

PM 25 1812-320 3/27/98 Page 178
Griffin.

BEST IMAGE AVAILABLE

ACCEPTED

MAR 27 1998

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 1812-320

LineX[®] 50DF
HERBICIDE

Made in the US

DRY FLOWABLE

ACTIVE INGREDIENT

Linuron 3-(3, 4-dichlorophenyl)-1-methoxy-1-methylurea 50.0%

INERT INGREDIENTS 50.0%

TOTAL 100.0%

KEEP OUT OF REACH OF CHILDREN

CAUTION

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Induce vomiting. Do not induce vomiting or give anything by mouth to an unconscious person.

IF ON SKIN: Remove by washing with soap and water.

IF IN EYES: Wash with large amounts of water and get medical attention.

See Label for Additional Precautions and Directions for Use

GRIFFIN CORPORATION

VALDOSTA, GEORGIA 31601

EPA REG. NO. 1812-320

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PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS (AND DOMESTIC ANIMALS) CAUTION

Harmful if swallowed. May irritate eyes, nose, throat and skin. Avoid breathing dust or spray mist. Avoid contact with skin, eyes and clothing. In case of skin contact, wash with soap and water. In case of contact with eyes, immediately flush with copious amounts of water. Get medical attention if irritation persists.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants
- Waterproof gloves
- Shoes plus socks
- Chemical-resistant headgear for overhead exposure

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

Engineering controls statement:

When handlers use closed systems, enclosed cabs, aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], 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 immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply where runoff is likely to occur. Do not apply where weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for 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.

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 over short-sleeved shirt and short pants
- Waterproof gloves
- Shoes plus 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.

STORAGE AND DISPOSAL

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

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

CONTAINER DISPOSAL: Plastic Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. Paper and Plastic Bags: Completely empty bag into application equipment. Then 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.

GENERAL INFORMATION

Linex 50DF 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. Linex 50DF is non-corrosive to equipment, non-flammable and non-volatile.

To control susceptible weed seedlings for an extended period of time, apply Linex 50DF 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 Linex 50DF, rainfall or irrigation is needed within 2 weeks of application.

When using Linex 50DF 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 Linex 50DF.

It is suggested that growers limit their first use to small areas as the effect of Linex 50DF 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 LINEX 50DF

PREEMERGENCE USE

Linex 50DF controls weeds as they germinate.

Broadleaf Weeds

Carpetweed	Nettleleaf Goosefoot	Radish, Wild
Chickweed	Lambsquarters	Ragweed, Common
Dayflower, Common	Mustard	Smartweed
Florida Pusley	Pigweed	
Galinsoja	Purslane	

Grasses

Barnyardgrass (Watergrass)	Foxtail (Including Giant)
Canarygrass	Goosegrass
Crabgrass	Fall Panicum

Linex 50DF will provide partial control of the following:

Cocklebur	Annual Morningglory	Prickly Sida (Teaweed)	Sicklepod	Velvetleaf (Buttonweed)
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Linex 50DF will not control established perennials such as:

Bermudagrass	Canada Thistle	Field Bindweed	Johnsongrass	Purple Nutsedge
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On lighter soils lower dosage rates will be effective. Use higher rates on heavier soils and the more resistant seedling weeds. Moisture 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 at moisture of 0.5 to 1 inch on moist soils; 1 to 2 inches on dry soils is applied within 2 weeks after application.

POSTEMERGENCE USE

Linex 50DF will control seedlings of these weeds:

Broadleaf Weeds

Carpetweed	Groundsel	Prickly Sida (Teaweed)
Cocklebur	Knawel	Purslane
Dayflower, Common	Lambsquarters	Sesbania
Dog Fennel	Annual Morningglory	Sicklepod
Fiddleneck (Amsinckia)	Mustard	Smartweed
Florida Beggarweed	Nettleleaf Goosefoot	Velvetleaf (Buttonweed)
Florida Purslane (Florida Pusley)	Pigweed	Wild Buckwheat

Grasses

Barnyardgrass (Watergrass)	Rattail Fescue
Broadleaf (Signalgrass)	Ryegrass, Annual
Canarygrass	Texas Panicum
Crabgrass	
Fall Panicum	
Foxtail (Including Giant)	
Goosegrass	

APPLICATION DIRECTIONS

Linex 50DF should be used only in accordance with recommendations on this label.

