



GROUP	7	HERBICIDE
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# Lorox<sup>®</sup> DF

Agricultural Herbicide

Dry Flowable

Active Ingredient	By Weight
Linuron: 3-(3, 4-dichlorophenyl)-1-methoxy-1-methylurea .....	50.0%
Other Ingredients .....	50.0%
	<b>TOTAL 100.0%</b>

## 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.)

FIRST AID	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
<p><b>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies involving this product, call toll free 1-866-374-1975.</b></p>	

See Label for Additional Precautions and Directions for Use.

EPA Reg. No. 61842-23  
EPA Est. No.  
Net Weight:

**Manufactured for:**  
Tessengerlo Kerley, Inc.  
2255 N. 44th Street, Suite 300  
Phoenix, AZ 85008 USA  
800-525-2803  
novasource.com



## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### Mixers and loaders must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical resistant footwear
- Chemical resistant gloves made of any waterproof material
- Chemical resistant apron

#### Applicators and other handlers (other than mixers and loaders) must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves, made of any waterproof material
- Chemical-resistant footwear

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.

**Engineering controls statement:** When handlers use closed systems, enclosed cabs, in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240 (d)(46), the handler PPE requirements may be reduced or modified as specified in the WPS.

### USER SAFETY RECOMMENDATIONS

**USERS SHOULD:** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/PPE 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

This pesticide is toxic to fish and aquatic invertebrates. 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 apply where weather conditions favor drift from areas treated. Do not contaminate water when cleaning off equipment or disposing of equipment wash waters or rinsate.

**Ground Water Advisory:** 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.

**Surface Water Advisory:** Linuron may contaminate surface water through spray drift or under certain conditions, from surface runoff into adjacent surface water bodies (ponds, lakes, streams, etc.) For several weeks post-application, linuron has a high potential to runoff when applied to fields with any of the following conditions: sloping land draining into nearby surface waters; very poorly to somewhat poorly drained soils; areas with extremely shallow ground water; frequently flooded areas; fields with surface water canals or ditches; and highly erodible land cultivated with poor management practices.

### 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.

### 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 action.

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.

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 recommendations 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.

### 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 Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours for all activities except hand-set irrigation to celeriac (REI=8 days) and to coriander, dill, and parsley (REI=4 days).

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
- Chemical-resistant gloves made of any waterproof material
- Shoes and socks
- Chemical-resistant headgear for overhead exposure

### 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. Non-crop weed control is not within the scope of the Worker Protection Standard.

Do not enter or allow unprotected persons to enter treated areas until the sprays have dried.

### PRODUCT INFORMATION

LOROX® DF is a dispersible granule to be mixed in water and applied as a spray for selective control of weeds on certain crops and for non-selective weed control on non-cropland areas. LOROX DF is noncorrosive to equipment, non-flammable and non-volatile.

To control susceptible weed seedlings for an extended period of time, apply LOROX DF to soil before weed emergence. The degree of control and duration of effect will vary with the amount of chemical applied, soil texture, rainfall and other conditions. Higher dosages are needed for soils high in clay or organic matter. Soil low in clay or organic matter will require lower dosages to obtain equivalent herbicide performance. Since moisture is needed to activate LOROX DF, rainfall or irrigation is needed within 2 weeks of application. In the Columbia River Basin, use LOROX DF only if the crop is sprinkler irrigated.

When using LOROX DF to control emerged weeds best results are obtained on succulent weeds growing in temperatures of 70°F or higher with high humidity. Where recommended, addition of a surfactant to the spray increases contact effects of LOROX DF.

It is suggested that growers limit their first use to small areas as the effect of LOROX DF varies with soils, uniformity of application and environmental conditions.

Follow all label directions on this and any product used in mixtures.

#### GRASSES AND BROADLEAF WEEDS CONTROLLED BY LOROX DF

##### PREEMERGENCE USE (GERMINATING WEEDS)

LOROX DF, at full specified rates provides good to excellent control of annual weeds as they germinate such as:

##### Broadleaf Weeds

Amaranth, Palmer	<i>Amaranthus palmeri</i>	Pigweed, Prostrate	<i>Amaranthus blitoides</i>
Carpetweed	<i>Mollugo verticillata</i>	Pigweed, Redroot	<i>Amaranthus retroflexus</i>
Chickweed, Common	<i>Stellaria media</i>	Pigweed, Smooth	<i>Amaranthus hybridus</i>
Dog Fennel (Mayweed Chamomile)	<i>Anthemis cotula</i>	Prickly Lettuce	<i>Lactuca serriola</i>
Galinsoga	<i>Galinsoga</i> sp.	Purslane, Common	<i>Portulaca oleracea</i>
Nettleleaf Goosefoot	<i>Chenopodium murale</i>	Radish, Wild	<i>Raphanus raphanistrum</i>
Lambsquarters, Common	<i>Chenopodium album</i>	Ragweed, Common	<i>Ambrosia artemisiifolia</i>
Mustard, Tumble	<i>Sisymbrium altissimum</i>	Shepherdspurse	<i>Capsella bursa-pastoris</i>
Mustard, Blue	<i>Chorispora tenella</i>	Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>
Mustard, Wallflower (Treacle)	<i>Erysimum cheiranthoides</i>	Tansymustard, Pinnate	<i>Descurainia pinnata</i>

##### Grasses

Barnyardgrass (Watergrass)	<i>Echinochloa crus-galli</i>	Yellow Foxtail	<i>Setaria glauca</i>
Canarygrass	<i>Phalaris canariensis</i>	Goosegrass	<i>Eleusine indica</i>
Large Crabgrass	<i>Digitaria sanguinalis</i>	Fall Panicum	<i>Panicum dichotomiflorum</i>
Green Foxtail	<i>Setaria viridis</i>		

LOROX DF will provide partial control of the following hard to control weeds:

Annual Morningglories only - see	<i>Ipomoae</i> spp.	Giant Foxtail	<i>Setaria faberi</i>
Entire Leaf Morningglory	<i>Ipomoae hederacea integriuscula</i>	Kochia	<i>Kochia scoparia</i>
Ivy Leaf Morningglory	<i>Ipomoae hederacea</i>	Prickly Sida (Teaweed)	<i>Sida spinosa</i>
Pitted Morningglory	<i>Ipomoae ipola &amp; I. lacunose</i>	Ragweed, Giant	<i>Ambrosia trifida</i>
Cocklebur, Common	<i>Xanthium strumarium</i>	Sicklepod	<i>Cassia obtusifolia</i>
Dayflower, Common (Asiatic)	<i>Commelina communis</i>	Smooth Crabgrass	<i>Digitaria ischaemum</i>
Eastern Black Nightshade	<i>Solanum ptychanthum</i>	Velvetleaf (Buttonweed)	<i>Abutilon theophrasti</i>
Florida Beggarweed	<i>Desmodium tortuosum</i>	Waterhemp, Common	<i>Amaranthus rudis</i>
Florida Pusley (Florida purslane)	<i>Richardia scabra</i>	Waterhemp, Tall	<i>Amarathus tuberculatis</i>

The lower dosage rates are effective on coarser soils. Use the higher rates on finer soils and on the more difficult to control broadleaf weeds and grasses. Sufficient moisture (0.5 to 1 inch on moist soils; 1 to 2 inches on dry soils) in the form of rainfall or sprinkler irrigation is necessary after treatment to carry the chemical into the root zone of germinating weeds; best results are obtained when this occurs within two weeks after application. If heavy rainfall occurs soon after application, injury to crop may result.

