SMALL GRAINS NOT UNDERSEEDED TO LEGUMES <br> (FALL- AND SPRING-SEEDED BARLEY, OAT, TRITICALE, AND WHEAT)

This product combinations with listed tank mix partners will provide control or suppression of the annual broadleaf weeds listed in Table 1. For improved control of listed weeds, tank mix this produt with one or more of the herbicides listed. This product used in a tank mix with other herbicides offers the best spectrum of weed control and herbicide tolerant or resistant weed management. Refer to the specific crop section for this product application rate and timing.

For applications prior to weed emergence or when sulfonylurea-resistant weeds are present or suspected, tank mix a minimum of 3 fluid ounces of this product per treated acre with a non-sulfonylure herbicide such as 2,4-D or MCPA. Tank mixing this product with these products will offer more consistent control of sulfonylurea-resistant weeds.

Additives: When tank mixing this product with sulfonylurea herbicides (Ally $\mathbb{B}$ XP, Ally $\mathbb{B}$ - Extra, Amber $®$, Express $®$, Finesse $®$, Glean $®$, Harmony $®$ Extra, and Peak $®$ ), use $1-4$ pints of an agriculturally approved surfactant (containing at least $80 \%$ active ingredient) per 100 gallons of spray or not more than $0.25-0.5 \%$ by volume. Use the highest rate of surfactant when using the lower rate ranges of the tank mix or when treating more mature and difficult to control weeds or dense vegetative growth.

Refer to the specific crop sections below for use rates. When treating difficult to control weeds such as kochia, wild buckwheat, cow cockle, prostrate knotweed, Russian thistle, and prickly lettuce or when dense vegetative growth occurs, use the 3-4 fluid ounces of this product per acre.

Timings: Apply this product before, during, or after planting small grains. See specific small grain crop uses below for maximum crop stage. For best performance, apply this product when weeds are in the 2-3 leaf stage and rosettes are less than $2^{\prime \prime}$ across. Applying this product to small grains during periods of rapid growth may result in crop leaning. This condition is temporary and will not reduce crop yields.

Applications to small grains may be made with aerial applications with 1 gallon of water or more per acre. Where dense foliage is present, 2-3 gallons of water per acre should be used.

Restrictions for small grain areas that are grazed or cut for hay are indicated in Table 6 in Pasture, Hay, Rangeland, and Farmstead section of this label.

## SMALL GRAINS: BARLEY (FALL- AND SPRING-SEEDED)

## Early Season Applications:

Apply 2-4 fluid ounces of this product to fall-seeded barley prior to the jointing stage. Apply 2-3 fluid ounces of this product before spring-seeded barley exceeds the 4 -leaf stage.

Note: For spring barley varieties that are seeded during the winter months or later, follow the rates and timings given for spring-seeded barley.

DO NOT tank mix this product with 2,4-D in early season applications on spring-seeded barley.

## Preharvest Applications:

This product can be used to control weeds that may interfere with harvest of fall- and spring-seeded barley. Apply 8 fluid ounces of this product per acre as a broadcast or spot treatment to annual broadleaf weeds when barley is in the hard dough stage and the green color is gone from the nodes (joints) of the stem. Best results will be obtained if application can be made when weeds are actively growing, but before weeds canopy.

A waiting interval of 7 days is required before harvest. DO NOT use preharvest-treated barley for seed unless a germination test is performed on the seed with an acceptable result of $95 \%$ germination or better.

For control of additional broadleaf weeds or grasses, this product may be tank mixed with other herbicides, such as 2,4-D, that are labeled for preharvest uses in barley.

DO NOT make preharvest applications in California.

## Table 7. Barley Tank Mixes

| Tank Mix Partner | Rate Per Acre |
| :--- | :--- |
| Ally $®$ Extra | $0.2-0.4$ ounce ${ }^{1}$ |
| Ally $®$ XP | $0.05-0.1$ ounce ${ }^{1}$ |
| Amber® | $0.14-0.28$ ounce ${ }^{1}$ |
| Bromac® | $0.75-1.5$ pints |
| Broclean $®$ | $1-1.5$ pints |
| Express $®$ | $0.083-0.167$ ounce $^{1}$ |
| Finesse $®$ | $0.167-0.33$ ounce ${ }^{1}$ |
| Glean $®$ | 0.167 ounce |
| Harmony $®$ Extra | $0.167-0.33$ ounce ${ }^{1}$ |
| MCPA amine or ester | $8-12$ fluid ounces ${ }^{2}$ |
|  | $(0.25-0.375$ pound a.e.) |
| Metribuzin | $0.125-0.47$ pound a.i. |
| $2,4-D$ amine or ester 2,3 | 8 fluid ounces |
|  | (0.25 pound a.e.) |