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

AERIAL APPLICATION: Preemergence Only -- Potatoes and Soybeans -- Apply Linex 50DF in a minimum of 3 gallons of water per acre. Avoid applications under conditions where uniform coverage cannot be obtained or where extensive spray drift may occur. Flagmen and loaders should avoid inhalation of spray mist and contact with skin.

GROUND APPLICATION: Use a fixed-boom power sprayer calibrated to a constant speed and rate of delivery. Openings in screen should be 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 it should terminate 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: Equipment should be cleaned of all traces of Linex 50DF immediately after use. Nozzle tips and screens should be removed and cleaned separately. Flush tank, pump, hoses and boom with several

changes of water. Equipment should not be flushed or drained or Linex 50DF applied 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. Linex 50DF should not be used 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: The tank should be 0.25 filled with clean water. Start agitation system, add Linex 50DF 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. Use proportionately less for band treatment. Use the lower rate on soil low in clay or organic matter (coarser soils) and the higher rate on soils high in clay or organic matter (finer soils). For postemergence application the lower rate should be used on smaller weeds and the higher rate on larger weeds.

SOIL LIMITATIONS: Do not use on hard, loamy sand, gravelly soils or exposed subsoils or soils containing less than 1% organic matter unless otherwise directed as injury to crops may result.

REPLANTING: The same crop may be replanted in soil treated preemergence with Linex 50DF if initial seeding fails to produce a stand. Soil should be reworked before replanting. Do not retreat the field during the same crop year as crop injury may result.

CROP ROTATION RECOMMENDATIONS: Unless otherwise directed, any crop may be planted after 4 months except for cereals where only barley, oats, rye and wheat may be planted. West of the Rocky Mountains: Carrots or celery may be planted 4 months after last application; do not plant any other crop until 1 year after the last application as injury may result.

FERTILIZER SPRAY MIXTURES: For preemergence application, non-pressure 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 mixture.

1. Measure 1 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 per 100 gallons.
 - (b) Dry ingredients (wetable powders, dry flowables): add 1 tablespoon for each pound per 100 gallons.
 - (c) Soluble ingredients: add 1 tablespoon for each pound per 100 gallons.
 - (d) Flowables: add 1 teaspoon for each pint per 100 gallons.
 - (e) Spreaders/stickers: add 1 teaspoon for each pint per 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 30 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 to active ingredients; some combinations will not tank mix.

GENERAL CHEMIGATION INSTRUCTIONS

Apply this product only through one or more of the following types of systems: sprinkler including center pivot, lateral move, end row, 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.

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

If you have questions about calibration, you should 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 systems 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 the 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 Linex 50DF 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.

Linex 50DF should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set or hand move irrigation systems. Agitation is recommended. Shut off injection equipment after treatment and continue to operate irrigation system until Linex 50DF 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 Linex 50DF 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.

Linex 50DF should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set or hand move irrigation systems. Agitation is recommended. Shut off injection equipment after treatment and continue to operate irrigation system until Linex 50DF has been cleared from the last sprinkler head.

ASPARAGUS

California, Michigan, Minnesota, North Carolina, Oregon, Washington, Orly

Direct Seeded or Newly Planted Crops:

Do not exceed 4 pounds total per acre per season; do not use surfactant or fertilizer solution in spray mixture.

Preemergence Application: Make a single application of 2 to 4 pounds per acre after planting seed 1.5 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 pounds per acre (equivalent to 15 pounds per acre of crop with 20 inches row spacing). Preemergence weed control will be reduced in soils with high organic matter (greater than 5% and peat or muck).

Postemergence Application: Make one or two applications of 1 to 2 pounds per acre when ferns are in 6 to 18 inches stage and weeds are not over 4 inches tall.

Established Beds:

Do not apply within 1 day of harvest. Do not exceed 8 pounds total per acre per season. Do not use surfactant or fertilizer solution in spray mixture.

Preemergence Application: Make a single application of 2 to 4 pounds per acre. Preemergence weed control will be reduced in soils with high organic matter (greater than 5% and peat or muck).