LOROX DF applied preemergence, before emergence of soybeans, asparagus, carrots, corn (field), parsnips, potatoes, and weeds, is an effective procedure because susceptible weeds are controlled in an early, vulnerable seedling stage before they compete with the crop. With favorable moisture conditions, LOROX DF continues to control weeds for some time as the crop becomes better able to compete. Should weed seedlings begin to break through the preemergence treatment in significant numbers, secondary weed control procedures should be implemented; these include cultivation and postemergence herbicide application.

A good seed bed must be prepared before application of LOROX DF as crop injury may result if application is made to ground which is cloddy or compacted resulting in improperly planted seed. Plant seed to depth specified. Surface of the soil should not be cultivated or disturbed after application of LOROX DF and before emergence of the crop as weed control may be reduced and crop injury may result. However, if moisture is insufficient to activate the herbicide, a shallow cultivation (rotary hoe preferred) may be made after emergence of row crops while weeds are small enough to be controlled by mechanical means. Deep cultivation reduces the effectiveness of LOROX DF.

#### POSTEMERGENCE USE (EMERGED SEEDLING WEEDS)

LOROX DF, at specified rates, controls up to 2 inch tall annual grasses and up to 6 inch tall broadleaf weeds.

#### Broadleaf Weeds

Annual morningglories only - see	<i>Ipomoae</i> spp.	Mustard, Tumble	<i>Sisymbrium altissimum</i>
Entire Leaf Morningglory	<i>Ipomoae hederacea integriuscula</i>	Mustard, Blue	<i>Chorispora tenella</i>
Ivy Leaf Morningglory	<i>Ipomoae hederacea</i>	Mustard, Wallflower (Treacle)	<i>Erysimum cheiranthoides</i>
Pitted Morningglory	<i>Ipomoae ipola &amp; I. lacunose</i>	Nettleleaf Goosefoot	<i>Chenopodium murale</i>
Carpetweed	<i>Mollugo verticillata</i>	Pigweed, Prostrate	<i>Amaranthus blitoides</i>
Chickweed, Common	<i>Stellaria media</i>	Pigweed, Redroot	<i>Amaranthus retroflexus</i>
Cocklebur, Common	<i>Xanthium strumarium</i>	Pigweed, Smooth	<i>Amaranthus hybridus</i>
Dayflower, Common	<i>Commelina communis</i>	Prickly Lettuce	<i>Lactuca serriola</i>
Dog Fennel (Mayweed Chamomile)	<i>Anthemis cotula</i>	Prickly Sida (Teaweed)	<i>Sida spinosa</i>
Fiddleneck, Coast	<i>Amsinckia intermedia</i>	Purslane, Common	<i>Portulaca oleracea</i>
Florida Beggarweed	<i>Desmodium tortuosum</i>	Ragweed, Common	<i>Ambrosia artemisiifolia</i>
Florida Pusley (Florida Purslane)	<i>Richardia scabra</i>	Sesbania, Hemp	<i>Sesbania herbacea</i>
Groundsel, Common	<i>Senecio vulgaris</i>	Sicklepod	<i>Senna obtusifolia</i>
Knawel	<i>Scleranthus annuus</i>	Smartweed (Pennsylvania)	<i>Polygonum pennsylvanicum</i>
Kochia (for best results tank mix with other burndown herbicide)	<i>Kochia scoparia</i>	Velvetleaf (Buttonweed)	<i>Abutilon theophrasti</i>
Lambsquarters	<i>Chenopodium album</i>	Wild Buckwheat	<i>Polygonum convolvulus</i>

#### Grasses

Barnyardgrass (Watergrass)	<i>Echinochloa crus-galli</i>	Yellow Foxtail	<i>Setaria glauca</i>
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>	Goosegrass	<i>Eleusine indica</i>
Canarygrass	<i>Phalaris canariensis</i>	Rattail Fescue	<i>Vulpia myuros</i>
Crabgrass, Large	<i>Digitaria sanguinalis</i>	Ryegrass, Annual (Italian)	<i>Lolium multiflorum</i>
Fall Panicum	<i>Panicum dichotomiflorum</i>	Texas Panicum	<i>Panicum texanum</i>
Green Foxtail	<i>Setaria viridis</i>		

Results of postemergence treatment of emerged weeds vary with rate applied and environmental conditions; best results are obtained on succulent weeds growing under conditions of high humidity and temperatures of 70° F or higher. Addition of a surfactant to the spray (where recommended) increases contact effects of LOROX DF.

Application can also provide control of emerging susceptible weed seedlings for an extended period of time.

## APPLICATION DIRECTIONS

LOROX DF must be used in accordance with directions on this label. Injury to or loss of desirable trees or other plants may result from failure to observe the following application directions.

- **Do not apply by air.**
- **Do not apply to sand or loamy sand.**
- **Do not use on soils with less than 1% organic matter.**

### TANK MIXING

LOROX DF is frequently used in tank mix combination with other registered herbicides to provide effective broad spectrum control of weeds. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

LOROX DF may be tank mixed or followed with sequential applications of other products registered for the same crops as LOROX DF. Applications of full or reduced rates of other products may be tank mixed with LOROX DF, provided:

- the tank mix product is labeled for the same timing, method of application, adjuvants and use restrictions as LOROX DF.
- the tank mixture is not specifically prohibited on the label of the tank mix product.
- the tank mix combination is compatible as determined by a 'jar test' described in the TANK MIX COMPATIBILITY TESTING section below.

When tank mixing LOROX DF with any other approved pesticide, always read and follow all use directions, restrictions, and precautions of both LOROX DF and the tank mix partner(s). When tank mixing, the most restrictive labeling applies.

### TANK MIX COMPATIBILITY TESTING

Perform a jar test prior to tank mixing to ensure compatibility of LOROX DF to other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour. If the mixture balls up, forms flakes, sludges, gels, oily films or layers, or other precipitates, it is not compatible and the tank mix combination should not be used.

**GROUND APPLICATION:** Use a fixed-boom power sprayer calibrated to a constant speed and rate of delivery. Ensure that openings in screen are equal to or larger than 50 mesh. Continuous agitation in the spray tank is necessary to keep the material in suspension. Agitation can be by hydraulic or mechanical means. If a by-pass or return line is used ensure that it terminates at the bottom of the tank to minimize foaming. Avoid overlapping of spray swaths and shut off spray booms while starting, turning, slowing or stopping or crop injury may result.