1 DO NOT use low rates of sulfonylureas (Ally XP, Ally Extra, Amber, Express, Finesse, Glean, and Harmony Extra) on more mature weeds or on dense vegetative growth.
2 When using formulations other than 4 pounds per gallon use pounds of a.e. per acre listed.
3 This tank mix is for fall-seeded barley only.

## SMALL GRAINS: OAT (FALL- AND SPRING-SEEDED)

## Early Season Applications:

Apply 2-4 fluid ounces of this product per acre to fall-seeded oat prior to the jointing stage.
Apply 2-4 fluid ounces of this product before spring-seeded oat exceeds the 5-leaf stage.
This product may be tank mixed with MCPA amine or ester for applications in oat.
DO NOT tank mix this product with 2,4-D in oat.
SMALL GRAINS: TRITICALE (FALL- AND SPRING-SEEDED)

## Early Season Applications:

Apply 2-4 fluid ounces of this product to triticale. Early season applications to fall-seeded triticale must be made prior to the jointing stage.

Early season applications to spring-seeded triticale must be made before triticale reaches the 6leaf stage.

Triticale Tank Mixes: For best performance, this product should be used in tank mix combination with bromoxynil (Broclean $®$, Moxy ${ }^{\top M} 2 E$ ) herbicide.

## SMALL GRAINS: WHEAT (FALL- AND SPRING-SEEDED)

## Early Season Applications:

Apply 2-4 fluid ounces of this product to wheat unless using one of the fall-seeded wheat specific programs below. Early season applications to fall-seeded wheat must be made prior to the jointing stage.

Early season applications to spring-seeded wheat must be made before wheat exceeds the 6-leaf stage.

Early developing wheat varieties such as TAM 107, Madison, or Wakefield must receive application between early tillering and the jointing stage. Care should be taken in staging these varieties to be certain that the application occurs prior to the jointing stage.

## STRUT ${ }^{\text {™ }}$

EPA REG. NO. 34704-1043
To improve control of Russian thistle, flixweed, gromwell, or mayweed, add 2,4-D amine or ester to a tank mix with one of the following herbicides: Ally® XP, Ally ${ }^{\circledR}$ Extra, Amber $®$, Express $®$, Finesse ${ }^{\circledR}$, Glean ${ }^{\circledR}$, Harmony ${ }^{\circledR}$ Extra, or Peak $®$.

## Specific Use Programs For Fall-Seeded Wheat Only:

This product may be used at 6 fluid ounces on fall-seeded wheat in Western Oregon as a spring application only. In Colorado, Kansas, New Mexico, Oklahoma, and Texas, up to 8 fluid ounces of this product may be applied on fall-seeded wheat after it exceeds the 3-leaf stage for suppression of perennial weeds, such as field bindweed. Applications may be made in the fall following a frost but before a killing freeze. This product may be tank mixed with 2,4-D amine at 8 fluid ounces after wheat begins to tiller. Periods of extended stress such as cold and wet weather may enhance the possibility of crop injury. For fall applications only, DO NOT use if the potential for crop injury is not acceptable.

## Preharvest Applications:

This product can be used to control weeds that may interfere with harvest of wheat. Apply 8 fluid ounces of this product per acre as a broadcast or spot treatment to annual broadleaf weeds when wheat is in the hard dough stage and the green color is gone from the nodes (joints) of the stem. Best results will be obtained if application can be made when weeds are actively growing but before weeds canopy.

A waiting interval of 7 days is required before harvest. DO NOT use preharvest-treated wheat for seed unless a germination test is performed on the seed with an acceptable result of $95 \%$ germination or better.

For control of additional broadleaf weeds or grasses, this product may be tank mixed with other herbicides such as Ally $®$ XP, Mad Dog $®$ Plus, Makaze $®$, and 2,4-D.