Postemergence Application: Make one to four applications of 1 to 2 pounds per acre before weeds exceed 4 inches in height. Apply before cutting season or immediately after cutting.

Directed Postemergence Application (Fern Stage):

Make a single application of 4 to 8 pounds per acre as directed; spray to base of plants for control of dudain melon.

Note: If more than 4 pounds Linex 50DF per acre is applied per season, do not plant any other crop until 1 year after last application.

In California, dudain melon and annual nightshade are controlled.

BULBS

Tulip, Calla Lilly, Daffodil and Dutch Iris Only California

After planting of bulbs, settle the soil with sprinkler irrigation (rainfall will serve the same purpose); then before emergence of plants (bulbs), apply 2 pounds Linex 50DF per acre in a minimum of 20 gallons of water per acre. Treat only once during the growing season.

CARROT

New Jersey

Preemergence Application – Florida, Michigan, Ohio and Wisconsin:

A single application of 1 to 3 pounds per acre should be made after planting but prior to carrots emerging. Seed should be planted at least 0.5 inch deep. The lower rate should be used on lighter soils and the higher rate on heavier soils. Additional postemergence applications may be made as long as the total does not exceed 4 pounds of Linex 50DF per acre per season.

NOTE: To prevent possible crop injury in various varieties of carrots determine tolerance to Linex 50DF before adoption as a field practice. Do not apply within 14 days of harvest.

Postemergence – Entire U.S.:

Apply 1.5 to 3 pounds per acre as a non-directed spray after carrots are at least 3 inches tall. Apply before annual grasses exceed 2 inches in height and before broadleaf weeds exceed 6 inches in height. Repeat application may be made but do not exceed 4 pounds Linex 50DF per acre (West of Rocky Mountains, do not exceed 3 pounds Linex 50DF per acre). Do not exceed 40 psi spray nozzle pressure as crop injury may result.

NOTE: Because carrot varieties vary in their resistance, determine tolerance to Linex 50DF prior to adoption as a field practice to prevent possible crop injury. Do not treat susceptible varieties which show an initial burning of foliage following postemergence treatment with Linex 50DF. Do not apply within 14 days of harvest.

Postemergence Application – Alternate Treatment for New York:

For control of emerged broadleaf weeds early in the development of the carrot crop, apply 0.25 pound per acre to carrots having at least one fully developed true leaf and 0.5 pound 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- and 2- and 4-, or 3- and 5-leaf stages will significantly improve weed control. Early crop injury can occur, however the effects should be transitory, with no yield losses attributable to crop injury. At normal rate recommendation, 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.

NOTE: The activity of Linex 50DF on both carrots and weeds is increased if applied after three or more cloudy days. If spraying is done under these conditions, the dosage of Linex 50DF must be reduced. Do not apply when the temperature exceeds 85°F. Linex 50DF often interacts with other herbicides or insecticides and damages carrots when the chemicals are tank mixed or applied sequentially at close intervals. Several days, preferably a week should elapse between Linex 50DF applications and application of insecticides.

CELERY

Post-transplant Application:

Make a single application of 1.5 to 3 pounds per acre in all states except California. In California use 1.5 to 2 pounds per acre. Apply as a non-directed spray after celery is transplanted and established, but before celery is 8 inches tall. Apply before annual grasses exceed 2 inches in height and before broadleaf weeds exceed 6 inches in height.

Do not exceed 40 psi spray nozzle pressure, and 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 replant to crops other than celery or carrots within 4 months after application as injury to subsequent crops may result.

CORN (FIELD)

East of the Rocky Mountains only

Preemergence Application:

Select one of the following herbicide treatments for application as a tank mixture. A single application should be made after planting but prior to crop emergence. Seed should be planted at least 1.75 inches deep on either flat or raised seedbeds only or injury to the crop may result. Do not spray over top of emerged corn.

Tank Mixture Linex 50DF + Lasso®:

Product Per Acre	Soil Texture		
	1 to 3 % Organic Matter		
Linex 50DF (lbs.)	Sandy Loam	Silt Loam	Clay Loam
PLUS	0.67-1.25	1-1.67	1.25-2
Lasso (qts.)	0.75-1	1-1.5	1.5-2
Product Per Acre	3 to 6% Organic Matter		
Linex 50DF (lbs.)	1.25-2	1.67-2.5	2-3
PLUS			
Lasso (qts.)	1-1.5	1.5-2	2-2.5

Replanting: Corn or soybeans may be replanted within 4 months. After 4 months, any crop may be planted.