For preemergence application, use a minimum of 15 gallons of water per acre. For postemergence application, use sufficient volume of water (minimum of 25 gallons per acre) for thorough coverage of weed foliage. Always apply in a manner and under conditions favorable to avoid spray drift.

**CLEANING:** Clean equipment of all traces of LOROX DF immediately after use. Remove and clean nozzle tips and screens separately. Flush tank, pump, hoses and boom with several changes of water.

Do not flush or drain equipment or apply LOROX DF 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 LOROX DF on home plantings of trees, shrubs or herbaceous plants, lawns, walks, driveways, tennis courts or similar areas. Keep drift of dry powder or spray from desirable plants.

**SPRAY PREPARATION:** Fill the tank 1/4 full with clean water. Start agitation system, add LOROX DF and continue adding water. Each component of any tank mix should be added separately while adding water. Surfactant, if used, should be added last when the tank is nearly full. Agitation should continue throughout. If poor mixing should occur with any component, premix the component with two parts water before adding to the spray tank.

**RATES:** All rates are expressed as broadcast rates; for band treatment, use proportionately less. For example, use 1/3 of the broadcast rate when treating a 14" band where row spacing is 42". Where a range of dosages is given, use the lower rate on coarser soils (low in clay or organic matter) and the higher rate on finer soils (high in clay or organic matter); for postemergence application, use the lower rate on smaller weeds and the higher rate on larger weeds. See crops section for crop-specific application rates.

**REPLANTING:** If initial seeding fails to produce a stand, any crop registered for the rate of linuron that was applied may be replanted immediately. Thoroughly rework soil before replanting; do not retreat field with a second application, as injury to the crop may result.

### CROP ROTATION DIRECTIONS

Follow the crop rotation directions below unless specified otherwise under the individual crop directions. Follow specific state crop rotation directions listed in crop sections for California, Washington, and Idaho.

#### *East of the Rocky Mountains*

- Cereal crops (except barley, oats, and rye) may be planted 12 months following the last LOROX DF application.
- Barley, oats, and rye may be planted 4 months after the last LOROX DF application.

#### *West of the Rocky Mountains*

- Do not plant any other crop until 12 months after the last LOROX DF application as crop injury may result.

**FERTILIZER SPRAY MIXTURES:** For preemergence application, nonpressurized nitrogen or fertilizer solution may be used in the spray mixture unless otherwise directed. Small quantities should be tested for compatibility by the following procedure before full scale mixing.

1. Measure one pint of intended spray water or fertilizer solution into a jar.
2. Add in the order given, the intended ingredients, shaking after each addition.
  - a. Surfactants (spreaders), acidifiers, compatibility agents and activators: add 1 teaspoon for each pint/100 gallons.
  - b. Dry ingredients (wetable powders, dry flowables): add 1 tablespoon for each pound/100 gallons.
  - c. Flowables: add 1 teaspoon for each pint/100 gallons.



- d. Soluble ingredients: add 1 tablespoon for each pound/100 gallons.
- e. Spreaders/stickers: add 1 teaspoon for each pint/100 gallons.
3. The final mixture should be uniform and smooth with no evidence of coagulation occurring. If incompatibility is evident, begin test again with a compatibility agent added first. Six drops is equivalent to 4 ounces per 100 gallons. If this does not smooth the mixture, try higher concentrations and other compatibility agents.
4. Allow the mixture to stand undisturbed thirty minutes. If separation occurs, shake and observe the resulting mixture. If mixture is smooth proceed with spraying, provided the tank has good agitation. If mixture is not smooth do not spray. You may try:
  - a. more compatibility agents.
  - b. different formulations of the active ingredients (switch from WP or EC to flowable or from WP to EC).
  - c. change active ingredients; some combinations will not tank mix.

## **CHEMIGATION INSTRUCTIONS**

Apply this product only through one or more of the following types of systems: sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set or hand move irrigation system(s). Do not apply this product through any other type of irrigation system. Not all labeled crops are approved for chemigation, refer to individual crop use directions for chemigation restrictions.

Crop injury or lack of effectiveness or illegal pesticide residues in the crop can result from the non-uniform distribution of treated water.

If you have any questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

### **CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS**

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional, interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

When mixing, fill nurse tank half full with water. Add LOROX DF slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. Stickers, spreaders, insecticides, nutrients, etc. should be added last. If compatibility is in question, use the compatibility jar test before mixing a whole tank. Because of the wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in mixtures.

LOROX DF should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set or hand moved irrigation systems. Agitation is recommended. Shut off injection equipment after treatment and continue to operate irrigation system until LOROX DF has been cleared from the last sprinkler head.

### **SPRINKLER CHEMIGATION**

The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

When mixing, fill nurse tank half full with water. Add LOROX DF slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. Stickers, spreaders, insecticides, nutrients, etc. should be added last. If compatibility is in question, use the compatibility jar test before mixing a whole tank. Because of the wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in mixtures.

LOROX DF should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set or hand moved irrigation systems. Agitation is recommended. Shut off injection equipment after treatment and continue to operate irrigation system until LOROX DF has been cleared from the last sprinkler head.

## **ASPARAGUS**

- **Do not exceed a maximum of 4 lbs./acre/year of LOROX DF (2 lbs./acre/year of linuron active ingredient (a.i.)).**
- **Do not use surfactant or fertilizer solution in spray mixture.**
- **Do not apply within 1 day of harvest.**

*Direct Seeded or Newly Planted Crowns:*

**Preemergence:** Make a single application of 2 to 4 lbs. per acre of LOROX DF (1 to 2 lbs. per acre linuron a.i.) after planting seed 1/2 inches deep in coarse soil and 1 inch deep in fine soils. During planting operation, spray activated charcoal as a 1 inch band on soil surface directly over seed rows at the rate of 300 lbs. activated charcoal per acre (equivalent to 15 lbs. per acre of crop with a 20 inch row spacing). Preemergence weed control will be reduced in soils with high organic matter (greater than 5% and peat or muck).

**Postemergence:** Make 1 or 2 applications of 1 to 2 lbs. per acre of LOROX DF (0.5 to 1 lb. linuron a.i.) per acre when ferns are in the 6 to 18 inch stage and weeds are not over 4 inches tall.

*Established Beds:*

**Preemergence:** Make a single application of 2 to 4 lbs. of LOROX DF (1 to 2 lbs. linuron a.i.) per acre. Preemergence weed control will be reduced in soils with high organic matter (greater than 5% and peat or muck).

**Postemergence:** Make 1 to 3 applications of 1 to 2 lbs. of LOROX DF (0.5 to 1 lb. linuron a.i.) per acre before weeds exceed 4 inches in height. Apply before cutting season or immediately after cutting.