DO NOT make preharvest applications in California.
Table 8: Wheat Tank Mixes

${ }^{1}$ DO NOT use low rates of sulfonylurea herbicides, such as Ally XP, Ally Extra, Amber, Express, Finesse, Glean, Harmony Extra, and Peak on more mature weeds or on dense vegetative growth.
2 Tank mixes with Karmex and metribuzin are for use in fall-seeded wheat only.
3 A tank mix of up to 4 fluid ounces of this product with Mad Dog ® Plus, Makaze ${ }^{\circledR}$ or any glyphosate formulation labeled for use as a preplan application to small grains may be applied with no waiting period prior to planting.
${ }^{4}$ Up to 32 fluid ounces ( 1.0 pound a.e.) may be used on fall-seeded wheat if crop injury is acceptable. When using formulations other than 4 pounds per gallon, use the pounds of a.e. per acre listed.

## SORGHUM

This product may be applied preplant, postemergence, or preharvest in sorghum to control many annual broadleaf weeds and to reduce competition from established perennial broadleaf weeds, as well as control their seedlings.

DO NOT graze or feed treated sorghum forage or silage prior to mature grain stage. If sorghum is grown for pasture or hay, refer to Pasture, Hay, Rangeland, and Farmstead section of this label for specific grazing and feeding restrictions.

DO NOT apply this product to sorghum grown for seed production.

## Preplant Application:

Up to 8 fluid ounces of this product may be applied per acre if applied at least 15 days before sorghum planting.

## Postemergence Application:

Up to 8 fluid ounces of this product per acre may be applied after sorghum is in the spike stage (all sorghum emerged) but before sorghum is 15 "tall. For best performance, apply this product when the sorghum crop is in the 3-5 leaf stage and weeds are small (less than $3^{\prime \prime}$ tall). Use drop pipes (drop nozzles) if sorghum is taller than 8 ". Keep the spray off the sorghum leaves and out of the whorl to reduce the likelihood of crop injury and to improve spray coverage of weed foliage. Applying this product to sorghum during periods of rapid growth may result in temporary leaning of plants or rolling of leaves. These effects are usually outgrown within 10-14 days.

Preharvest uses in Texas and Oklahoma only: Up to 8 fluid ounces of this product per acre may be applied for weed suppression any time after the sorghum has reached the soft dough stage. An agriculturally approved surfactant may be used to improve performance. For aerial applications, use at least 2 gallons of water-based carrier per treated acre. Delay harvest until 30 days after a preharvest treatment.

## Split Application:

This product may be applied in split applications: preplant followed by postemergence or preharvest; or postemergence followed by preharvest. DO NOT exceed 8 fluid ounces per acre, per application or a total of 16 ounces per acre, per season.

## Sorghum Tank Mixes and Sequential Treatments

This product may be applied prior to, in a tank mix with, or after one or more of the following herbicides:

| Atrazine | Broclean $®$ | Gramoxone | Intro | Outlook ® |
| :--- | :--- | :--- | :--- | :--- |
| Basagran $®$ | Dual Magnum $®$ | Inteon $®$ | Landmaster® | Paramount $®$ |
| Bicep II | Dual II Magnum ® | Guardsman | Mad Dog ® Plus | Peak ® |
| Magnum $®$ | Fallow Master $®$ | Max ® | Makaze® | Permit ® |

## SOYBEANS

## Preplan Applications:

Apply 4-16 fluid ounces of this product per acre to control emerged broadleaf weeds prior to planting soybeans. DO NOT exceed 16 fluid ounces of this product per acre in a spring application prior to planting soybeans.

Following application of this product and a minimum accumulation of 1 " rainfall or overhead irrigaton, a waiting interval of 14 days is required for 8 fluid ounces per acre or less, and 28 days for 16 fluid ounces per acre. These intervals must be observed prior to planting soybeans or crop injury may occur.

DO NOT make preplant applications of this product to soybeans in geographic areas with average annual rainfall less than $25^{\prime \prime}$.

## Preharvest Applications:

This product can be used to control many annual and perennial broadleaf weeds and control or suppress many biennial and perennial broadleaf weeds in soybean prior to harvest (refer to Table 1). Apply 8-32 fluid ounces of this product per acre as a broadcast or spot treatment to emerged and actively growing weeds after soybean pods have reached mature brown color and at least $75 \%$ leaf drop has occurred.

Soybeans may be harvested 14 days or more after a preharvest application.
Treatments may not kill weeds that develop from seed or underground plant parts, such as rizones or bulblets, after the effective period for this product. For seedling control, a follow-up program or other cultural practice could be instituted.