Tank Mixture Linex 50DF + Atrazine

Product Per Acre	Soil Texture		
	1 to 2 % Organic Matter		
Linex 50DF (lbs.)	Sandy Loam	Silt Loam	Clay Loam
PLUS	0.67-1	1-1.5	1.33-1.67
Atrazine 80% (lbs.)	0.5-0.67	0.67-1	0.75-1
Product Per Acre	2 to 5 % Organic Matter		
Linex 50DF (lbs.)	1-2	1.5-2.5	1.67-3
PLUS			
Atrazine 80% (lbs.)	0.67-1.25	1-1.5	1-2

CORN (Field and Sweet)

Directed Postemergence Application:

A single application as a directed spray should be made after corn is at least 15 inches high. Do not spray over top of corn. There should be 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. Such contact may cause crop injury. Early cultivation will aid in achieving proper differential between height of corn and weeds.

Apply 1.25 to 3 pounds Linex 50DF per acre. A pint of surfactant for each 25 gallons of spray mixture may be added. For field corn, non-pressurized nitrogen solution may be substituted for all or part of the water. On lighter soils (low in clay or organic matter) the lower rate should be used and when weeds do not exceed 2 inches in height. The higher rate should be used on heavier soils (soils high in clay or organic matter) and for weeds up to 5 inches in height.

COTTON

East of Rocky Mountains only

Directed Postemergence Application:

Linex 50DF should be applied as a directed spray with nozzles adjusted to minimize contact to cotton leaves with spray or drift so that crop injury does not result. Do not spray over top of cotton.

When cotton is at least 8 inches tall and weeds are not over 2 inches tall, apply 1 to 1.5 pounds Linex 50DF. One pint of surfactant for each

25 gallons of spray mixture may be added. If a second application is needed use the same rate and apply 1 week or later after first treatment. Alternatively, a single application of 2 to 3 pounds per acre following last cultivation can be made after cotton is 20 inches tall. If emerged weeds are present add surfactant as directed above.

NOTE: Should not be used on Pima varieties of cotton. Do not feed forage or grain trash from treated areas to livestock. Do not graze treated fields.

HYBRID POPLAR

Midwest

Apply 2 to 4 pounds Linex 50DF per acre before bud break in the spring. For application after bud break, apply 2 to 4 pounds Linex 50DF per acre as a directed spray. Spray should be directed to weed growth and to 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 no more than 8 pounds Linex 50DF per acre should be applied per year.

PARSNIP

Preemergence Application:

A single application of 1.5 to 3 pounds per acre should be made after planting but prior to crop emergence. Seed should be planted at least 0.5 inch deep.

POTATO

Preemergence Application:

A single application of Linex 50DF should be made as a broadcast spray after planting but prior to crop emergence. Seed should be planted at least 2 inches deep. Do not spray over top of emerged potatoes. If beds are to be "dragged" and/or "hilled," apply after the final "dragging" or "hilling" operation. Application should be made before grasses are 2 inches tall and before broadleaf weeds are 6 inches tall, preferably just before or when weed seedlings emerge. A pint of surfactant for each 25 gallons of spray mixture can be added if emerged weeds are present. In irrigated areas, best results are obtained when application is made to moist soil, followed within 2 weeks by 1 to 2 inches of sprinkler irrigation (or rainfall). If soil is dry and powdery, irrigate before application and follow with sprinkler irrigation to activate herbicide. Do not use West of Rocky Mountains.

East of Rocky Mountains only:

On sandy loams, silt loams, soils with 1 to 2% organic matter (coarser soils) apply 1.5 to 2.5 pounds of Linex 50DF per acre. On silts, clay loams and soils with 2 to 5% organic matter (fine soils) apply 2.5 to 4 pounds per acre to emerged weeds (before potato emergence).

Wisconsin - Central Sands Area:

Linex 50DF should be applied at the rate of 1 pound per acre on sands and 2 pounds per acre on loamy sands.

Northeast:

Use the following tank mix for improved control of annual grasses. Follow directions and precautions on the Dual® label also.