**Directed Postemergence (Fern Stage):** Make a single application of 4 lbs. of LOROX DF (2 lbs. linuron a.i.) per acre as directed. Spray to base of plants for control of dudain melon.

In California, dudain melon and annual nightshade are controlled.

## **BULB**

**Tulip, Caladium, Calla Lily, Daffodil and Dutch Iris (California, Florida)**

After planting of bulbs, settle the soil with sprinkler irrigation (rainfall will serve the same purpose); then before emergence of plants (bulbs), apply 2 lbs. LOROX DF (1 lb. linuron a.i.) per acre in a minimum of 20 gallons of water per acre. Treat only once during the growing season.

## **CARROT**

- **Because carrot varieties vary in their resistance, determine tolerance to LOROX DF prior to adoption as a field practice to prevent possible crop injury.**
- **Do not exceed 4 lbs. of LOROX DF (2 lbs. linuron a.i.) per acre per year East of Rocky Mountains.**
- **Do not exceed 3 lbs. of LOROX DF (1.5 lbs. linuron a.i.) per acre per year West of Rocky Mountains.**
- **Do not apply within 14 days of harvest.**

**Preemergence - California, Colorado, Delaware, Florida, Georgia, Maryland, Michigan, Minnesota, New Jersey, North Dakota, Ohio, Oregon, Virginia, Washington, and Wisconsin only:**

Make a single application of 1 - 2 lbs. of LOROX DF (0.5-1 lb. linuron a.i.) per acre in California, Florida, Minnesota, North Dakota, Oregon, and Washington and 1 - 3 lbs. of LOROX DF (0.5-1.5 lbs. linuron a.i.) per acre in Colorado, Delaware, Georgia, Maryland, Michigan, New Jersey, Ohio, Virginia, and Wisconsin after planting but prior to carrots emerging. Seed should be planted at least 1/2 inch deep. Use the lower rate on lighter soils and the higher rate on heavier soils. Additional postemergence applications may be made as long as the total does not exceed the seasonal maximum of LOROX DF for the geography.

**Postemergence - Entire U.S.:**

Apply 1.5 to 3 lbs. of LOROX DF (0.75 to 1.5 lbs. linuron a.i.) per acre as a broadcast spray. Applications to carrots that are less than 3 inches tall may result in crop injury; grower and/or applicator assumes all crop injury risk if applications are made to carrots less than 3 inches tall. Repeat application may be made as long as the total LOROX DF use does not exceed the seasonal maximum of LOROX DF for the geography.

**Postemergence - Alternate Treatment for New York:** For control of emerged broadleaf weeds early in the development of the carrot crop, apply 0.25 lb. of LOROX DF (0.125 lb. linuron a.i.) per acre to carrots having at least one fully developed true leaf and 0.5 lb. of LOROX DF (0.25 lb. linuron a.i.) per acre to carrots having three or more leaves. A single application applied prior to the five-leaf stage of carrots may not provide adequate season-long control. Multiple applications at 1- and 3-, or 2- and 4-, or 3- and 5-leaf stages will significantly improve weed control. Early crop injury can occur, however the effect should be transitory, with no yield losses attributable to crop injury. Carrots must be at least 3 inches tall at the time of application. Failure to control weeds before this stage of development will result in significant yield losses due to weed competition.

**Restrictions for Postemergence Carrot Applications:**

Do not treat susceptible varieties which show an initial burning of foliage following postemergence treatment with LOROX DF.

Do not exceed 40 psi spray nozzle pressure as crop injury may result.

Do not apply when the temperature exceeds 85° F as crop injury may result.

The activity of LOROX DF on both carrots and weeds is increased if applied after 3 or more cloudy days. If spraying is done under these conditions, the dosage of LOROX DF must be reduced.

### **Precautions for Postemergence Carrot Applications:**

The addition or tankmix of Stoddard solvent, surfactants, nitrogen, or fertilizer solution, or other pesticides may cause crop injury. The grower/applicator assumes all risks in the tankmix situations.

LOROX DF often interacts with other herbicides or insecticides and may damage carrots when the chemicals are tank mixed or applied sequentially at close intervals. Several days, preferably a week should elapse between LOROX DF applications and application of insecticides.

### **FOR USE ON CARROTS IN CHEMIGATION SYSTEMS IN CALIFORNIA**

Follow the use direction in the section above and the chemigation instructions in the Chemigation section of this label.

For solid set and hand move irrigation systems, apply LOROX DF at the beginning of the set and then apply 1/3 to 1" of water for activation (sandy soils apply at least 1/3", sandy loams apply at least 1/2", silt soils apply at least 3/4", clay soils apply at least 1"). For center pivot and lateral move irrigation systems, apply LOROX DF in 1/3 to 1" of water for activation as a continuous injection (sandy soils apply at least 1/3", sandy loams apply at least 1/2", silt soils apply at least 3/4", clay soils apply at least 1").

### **CALIFORNIA ONLY– Crop rotation directions following LOROX DF use in carrots, celery, cilantro or other registered crops grown to maturity:**

Any crop registered for the rate of linuron that was applied may be replanted immediately.

Following LOROX DF use in carrots, celery, cilantro or other registered crops grown to maturity, tomato, broccoli, spinach, green onion, and lettuce (head or leaf) may be planted 4 months after application.

If crops are planted in stressful conditions (low OR high temperatures, drought, salinity, etc.) it is possible that minor crop injury (stunting, yellowing, etc.) might occur. The injury should be transient.

Following LOROX DF use in carrots grown to maturity, barley, garlic, and onions may be planted after 6 months and potatoes after 9 months.

### **WASHINGTON ONLY– Crop rotation directions following LOROX DF use in carrots grown to maturity:**

Any crop registered for the rate of linuron that was applied may be replanted immediately.

**Application of LOROX DF made between January and September:** Barley, Bean (snap), Corn (field and sweet), Oat, Pea (green), Potato, Rye, Triticale, and Wheat may be planted 4 months after application.

**Application of LOROX DF made between October and December:** Barley, Bean (snap), Corn (field and sweet), Oat, Pea (green), Potato, Rye, Triticale, and Wheat may be planted 6 months after application.

All crops not listed above may be planted 12 months after application of LOROX DF.

**Note** - Crop injury may occur if shorter crop rotation intervals are used in areas with insufficient rainfall or irrigation.

## **CELERIAC**

- Do not exceed 40 psi spray nozzle pressure.
- Do not apply when temperatures exceed 85 degrees F
- Do not apply as a tank mixture with surfactants, nitrogen or fertilizer solution, or other pesticides, as injury to the crop may result.
- Do not replant to crops other than rhubarb, celeriac, celery, or carrots within 4 months after application as injury to subsequent crops may result.
- Do not apply within 60 days of harvest.
- Do not apply this product to celeriac through any type of irrigation system.
- The restricted-entry interval for treated celeriac is 8 days for hand-set irrigation activity and 24 hours for all other activities.