DO NOT use preharvest-treated soybean for seed unless a germination test is performed on the seed with an acceptable result of $95 \%$ germination or better.

DO NOT feed soybean fodder or hay following a preharvest application of this product.
DO NOT make preharvest applications in California.

## Soybean Tank Mixes <br> Preplant Tank Mixes:

This product may be tank mixed with other herbicides registered for early preplant use in soybeans including burndown herbicides such as glyphosate (Mad Dog $®$ Plus, Makaze $(®)$ ) and 2,4-D or residul herbicides such as Outlook ®, or Dual Magnum $®$.

## Preharvest Tank Mixes:

This product may be tank mixed with other herbicides registered for preharvest use in soybeans such as glyphosate (Mad Dog Plus, Makaze®) and Gramoxone Inteon®.

## SUGARCANE

Apply this product for control of annual, biennial, or perennial broadleaf weeds listed in Table 1. Apply 8-24 fluid ounces of this product per acre for control of annual weeds, 16-32 fluid ounces for control of biennial weeds and for control or suppression of perennial weeds.

Use the higher level of listed rate ranges when treating dense vegetative growth.

DO NOT exceed a total of 64 fluid ounces of this product per treated acre during a growing season.

Timing: This product may be applied to sugarcane any time after weeds have emerged, but before the close-in stage of sugarcane. Applications of 32 fluid ounces of this product per acre made over the top of actively growing sugarcane may result in crop injury.

When possible, direct the spray beneath the sugarcane canopy to minimize the likelihood of crop injury. Using directed sprays will also help maximize the spray coverage of weed foliage.

## Sugarcane Tank Mixes

This product may be tank mixed with other products registered for use in sugarcane such as Asulam Herbicide, atrazine, Evik®, and 2,4-D.

## FARMSTEAD TURF (NONCROPLAND) AND SOD FARMS

For use in farmstead (noncropland) and sod farms, apply 3-32 fluid ounces of this product per acre to control or suppress growth of many annual, biennial, and some perennial broadleaf weeds commonly found in turf. This product will also suppress many other listed perennial broadleaf weeds and woody brush and vine species. Refer to Table 2 for rate listings based on targeted weed or brush species and growth stage. Some weed species will require tank mixes for adequate control.

DO NOT exceed 32 fluid ounces of this product per acre, per growing season.
Apply 30-200 gallons of diluted spray per treated acre (3-17 quarts of water per 1,000 square feet), depending on density or height of weeds treated and on the type of equipment used.

To avoid injury to newly seeded grasses, delay application of this product until after the second mowing. Furthermore, applying more than 16 fluid ounces of this product per treated acre may cause noticeable stunting or discoloration of sensitive grass species such as bentgrass, carpetgrass, buffalograss, and St. Augustinegrass.

In areas where roots of sensitive plants extend, DO NOT apply more than 4 fluid ounces of this product per treated acre on coarse-textured (sandy-type) soils, or in excess of 8 fluid ounces per treated acre on fine-textured soils. DO NOT make repeat applications in these areas for 30 days and until previous applications of this product have been activated in the soil by rain or irrigation.

## Farmstead Turf (noncropland) and Sod Farm Tank Mixes

Apply 3.2-8 fluid ounces of this product per acre in a tank mix with one of the products in Table 9 at the rates listed. Use the higher rates when treating established weeds.

Table 9. Farmstead Turf (noncropland) and Sod Farm Tank Mixes

| Tank Mix Partner | Rate Per Acre |
| :---: | :--- |
| bromoxynil (Broclean $(B)$ | $0.375-0.5$ pound a.i. |
| MCPA | $0.5-1.5$ pounds a.e. |
| MCPP | $0.5-1.5$ pounds a.e. |
| $2,4-D$ | $0.5-1.5$ pounds a.e. |

ANNUALS
Common Name
Alkanet
Amaranth
Palmer
Powell
Spiny
Aster, Slender
Bedstraw, Catchweed
Beggarweed, Florida
Broomweed, Common
Buckwheat
Tartary
Wild
Buffalobur
Burclover, California
Burcucumber
Buttercup
Corn
Creeping
Roughseed
Western Field
Carpetweed
Catchfly, Nightflowering
Chamomile, Corn
Chervil, Bur
Chickweed, Common
Clovers
Cockle
Corn
Cow
White
Cocklebur, Common
Copperleaf, Hophornbeam
Cornflower (Bachelor Button)
Croton
Tropic
Woolly
Daisy, English
Dragonhead, American
Eveningprimrose, Cutleaf
Falseflax, Smallseed
Fleabane, Annual
Flixweed
Fumitory
Goosefoot, Nettleleaf
Hempnettle
Henbit
Jacob's Ladder
Jimsonweed
Knawel (German Moss)