Product Per Acre	Soil Texture	
	Coarse Sandy Loam	Medium Silt, Loam, Silt Loam
1 to 3 % Organic Matter		
Linex 50DF (lbs.)	1-1.5	1.5-2
PLUS		
Dual (pts.)	1.5	2
3 to 5 % Organic Matter		
Linex 50DF (lbs.)	1.5-2	2-2.5
PLUS		
Dual (pts.)	2	2.5-3

NOTE: See Aerial Application Instructions.

SORGHUM

Preemergence Application:

Select a registered herbicide treatment for application as a tank mixture. A single application should be made after planting but prior to crop emergence. In soil with 1 to 2% organic matter apply 0.5 to 1 pound per acre on sandy loam and 1 to 1.5 pounds 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 pounds per acre on sandy loam and 1 to 2 pounds 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. Do not spray over top of emerged sorghum.

Directed Postemergence Application:

Make a single application of Linex 50DF 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 pound per acre when sorghum is 12 inches tall (free standing plants) and weeds are up to 2 inches in height. Use 1 to 2 pounds per acre when sorghum is 15 inches tall and weeds are 2 to 4 inches in height. If drop-nozzles are used, apply 1 to 2 pounds per acre when sorghum is at least 18 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.

Replanting: Do not follow treated sorghum with any fall crop, nor with sugarbeets, tobacco, vegetables or potatoes in rotation. Prior to replanting, thorough seedbed preparation including fall or spring plowing is recommended. Sorghum or field corn may be replanted within 4 months; after 4 months any crop may be planted.

NOTE: Do not graze or feed sorghum forage or silage from treated fields to dairy animals. Follow label instructions on product to be tank mixed.

SOYBEAN

Preemergence Application:

Select one of the following herbicide treatments and make a single application but prior to crop emergence. Seeds should be planted at least 0.75 inch deep on flat or raised seedbeds only or crop injury may result. If application is made to fields with standing water or fields too wet to cultivate, injury to soybeans may result. Do not spray over top of emerged soybeans. Do not use on sand or loamy sand or any soil containing less organic matter than listed below.

Preemergence Following Preplant Application of Trifluralin or Prowl®: Where Trifluralin or Prowl have been used as a preplant incorporation treatment, apply Linex 50DF as a separate operation using rates recommended below for Linex 50DF alone. For rotation crops, follow instructions on trifluralin or Prowl labels.

Linex 50DF Alone:

Add 1 pint surfactant for each 25 gallons of spray mixture if weeds have emerged.

Product Per Acre	Soil Texture		
	1 1/2 to 2 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Linex 50DF (lbs.)	1-1.67	1.25-2.67	1.33-2.67
2 to 5 % Organic Matter			
Linex 50DF (lbs.)	1.67-3	2.33-4	2.67-5
Over 5 % Organic Matter, Use 6 lbs.			

Replant: Soybeans or field corn may be replanted within 4 months. After 4 months any crop may be planted.

Tank Mixture Linex 50DF with Lexone® DF Herbicide and Lasso®:

Product Per Acre	Soil Texture		
	1 to 3 % Organic Matter		
	Coarse Loam, Silt Loam, Silt, Sandy Clay, Sandy Loam, Clay Loam	Medium Loam, Silt Loam, Silt, Sandy Clay, Sandy Loam, Clay Loam	Fine Silty Clay, Silty Clay Loam, Clay, Sandy Clay Loam
Linex 50DF (lbs.)	0.33-0.5	0.5-0.75	0.75-1.5
PLUS			
Lexone DF (lbs.)	0.17-0.25	0.25-0.33	0.33-0.5
PLUS			
Lasso (qts.)	0.75-1	1-1.5	1.25-2
PLUS			
3 to 6 % Organic Matter			
Linex 50DF (lbs.)	0.33-0.75	0.75-1.5	1.5-2
PLUS			
Lexone DF (lbs.)	0.25-0.33	0.33-0.5	0.5-0.67
PLUS			
Lasso (qts.)	1-1.5	1.5-2	2-3

NOTE: Soybean varieties such as Altona, Coker 102 and 156, Govan, NKs, 1884, Semmes, Tracy, Vansoy, Tera Vig 505 and 606, and AP 71 are sensitive to Lexone DF. If Lexone DF is used on these varieties, injury may occur. Tolerance to Lexone DF should be determined before use on any

other soybean variety. If Lexone DF is used on soils having a calcareous surface layer or pH of 7.5 or higher, or if used in conjunction with soil applied organo phosphate pesticides such as Dasanit, Disyston, Mocap, Nemacur, Thimet, Parathion, Lorsban 15G or Counter, injury to soybeans may occur.