Make a single application at up to 3 lbs. of LOROX DF (1.5 lbs. linuron a.i.) per acre. Apply as a broadcast spray after celeriac is transplanted and established, but before celeriac is 8 inches tall. Apply before annual grasses exceed 2 inches in height and before broadleaf weeds exceed 6 inches in height.

## **CELERY**

- Do not exceed 40 psi spray nozzle pressure.
- Do not apply when temperature exceeds 85°F nor as a tank mixture with surfactants, nitrogen or fertilizer solution, or other pesticides as injury to the crop may result.
- Do not apply within 45 days of harvest east of the Rocky Mountains. Do not apply within 67 days of harvest west of the Rocky Mountains.

### **Post-transplant Application:**

Make a single application of 1.5 to 3 lbs. of LOROX DF (0.75 to 1.5 lbs. linuron a.i.) per acre in all states except California. In California use 1.5 to 2 lbs. of LOROX DF (0.75 to 1 lb. linuron a.i.) per acre. Apply as a broadcast spray after celery is transplanted and established, but before celery is 8 inches tall. In the Northeast, use only on celery grown on muck soils.

## **CORIANDER/CILANTRO**

- Because coriander/cilantro varieties may vary in their resistance, determine tolerance to LOROX DF prior to adoption as a field practice to prevent possible crop injury.
- Do not exceed 4 lbs. of LOROX DF (2 lbs. linuron a.i.) per acre per year East of Rocky Mountains.
- Do not exceed 3 lbs. of LOROX DF (1.5 lbs. linuron a.i.) per acre per year West of Rocky Mountains.
- Do not apply within 21 days of harvest for leaves and stems.
- Do not apply within 155 days of harvest for coriander seed.
- Do not apply this product to coriander/cilantro through any type of irrigation system.
- The restricted-entry interval for treated coriander/cilantro is 4 days for hand-set irrigation activity and 24 hours for all other activities.



**Preemergence:** Make a single broadcast application of LOROX DF at a rate up to 1-2 lbs. (0.5-1 lb. linuron a.i.) per acre after planting but before crop emergence. Plant seed at least 1/2 inch deep. Allow an irrigation or rainfall of at least 1/2 inch prior to making application after planting. Use lower rates on lighter soils and higher rates on heavier soils. Additional postemergence applications may be made as long as the total does not exceed the seasonal maximum of LOROX DF for the geography.

**Postemergence:** Make up to two postemergence applications of LOROX DF at up to rate of 1-2 lbs. (0.5-1 lb. linuron a.i.) per acre to control emerged weeds. Apply after coriander/cilantro has a minimum of 3 true leaves or significant crop injury may result; grower and/or applicator assumes all crop injury risk if applications are made to coriander/cilantro with less than 3 leaves. Early crop injury can occur, however the effect should be transitory, with no yield losses attributable to crop injury. Apply when weeds are in the 1 to 3 true leaf stage. A second application may be made 14 days following the first application but no later than 21 days before harvest. Do not exceed the seasonal maximum of LOROX DF for the geography.

**Restrictions for Postemergence Applications:**

Do not treat susceptible varieties which show an initial burning of foliage following postemergence treatment with LOROX DF.

Do not exceed 40 psi spray nozzle pressure as crop injury may result.

Do not apply when the temperature exceeds 85° F as crop injury may result.

The activity of LOROX DF on both the crop and weeds is increased if applied after 3 or more cloudy days. If spraying is done under these conditions, the dosage of LOROX DF must be reduced.

**Precautions for Postemergence Applications:**

The addition or tankmix of surfactants, nitrogen or fertilizer solution, and/or other pesticides may cause crop injury. The grower/applicator assumes all risks in the tankmix situations.

LOROX DF often interacts with other herbicides or insecticides and may damage coriander/cilantro when the chemicals are tank mixed or applied sequentially at close intervals. Several days, preferably a week should elapse between LOROX DF applications and application of insecticides.

**CORN (FIELD)**

- **East of Rocky Mountains Only**
- **Do not exceed a seasonal maximum of 1.5 lbs. of LOROX DF (0.75 lb. linuron a.i.) per acre.**
- **Do not spray over top of emerged corn.**

**Preemergence:** Make a single application after planting but before crop emerges. Plant seed at least 1.75 inches deep on flat or raised seedbeds only or injury to the crop may result.

Use LOROX DF alone at 1 to 1.5 lbs./acre (0.5 to 0.75 lb. linuron a.i. per acre). Use lower rates on lighter soils and higher rates on heavier soils. For improved grass and broadleaf weed residual, tank mix LOROX DF with such products registered for field corn as atrazine, "Prowl", or "Dual Magnum II". Read and follow the manufacturer's label requirements of each tank mix product used for precautionary statements, directions for use, geographic and other restrictions. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

**Directed Postemergence Application:** Make a single application as a directed spray after corn is at least 15 inches high (measured to the highest leaf surface on free standing plants). Do not spray over top of corn. Apply only when there is sufficient differential between height of corn and weeds so that the directed spray thoroughly covers all weed foliage without contact of upper leaves or whorl of corn by spray or drift, as such contact may cause crop injury. Early cultivation (rotary hoe or other suitable equipment) will aid in achieving proper differential between height of corn and weeds.

Use 1.25 to 1.5 lbs. of LOROX DF (0.625 to 0.75 lb. linuron a.i.) per acre; add 1 pint of surfactant for each 25 gallons of spray mixture.

Non-pressure nitrogen solution may be substituted for all or part of the water.

Use the lower rate on lighter soils (low in clay or organic matter) and when weeds do not exceed 2 inches in height; use the higher rate on heavier soils (high in clay or organic matter) for weeds up to 5 inches in height. Do not apply within 57 days of harvest.

**DILL (except California)**

- **Determine tolerance of dill to LOROX DF prior to adoption as a field practice to prevent possible crop injury.**
- **Do not exceed 4 lbs. of LOROX DF (2 lbs. linuron a.i.) per acre per year East of Rocky Mountains.**
- **Do not exceed 3 lbs. of LOROX DF (1.5 lbs. linuron a.i.) per acre per year West of Rocky Mountains (except California).**
- **Do not apply within 21 days of harvest.**
- **Do not apply this product to dill through any type of irrigation system.**
- **The restricted-entry interval for treated dill is 4 days for hand-set irrigation activity and 24 hours for all other activities.**

**Preemergence:** Make a single broadcast application of LOROX DF at a rate up to 2 lbs. (1 lb. linuron a.i.) per acre after planting but before crop emergence. Plant seeds at least 1/2 inch deep. Allow an irrigation or rainfall of at least 1/2 inch prior to making application after planting. Use lower rates on lighter soils and higher rates on heavier soils. Additional postemergence applications may be made as long as the total does not exceed the seasonal maximum of LOROX DF for the geography.