## Scientific Name

Lithospermurn arvense
Amaranthus palmeri
Amaranthus powelli
Arnaranthus spinosus
Aster subulatus
Galium aparine
Desmodiurn tortuosum
Gutierezia dracunculo/des
Fagopyrurn tatarium
Polygonurn con volvulus
Solanurn rostraturn
Medicago polymorpha
Sicyos angulatus
Ranunculus arvensis
Ranunculus repens
Ranunculus muricatus
Ranunculus occidentalis
Mollugo verticillata
Silene noctiflorum
Anthemis arvensis
Anthriscus caucalis
Stellaria media
Trifolium spp
Agrostemma githago
Vaccaria pyrarnidata
Melandrium alburn
Xanthiurn strumarium
Acalypha ostryifolia
Centaurea cyanus
Croton glandiola
Croton capitatus
Bells perennis
Dracocephalurn parviflorum
Oenotherá laciniata
Camelina microcarpa
Erigeron annuus
Descurainia sophia
Furnaria officinalis
Chenopodium murale
Galeopsis tetrahit
Lamiurn amplexicaule
Polemonium caeruleum
Datura stramonium
Scleranthus annuus
ANNUALS (Cont'd.)
Common Name
Knotweed, Prostrate
Kochia
Ladysthumb
Lambsquarters, Common
Lettuce
Miners
Prickly
Mallow
Common
Venice
Marestail (Horseweed)
Mayweed
Morningglory
IvyleafTall
Mustard
Black
Blue
Tansy
Treacle
Tumble
Wild
NightshadeBlack
Cutleaf
Pennycress
Field (Fanweed,
Frenchweed, Stinkweed)
Pepperweed
Virginia (Peppergrass)
Pigweed
Prostrate
Redroot (Carelessweed)
Smooth
Tumble
Pineappleweed
Poorjoe
Puncturevine
Purslane, Common
Pusley, Florida
Radish, Wild
Ragweed
Common
Giant (Buffaloweed)
Lance-Leaf
Ragwort, Tansy
Rocket
London
Yellow
Rubberweed, Bitter
Scientific Name
Polygonurn aviculare
Kochia scoparia
Polygon urn persicaria
Chenopodium album
Claytonia perfoliata
Lactuca serriola
Malva neglecta
Hibiscus trionurn
Hippurus vulgaris
Anthemis cotula
Ipomea hedracea
lpomea purpurea
Brassica nigra
Chorispora tenella
Descurainia pinnata
Erysimum repandum
Sisyrnbriumm altissirnurn
Sinapis arvensis
Solanum nigrum
Solanum triflorum
Thlaspi arvense
Lepidium virginicum
Amaranthus blitoides
Amaranthus retroflexus
Arnaranthus hybridus
Arnaranthus albus
Matricaria matricarioides
Diodia teres
Tribulus terrestris
Portulaca oleracea
Richardia scabra
Raphanus raphanistrurn
Ambrōsia ärtēmisiifolia
Ambrosia trifida
Ambrosia bidentata
Senecia jacobea
Sisyrnbriurn irio
Barbarea vulgaris
ANNUALS (Cont'd.)

Common Name
Salsify
Sesbania, Hemp
Shepherdspurse
Sicklepod
Sida, Prickly (Teaweed)
Smartweed
Green
Pennsylvania
Sneezeweed, Bitter
Sowthistle
Annual
Spiny
Spikeweed, Common
Spurge, Prostrate
Spurry, Corn
Starbur, Bristly
Starwort, Little
Sumpweed, Rough
Sunflower, Common
Thistle, Russian
Velvetleaf
Waterhemp Common
Tall
Waterprimrose
Wormwood

## BIENNIALS

Common Name
Burdock, Common
Carrot, Wild (Queen Anne's Lace)
Cockle, White
Eveningprimrose, Common
Geranium, Carolina
Gromwell
Knapweed
Diffuse
Spotted
Mallow, Dwarf
Plantain, Bracted
Ragwort, Tansy
Starthistle, Yellow
Sweetclover
Teasel
Thistle
Bull
Musk
Plumeless