Do not feed treated plant parts to livestock. If atrazine was applied on the soil the year before, injury may occur. Increased possibility of crop injury may occur when soybean seedlings are weakened because of seedling disease, cold weather, deep planting (more than 2 inches), excessive moisture, high soil pH of 7.5 or higher, higher salt concentration or drought.

Cultivation After Planting: Treated soil may be shallow-cultivated, rotary hoed or hand hoed without reducing the weed control activity of the tank mixture. Do not cultivate deeper than the treated layer of soil since this may bring untreated soil to the surface and poor weed control may result.

Replanting: Treated fields may be replanted to soybeans if initial seeding fails to produce a stand. Soil should not be reworked. Crop injury may result if second application is applied. Do not replant treated areas to any crop other than soybeans within 4 months after treatment as injury to subsequent crops may result.

Tank Mixture Linex 50DF with Lasso:

Product Per Acre	Soil Texture ½ to 3 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Linex 50DF (lbs.)	0.67-1.25	1-1.67	1.25-2
PLUS			
Lasso (qts.)	0.75-1	1-1.5	1.5-2
Product Per Acre	3 to 6 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Linex 50DF (lbs.)	1.25-2	1.67-2.5	2-3
PLUS			
Lasso (qts.)	1-1.5	1.5-2	2-2.5

For Control of Black Nightshade Apply:

Product Per Acre	Sandy Loam	Silt Loam	Clay Loam
Linex 50DF (lbs.)	0.75-1.5	1-1.67	1.25-2
PLUS			
Lasso (qts.)	2	2.5-3	3

Replanting: Soybeans or field corn may be replanted within 4 months. After 4 months, any crop may be planted.

Tank Mixture Linex 50DF with Lexone DF and Dual 8E:

Controls common ragweed, prickly sida, sicklepod, hemp sesbania, lambsquarter, pigweed, and partially controls cocklebur, and jimsonweed.

	Soil Texture ½ to 3 % Organic Matter		
	Coarse Sandy Loam,	Medium Loam, Silt Loam, Silt, Sandy Clay, Sandy Clay Loam	Fine Silty Clay, Silty Clay Loam, Clay, Clay Loam
Linex 50DF (lbs.)	0.33-0.5	0.5-0.75	0.75-1.5
PLUS			
Lexone DF (lbs.)	0.17-0.25	0.25-0.33	0.33-0.5
PLUS			
Dual 8E (pts.)	1-1.25	1.25-1.5	1.5-2
	3 to 6 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Linex 50DF (lbs.)	0.33-0.75	0.75-1.5	1.5-2
PLUS			
Lexone DF (lbs.)	0.25-0.67	0.33-0.5	0.5-0.67
PLUS			
Dual 8E (pts.)	1.5	2	2.5

NOTE: Soybean varieties such as Altona, Coker 102 and 156, Govan, NKs 1884, Semmes, Tracy, Vansoy, Terra Vig 505 and 606, and AP 71 are sensitive to Lexone DF. If Lexone DF is used on these varieties, injury may occur. Tolerance to Lexone DF should be determined before use on any other soybean variety. If Lexone DF is used on soils having a calcareous surface layer or pH of 7.5 or higher, or if used in conjunction with soil applied organo phosphate pesticides such as Dasanit, Disyston, Mocap, Nemacur, Thimet, Parathion, Lorsban 15G or Counter, injury to soybeans may occur.

Do not feed treated plant parts to livestock. If atrazine was applied on the soil the year before, injury may occur. Increased possibility of crop injury may occur when soybean seedlings are weakened because of seedling disease, cold weather, deep planting (more than 2 inches), excessive moisture, high soil pH of 7.5 or higher, high salt concentration or drought.