**Postemergence:** Make up to two postemergence applications of LOROX DF at up to rate of 1-2 lbs. (0.5-1 lb. linuron a.i.) per acre to control emerged weeds. Apply after dill has a minimum of 3 true leaves or crop injury may result; grower and/or applicator assumes all crop injury risk. Early crop injury can occur, however the effect should be transitory, with no yield losses attributable to crop injury. Apply when weeds are in the 1 to 3 true leaf stage. A second application may be made 14 days following the first application but no later than 21 days before harvest. Do not exceed the seasonal maximum of LOROX DF for the geography.

**Restrictions for Postemergence Applications:**

Do not treat susceptible varieties which show an initial burning of foliage following postemergence treatment with LOROX DF.

Do not exceed 40 psi spray nozzle pressure as crop injury may result.

Do not apply when the temperature exceeds 85° F as crop injury may result.

Precautions for Postemergence Applications:

The activity of LOROX DF on both the crop and weeds is increased if applied after 3 or more cloudy days. If spraying is done under these conditions, the dosage of LOROX DF should be reduced.

The addition or tankmix of surfactants, nitrogen or fertilizer solution, and/or other pesticides may cause crop injury. The grower/applicator assumes all risks in the tankmix situations.

LOROX DF often interacts with other herbicides or insecticides and may damage dill when the chemicals are tank mixed or applied sequentially at close intervals. Several days, preferably a week should elapse between LOROX DF applications and application of insecticides.

### **DILL (California Only)**

- **Determine tolerance of dill to LOROX DF prior to adoption as a field practice to prevent possible crop injury.**
- **Do not apply within 21 days of harvest.**
- **Do not apply this product to dill through any type of irrigation system.**
- **The restricted-entry interval for treated dill is 4 days for hand-set irrigation activity and 24 hours for all other activities.**
- **Do not exceed 2 lbs. of LOROX DF (1 lb. linuron a.i.) per acre per year in California.**

**Preemergence:** Make a single broadcast application of LOROX DF at a rate up to 1 lb. (0.5 lb. linuron a.i.) per acre after planting but before crop emergence. Plant seeds at least 1/2 inch deep. Allow an irrigation or rainfall of at least 1/2 inch prior to making application after planting. Use lower rates on lighter soils and higher rates on heavier soils. Additional postemergence applications may be made as long as the total does not exceed the seasonal maximum of LOROX DF for California.

**Postemergence:** Make one postemergence application of LOROX DF at up to 1 lb. (0.5 lb. linuron a.i.) per acre to control emerged weeds. Apply after dill has a minimum of 3 true leaves or crop injury may result. Grower and/or applicator assumes all crop injury risk. Early crop injury can occur, however the effect should be transitory, with no yield losses attributable to crop injury. Apply when weeds are in the 1 to 3 true leaf stage. Do not exceed the seasonal maximum of LOROX DF for California.

Restrictions for Postemergence Applications:

Do not treat susceptible varieties which show an initial burning of foliage following postemergence treatment with LOROX DF.

Do not exceed 40 psi spray nozzle pressure as crop injury may result.

Do not apply when the temperature exceeds 85° F as crop injury may result.

The activity of LOROX DF on both the crop and weeds is increased if applied after 3 or more cloudy days. If spraying is done under these conditions, the dosage of LOROX DF must be reduced.

Precautions for Postemergence Applications:

The addition or tank-mix of surfactants, nitrogen or fertilizer solution, and/or other pesticides may cause crop injury. The grower/applicator assumes all risks in the tank-mix situations.

LOROX DF often interacts with other herbicides or insecticides and may damage dill when the chemicals are tank mixed or applied sequentially at close intervals. Several days, preferably a week should elapse between LOROX DF applications and application of insecticides.

### **HORSERADISH**

- **Do not apply this product to horseradish through any type of irrigation system.**

Make a single broadcast application of LOROX DF at a rate up to 3 lbs. (1.5 lbs. linuron a.i.) per acre after planting or during dormancy, but before the leaves emerge in spring. Allow an irrigation or rainfall of at least 1/2 inch prior to making application after planting. Use lower rates on lighter soils and higher rates on heavier soils. Do not apply more than 3 lbs. of LOROX DF (1.5 lbs. linuron a.i.) per acre per year.

### **HYBRID POPLAR**

#### **Midwest**

Apply 2 to 4 lbs. LOROX DF (1 to 2 lbs. linuron a.i.) per acre before bud break in the spring. For application after bud break, apply 2 to 4 lbs. LOROX DF (1 to 2 lbs. linuron a.i.) per acre as a directed spray. Direct spray to weed growth and avoid contact with the poplar plant. Do not spray over the top of the poplar as injury to the plant will result.

Use the lower rate on light soils and higher rate on heavier soils. For best results on emerged weeds, treat at the seedling stage.

More than one treatment may be made but apply no more than 8 pounds LOROX DF per acre per year.

### **MARIGOLDS GROWN FOR SEED IN CALIFORNIA ONLY**

- **Apply Lorox DF herbicide at the rate of 2 lbs. (1.0 lb. linuron a.i.) in 20-60 gallons of water per acre.**
- **Make only one application per crop. Apply after transplanting or when direct seed crop has 2-3 pairs of true leaves for control of mustard weed and shepherd's purse.**
- **Make applications by ground only.**
- **Do not use on sand, loamy sand, gravelly soils, or on soils containing less than 1% organic matter.**
- **Do not apply through any type of irrigation system.**
- **Do not plant other marigolds or other flower seed crops within one year after the last application of this product.**
- **Do not use treated plants for feed or forage or allow animals to graze treated areas.**
- **No portion of the marigold seed plant, including but not limited to green chop, hay, pellets, meal, whole seed, cracked seed, roots, bulbs, leaves and seed screenings may be used or distributed for food or feed purposes. All marigold seed screenings must be disposed of in such a way that they cannot be distributed or used for human food or animal feed.**

## **PARSLEY (Except Parsley Grown for Seed in OR and WA)**

- Do not exceed a total of 3 lbs. of LOROX DF (1.5 lbs. linuron a.i.) per acre per season.
- Do not apply within 30 days of harvest.
- In Texas, use on mineral soils only.
- Do not apply this product to parsley through any type of irrigation system.
- The restricted-entry interval for treated parsley is 4 days for hand-set irrigation activity and 24 hours for all other activities.

**Preemergence (Mineral and Muck Soils):** Make a single broadcast application of LOROX DF at a rate of 1 to 3 lbs. (0.5 to 1.5 lbs. linuron a.i.) per acre after planting, but before the crop emerges. Use lower rates on coarse soils and higher rates on heavier soils.

**Postemergence (Muck Soils Only):** Make a single application of LOROX DF at a rate of 1 lb. (0.5 lb. linuron a.i.) per acre to control emerged weeds. Apply after parsley has a minimum of 3 true leaves or crop injury may result. Apply when weeds are in the 1 to 3 true leaf stage.