## Scientific Name

Tragopogon porrifolius
Sesbania exaltata
Capsella bursa-pastoris
Cassia obtusifolia
Sida spinosa
Polygonum scabrum
Polygonum pensylvanicum
Helenium amurum
Sonchus oleraceus
Sonchus asper
Hemozenia pungens
Euphorbia hurnistrata
Spergula arvensis
Acanthospermum hispidurn
Stellaria grarninea
fva cilliata
Helianthus annuus
Salsola iberica
Abutilon theophrasti
Amaranthus rudis
Amaranthus tuberculatus
Ludwigia decurrens
Artemisia annua

Scientific Name
Arctium minus
Daucus carota
Melandrium album
Oenothera biennis
Geranium carolinianum
Lithospermurn spp.
Cantaurea diffusa
Cantaurea maculosa
Malva borealis
Plantago aristata
Senecio jacobaea
Centaurea solstitialis
Melilotus spp.
Dipsacus sativus
Cirsium vulgare
Carduus nutans
Carduus acanthoides

## PERENNIALS

## Common Name

Alfalfa
Artichoke, Jerusalem
Aster
Spiny
Whiteheath
Bedstraw, Smooth
Bindweed
Field
Hedge
Blueweed, Texas
Bursage, Woollyleaf (Bur Ragweed,
Povertyweed)
Buttercup, Tall
Campion, Bladder
Chickweed
Field
Mouseear
Chicory
Clover, Hop
Dandelion
Dock
Broadleaf (Bitterdock)
Curly
Dogbane, Hemp
Dogfennel (Cypressweed)
Fern, Bracken
Garlic, Wild
Goldenrod
Canada
Missouri
Goldenweed, Common
Hawkweed
Henbane, Black
Horsenettle, Carolina
Ironweed
Knapweed
Black
Russian
Milkweed
Common
Honeyvine
Western Whorled
Nettle, Stinging
Nightshade, Silverleaf (White Horsenettle)
Onion, Wild
Plantain
Broadleaf
Buckhorn
Pokeweed
Ragweed, Western

## Scientific Name

Medicago sativa
Helianthus tuberosus
Aster spinosus
Aster pilosus
Galilum mollugo
Convolvulus arvensis
Calystegia sepium
Hellanthus ciliaris
Ambrosia grayi
Ranunculus acris
Silene vulgaris
Cerastium arvense
Cerastium vulgaturn
Cichorium intybus
Trifoleum aureum
Taraxacum officinale
Rumex obtusifolius
Rumex crispus
Apocynurn cannabinum
Eupatorium capillifolium
Pteridium aquilinum
Alliurn vineale
Solidago canadensis
Solidago missouriansis
Isocorna coronopifolia
Hieracium spp.
Hyoscyarnus niger
Solanurn caroliniense
Vernonia spp.
Centaurea nigra
Centaurea repens
Asclepias syriaca
Ampelamus albidus
Asclepias subverticillata
Urtica dioica
Solanum elaeagnifoliurn
Allium canadense
Plantago major
Plantago lanceolata
Phytolacca americana
Ambrosia psilstachya

## PERENNIALS (Cont'd.)

Common Name
Redvine
Sericea Lespedeza
Smartweed, Swamp
Snakeweed, Broom
Sorrel, Red (Sheep Sorrel)
Sowthistle, Perennial
Spurge, Leafy
Sundrops
Thistle
Canada
Scotch
Toadflax, Dalmatian
Tropical Soda Apple
Trumpetcreeper (Buckvine)
Vetch
Waterhemlock, Spotted
Waterprimrose, Creeping
Woodsorrel
Creeping
Yellow
Wormwood
Absinth
Louisiana
Yankeeweed
Yarrow, Common
WOODY SPECIES
Common Name
Alder
Ash
Aspen
Basswood
Beech
Birch
Blackberry
Blackgum
Cedar
Cherry
Chinquapin
Cottonwood
Creosotebush
Cucumbertree
Dewberry
Dogwood
Elm
Grape
Hawthorn (Thornapple)
Hemlock
Hickory
Honeylocust