## **PARSLEY GROWN FOR SEED IN OREGON AND WASHINGTON ONLY**

For best results apply preemergence to weeds or early postemergence while weeds are small. If weeds are up at time of application, add a non-ionic surfactant at 1 quart per 100 gallons to improve weed control performance. Before using other kinds of adjuvants, test on a small area to be sure the treatment is safe to the crop.

Apply this product at 1.0 to 2.0 lbs. of LOROX DF (0.5 to 1 lb. linuron a.i.) per acre after parsley has a minimum of 3 true leaves or crop injury may result. More than one application can be made providing the user has prior experience to indicate adequate crop safety. Wait at least 21 days between applications. Do not treat plants that are under stress. Avoid late fall applications prior to cold weather as crop injury may occur. Do not make more than 2 applications per growing season (maximum 2 growing seasons). When using on a new variety for the first time, treat a small area to determine crop safety prior to treating a larger area.

User must accept all crop injury liability if an adjuvant other than a non-ionic surfactant at 1 quart per 100 gallons is used or if more than one application per crop is made.

**Note:** All parsley seed screenings must be disposed of in such a way that they cannot be distributed or used for human food or animal feed. The seed conditioner must keep records of screening disposal for three years from the date of disposal and shall furnish the records to the state department of agriculture immediately upon request. Disposal records must consist of documentation from a controlled dumpsite, incinerator, or other equivalent disposal site and shall show the lot numbers, amount of material disposed of, its grower(s), and date of disposal.

No portion of the parsley seed plant, including but not limited to green chop, hay, pellets, meal, whole seed, cracked seed, roots, bulbs, leaves and seed screenings may be used or distributed for food or feed purposes. Parsley seed must bear a tag or container label which forbids use of the seed for human consumption or animal feed. Parsley seed may not be distributed for human consumption or animal feed.

## **PARSNIP**

**Preemergence Application:** Make a single application of 1.5 to 3 lbs. of LOROX DF (0.75 to 1.5 lbs. linuron a.i.) per acre after planting but prior to crop emergence. Seed should be planted at least 1/2 inch deep.

## **PEAS (DRY) INCLUDING DRY CULTIVARS OF PIGEON PEAS, CHICKPEAS, GARBANZO BEANS, LENTILS, DWARF PEAS, GARDEN PEAS, GREEN PEAS, ENGLISH PEAS, FIELD PEAS, AND EDIBLE POD PEAS**

- Do not apply more than one (1) application per acre per season.
- Do not apply this product to dry peas through any type of irrigation system.
- Do not apply to field pea used for livestock feed.

Apply LOROX DF at a single application at up to 2 lbs. (1 lb. linuron a.i.) per acre post planting but preemergence to the crop. Sufficient rainfall to move the herbicide into the root zone of germinating weeds is needed for best performance. Use lower rates on coarse soils and higher rates on heavier soils. LOROX DF Herbicide may be tank mixed with other herbicides registered for use in these crops. When tank mixing, use the most restrictive label limitations for each of the products being used in the tank mix.

### **IDAHO AND WASHINGTON ONLY: Crop Rotation Directions following LOROX DF use on Lentils, Dry Peas and Chickpeas:**

Any crop registered for the rate of LOROX DF that was applied may be replanted immediately.

Winter wheat and winter barley may be planted 4 months after application of LOROX DF if the use rate does not exceed 1.25 lbs. (0.625 lb. linuron a.i.) per acre per year. Do not plant any other crop (including spring wheat, spring barley or canola) until 12 months after the last LOROX DF application as crop injury may result. After 12 months, any other crop used for food or feed may be rotated.

## **POTATO**

- Do not use West of Rocky Mountains.
- Do not spray over top of emerged potatoes.
- Do not exceed 3 lbs. of LOROX DF (1.5 lbs. linuron a.i.) per acre per year.

**East of Rocky Mountains only:** Apply 1.5 to 2.5 lbs. of LOROX DF (0.75 to 1.25 lbs. linuron a.i.) per acre on the lighter soils (sandy loams, silt loams; 1 to 2% organic matter) and 2.5 to 3 lbs. of LOROX DF (1.25 to 1.5 lbs. linuron a.i.) per acre on heavier soils (silts, clay loams; 2 to 5% organic matter). On soils over 5% organic matter, use 3 lbs. of LOROX DF (1.5 lbs. linuron a.i.) per acre. For improved annual grass and nutsedge control, LOROX DF may be tank mixed with "Dual Magnum" or "Dual II Magnum". Read and follow the manufacturer's label requirements of each tank mix product used for precautionary statements, directions for use, geographic and other restrictions. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

**Preemergence:** Make a single application as a broadcast spray after planting but before crop emerges. Plant seed at least 2 inches deep. If beds are to be dragged and/or hilled, apply after the final dragging or hilling operation. Apply before grasses are 2 inches tall and before broadleaf weeds are 6 inches tall, preferably just before or when weed seedlings emerge. If emerged weeds are present, add 1 pt. surfactant for each 25 gals. spray mixture.

In irrigated areas, best results are obtained when application is made to moist soil, followed within 2 weeks by 1 inch to 2 inches of sprinkler irrigation (or rainfall). On powder dry soils, irrigate prior to herbicide application and follow with sprinkler irrigation to activate the herbicide.

## RHUBARB

- **Do not apply this product to rhubarb through any type of irrigation system.**

Apply as a single treatment at up to 3 lbs. of LOROX DF (1.5 lbs. linuron a.i.) per acre as a dormant application (before leaves emerge from the crown). Make application as a broadcast or banded over-the-row treatment – for banded treatments use proportionately less. Do not exceed a total of 3 lbs. of LOROX DF (1.5 lbs. linuron a.i.) per acre per season.

## SORGHUM

- **Do not apply over top of emerged sorghum.**
- **Do not apply 75 days within harvest.**
- **Do not graze or feed plants to livestock within 3 months after directed postemergence application.**

**Preemergence:** Select a registered herbicide treatment for application as a tank mixture. Make a single application as a tank mixture. Make a single application after planting but before crop emerges. In soil with 1 to 2% organic matter apply 0.5 to 1 lb. of LOROX DF (0.25 to 0.5 lb. linuron a.i.) per acre on sandy loam and 1 to 1.5 lbs. of LOROX DF (0.5 to 0.75 lb. linuron a.i.) per acre on loam, silt loam, silt, sandy clay, or sandy clay loam. In soil with 2 to 4% organic matter apply 1 to 1.5 lbs. of LOROX DF (0.5 to 0.75 lb. linuron a.i.) per acre on sandy loam and 1 to 2 lbs. (0.5 to 1 lb. linuron a.i.) per acre on loam, silt loam, silt, sandy clay, or sandy clay loam. Plant seed at least 1 inch deep on flat or raised seedbeds only as injury to the crop may result.