## Scientific Name

Brunnichia ovata
Lespedeza cuneata
Polygonurn coccineum
Gutierezia sarothrae
Rumex acetosella
Sonchus arvensis
Euphorbia esula
Oenothera perrenis
Cirsium arvense
Onopordum acanthium
Linaria genistrata
Solanum viarum
Campsis radicans
Vicia spp.
Cicuta maculata
Ludwigia peploides
Oxalis corniculata
Oxalis stricta
Artemesia absinthium
Artemesia ludoviciana
Eupatoriurn compositifolium
Achillea millefolium

Scientific Name
Alnus spp.
Fraxinus spp.
Populus spp.
Tilia americana
Fagus spp.
Betula spp.
Rubus spp.
Nyssa spp.
Cedrus spp.
Prunus spp.
Chrysolepis chrysophylla
Populus deltoides
Larrea tridentata
Magnolia acuminata
Rubüs caeasiūs
Cornus spp.
Ulrnus spp.
Vitus spp.
Crataegus spp.
Tsuga spp.
Carya spp.
Gleditsia triacanthos

## WOODY SPECIES (Cont'd.)

## Common Name

Honeysuckle
Hornbeam
Huckleberry
Huisache
Ivy, Poison
Kudzu
Locust, Black
Maple
Mesquite
Oak
Oak, Poison
Olive, Russian
Persimmon, Eastern
Pine
Plum, Sand (Wild Plum)
Poplar
Rabbitbrush
Redcedar, Eastern
Rose
McCartney
Multiflora
Sagebrush, Fringed
Sassafras
Serviceberry
Spicebush
Spruce
Sumac
Sweetgum
Sycamore
Tarbush
Willow
Witchhazel
Yaupon
Yucca

## Scientific Name

Lonicera spp.
Carpinus spp.
Vaccinium arboreurn
Acacia farnesiana
Rhus radicans
Pueraria lobata
Robinia pseudoacacia
Acer spp.
Prosopis ruscifolia
Quercus spp.
Rhus toxicodendron
Eleaegnus angustifolia
Diospyros virginiana
Pinus spp.
Prunus amygdalis
Populus spp.
Chrysothamnus pulchellus
Juniperus virginiana
Rosa bracteata
Rosa multiflorum
Artemisia frigida
Sassafras albidum
Arnelanchier sanguinea
Lindera benzoin
Picea spp.
Rhus spp.
Liquidamber styraciflua
Platanus occidentalis
Flourensia cernua
Salix spp.
Hamarnelis macrophylla
llex spp.
Yucca spp.

## CROPS

This product can be used on the following crops:

Asparagus
Conservation Reserve Program (CRP)
Corn
Cotton
Fallow Systems (Between Crop Applications)

Small Grains (Barley, Oat, Triticale and Wheat) Sorghum
Soybean
Sugarcane
Turf

## Proso Millet

Pastures, Rangeland, Farmstead
Read label for complete Restrictions and Limitations and Application Instructions.

## STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. This product may not be mixed, loaded, or used within 50 feet of all wells including abandoned wells, drainage wells, and sinkholes.
PESTICIDE STORAGE: Groundwater contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material. Store in original container in a well-ventilated area separately from fertilizer, feed, and foodstuffs. Avoid cross-contamination with other pesticides.
PESTICIDE DISPOSAL: Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state or local procedures under Subtitle C of the Resource Conservation and Recovery Act. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law.
Container Disposal: Nonrefillable Container. DO NOT reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities. Triple rinse containers small enough to shake (capacity $\leq \mathbf{5}$ gallons) as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $1 / 4$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Triple rinse containers too large to shake (capacity $>5$ gallons) as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container $1 / 4$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or mix tank. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.
Refillable Container: Refill this container with pesticide only. DO NOT reuse this container for any other purpose. Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. Triple rinse as follows: To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about $10 \%$ full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. When this container is empty, replace the cap and seal all openings that have been opened during use; return the container to the point of purchase or to a designated location. This container must only be refilled with a pesticide product. DO NOT 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-transport.-DO NOT transport if this container is damaged or leaking. If the container is damaged, or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling, if available, or dispose of container in compliance with state and local regulations.
For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC - 1-800-424-9300.

## STRUTTM

EPA REG. NO. 34704-1043
Steps to be taken in case material is released or spilled: Dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing and wash affected skin areas with soap and water. Wash clothing before reuse. Keep the spill out of all sewers and open bodies of water.

## 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 LOVELAND 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.

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