**Directed Postemergence:** Make a single application of LOROX DF as a directed spray. Add 1 pint surfactant for each 25 gallons spray mixture. If sprayer is equipped with skids, shoes or shields, apply 1 lb. of LOROX DF (0.5 lb. linuron a.i.) per acre when sorghum is 12 inches tall (free standing plants) and weeds are up to 2 inches in height. Use 1 to 2 lbs. (0.5 to 1 lb. linuron a.i.) per acre when sorghum is 15 inches tall and weeds are 2 to 4 inches in height. Apply only when there is sufficient differential between height of sorghum and weeds so that the directed spray thoroughly covers all weed foliage without contact on upper leaves or whorl of sorghum by spray or drift as such contact may cause crop injury.

## SOYBEAN

- **Make only a single preemergence application of LOROX DF per season.**
- **Do not exceed 2 lbs. of LOROX DF (1 lb. linuron a.i.) in any application.**
- **Soybeans planted too shallow have increased potential for injury.**
- **Do not spray over top of emerged soybeans.**
- **Do not feed treated forage to livestock.**

### Preemergence - all tillage types

Apply LOROX DF prior to soybean emergence at the rates specified in the Table 1 below. For improved control or for a broader spectrum of control, LOROX DF may be tank mixed with such herbicides as “Dual Magnum” or “Dual Magnum II”, “Metribuzin 75DF”, SYNCHRONY® XP, CLASSIC®, “Prowl”, “Boundary”, and “Gangster”.

Read and follow the manufacturer’s label requirements of each tank mix product used for precautionary statements, directions for use, geographic and other restrictions. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

### No-till, Minimum till or Stale Seedbed

#### Timing

Apply LOROX DF up to 30 days prior to soybean planting. For maximum in-season residual control, apply no earlier than 14 days before planting.

#### Adjuvants and tank mixes

For burndown control (postemergence activity), addition of adjuvant is required.

- For best results, use 1 gallon crop oil concentrate per 100 gallons of spray.
- Alternatively, use 1 qt nonionic surfactant per 100 gallons of spray.
- To burndown larger than 2 inch grasses and 6 inch broadleaves, or to expand the burndown spectrum, tank mix LOROX DF with such herbicides as 2,4-D LVE, SYNCHRONY® XP, CLASSIC®, glyphosate and/or paraquat. When tank-mixing LOROX DF with glyphosate, substitute nonionic surfactant (1 qt per 100 gallons spray) for crop oil concentrate. Follow the glyphosate manufacturer’s instructions for addition of ammonium sulfate.
- 1 lb. LOROX DF + 1 pt 2,4-D LVE + 1 gallon Crop oil concentrate per 100 gallons spray will burn down the following winter annual weeds (up to 6 inches in size) as well as the weeds included in “Postemergence Use” at the beginning of this label.

Wallflower, bushy	<i>Erysimum repandum</i>	Purselane, common	<i>Portulaca oleracea</i>
Chickweed, common	<i>Stellaria media</i>	Shepherdspurse	<i>Capsella bursa-pastoris</i>
Chickweed, mouseear	<i>Cerastium fontanum</i> sp. <i>vulgare</i>	Speedwell, corn	<i>Veronica agrestis</i>
Evening-Primrose, cutleaf	<i>Oenothera laciniata</i>	Speedwell, field	<i>Veronica arvensis</i>
Deadnettle, red*	<i>Lamium purpureum</i>	Aster, white heath	<i>Symphotrichum pilosum</i>
Henbit	<i>Lamium amplexicoule</i>		
Pennycress, field	<i>Thlaspi arvense</i>		

\*suppression

**Table 1. Preemergence rates of LOROX DF for soybeans - all tillage types**

Soil Texture	LOROX DF lbs per acre	
	1 to 3% Organic Matter	3 to 6% Organic Matter
Coarse: Sandy loam	1 to 1.25	1.25 to 2
Medium: Loam, Silt Loam, Silt, Sandy Clay Loam	1 to 2	1.5 to 2
Fine: Silty Clay, Silty Clay Loam, Clay, Clay Loam	1.25 to 2	2

**EDAMAME (IMMATURE SOYBEANS)\***

\*Not approved for this use in California

- **Make only a single preemergence application of LOROX DF per season.**
- **Do not exceed 2 lbs. of LOROX DF (1 lb. linuron a.i.) in any application.**
- **Soybeans planted too shallow have increased potential for injury.**
- **Do not spray over top of emerged soybeans.**
- **Do not feed treated forage to livestock.**

**Preemergence Use Only - all tillage types**

Apply LOROX DF prior to soybean emergence at the rates specified in the Table 2 below. For improved control or for a broader spectrum of control, LOROX DF may be tank mixed with other herbicides approved for immature soybean use, such as "Dual Magnum® Herbicide". Observe directions for use, precautionary language, and specific restrictions of any herbicide used.

**No-till, Minimum till or Stale Seedbed***Timing*

Apply LOROX DF up to 30 days prior to soybean planting. For maximum in-season residual control, apply no earlier than 14 days before planting.

*Adjuvants and tank mixes*

For burndown weed control (postemergence activity), addition of adjuvant is required.

- For best results, use 1 gallon crop oil concentrate per 100 gallons of spray.
- Alternatively, use 1 qt nonionic surfactant per 100 gallons of spray.
- To burndown larger than 2 inch grasses and 6 inch broadleaves, or to expand the burndown spectrum, tank mix LOROX DF with burndown herbicides approved for immature soybean use. Observe directions for use, precautionary language, and specific restrictions on the label of the contact herbicide.

**Table 2. Preemergence rates of LOROX DF for soybeans - all tillage types**

Soil Texture	LOROX DF lbs per acre	
	1 to 3% Organic Matter	3 to 6% Organic Matter
Coarse: Sandy loam	1 to 1.25	1.25 to 2
Medium: Loam, Silt Loam, Silt, Sandy Clay Loam	1 to 2	1.5 to 2
Fine: Silty Clay, Silty Clay Loam, Clay, Clay Loam	1.25 to 2	2

**NONCROP WEED CONTROL**

Make a single application of 2 to 6 lbs. LOROX DF (1 to 3 lbs. linuron a.i.) per acre in 40 to 100 gallons of water for short term control of annual weeds on non cropland areas such as roadsides and fence rows. Apply shortly before weed growth begins or at early seedling stage of growth for best results. Add 2 quarts of surfactant per 100 gallons of spray mixture for control of established annual weeds. Apply as a thorough coverage spray during periods when daily temperatures exceed 70°F and before weed growth exceeds 8 inches in height.

**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. 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.



### **Boom Height**

For ground equipment, set the boom at the lowest labeled height (if specified) and remain level with the crop and have minimal bounce. Use and configure application equipment to provide an adequate spray volume and uniform distribution of spray droplets over the treated area. Select nozzles that meet EPA requirements to minimize drift and provide adequate coverage.

### **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 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.

## **STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store product in original container only. Store in a cool, dry place.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay 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.

## **WARRANTY AND LIMITATION OF DAMAGES**

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