Cultivation After Planting: Treated soil may be shallow-cultivated, rotary hoed or hand hoed without reducing the weed control activity of the tank

mixture. Do not cultivate deeper than the treated layer of soil since this may bring untreated soil to the surface and poor weed control may result.

Replanting: Treated fields may be replanted to soybeans if initial seeding fails to produce a stand. Soil should not be reworked. Crop injury may result if second application is applied. Do not replant treated areas to any crop other than soybeans within 4 months after treatment as injury to subsequent crops may result.

Tank Mixture Linex 50DF with Dual 8E:

Product Per Acre	Soil Texture ½ to 3 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Linex 50DF (lbs.)	0.67-1.25	1-1.67	1.25-2
PLUS			
Dual 8E (pts.)	1.25	1.5	2
Product Per Acre	3 to 6 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Linex 50DF (lbs.)	1.25-2	1.67-2.5	2-3
PLUS			
Dual 8E (pts.)	1.5	2	2-2.5

Do not feed treated plant parts to livestock. Do not graze treated areas.

Replanting: Soybeans or field corn may be replanted within 4 months. For rotation crops follow instructions on the Dual 8E label.

For control of black nightshade in Kentucky, Illinois, Indiana and Ohio:

Product Per Acre	Soil Texture 1 to 3 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Linex 50DF (lbs.)	0.75-1.5	1-1.67	1.25-2
PLUS			
Dual 8E (pts.)	1.5	2	2-2.5

Do not use on sand or loamy sands.

Replanting: Soybeans or field corn may be replanted within 4 months. Any crop may be planted after 4 months.

Tank Mixture Linex 50DF with Prowl:

Product Per Acre	Soil Texture 1 to 3 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Linex 50DF (lbs.)	0.67-1.25	1-1.67	1.25-2
PLUS			
Prowl (pts.)	1-1.5	1.5-2	1.5-2
Product Per Acre	3 to 6 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Linex 50DF (lbs.)	1.25-2	1.67-2.5	2-3
PLUS			
Prowl (pts.)	1.5	1.5-2	2-2.5

Replanting: Soybeans or field corn may be replanted within 4 months. Other crops may be planted the following year.

Minimum or No-Tillage:

Linex 50DF on soybeans may be used with paraquat, Bronco® or glyphosate in tank mix combinations for preemergence and postemergence control of many broadleaf weeds and grasses and for top kill or suppression of some perennials where soybeans will be planted directly into a preformed bed (stale seed bed), cover crop or in previous crop residues such as corn or small grain stubble. Use rates as described for Preemergence Application for conventional seed bed preparation in reduced tillage systems. Adding Lasso or Dual 8E to the tank mixture improves control of grasses and volunteer small grains. Apply with ground equipment immediately before, during or after planting but before crop emerges. Maintain continuous agitation of spray mixture.

Tank Mixture Linex 50DF with Lasso and Paraquat or Glyphosate:

Linex 50DF and Lasso should be thoroughly mixed first according to directions. Add paraquat or glyphosate as directed under Paraquat Combinations or Glyphosate Combinations below.

Product Per Acre	Soil Texture ½ to 3 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Linex 50DF (lbs.)	0.75-1.5	1-1.67	1.25-2.25
PLUS			
Lasso (qts.)	2	2.5	2.5
Product Per Acre	3 to 6 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Linex 50DF (lbs.)	1.5-2.25	2-3	2.25-3.5
PLUS			
Lasso (qts.)	2.5	3	3

For control of black nightshade apply:

Product Per Acre	Soil Texture 1 to 3 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Linex 50DF (lbs.)	0.75-1.5	1-2	1.25-2.25
PLUS			
Lasso (qts.)	2	2.5-3	3

Replanting: Soybeans or field corn may be replanted within 4 months. Any crop may be planted after 4 months.

Paraquat Combinations - Choose and tank mix one of the above treatments in water. Then add 1 to 2 pints paraquat (2 pounds active per gallon) per acre for control of emerged weeds. The higher rate should be used for weeds 4 to 6 inches tall. Add 0.5 pint of surfactant or spreader per 100 gallons of spray mixture as the last ingredient. Maintain continuous agitation. Use 20 to 60 gallons of water per acre. Use the higher gallonage for dense stubble or vegetation.

Glyphosate Combinations - Choose and tank mix one of the above treatments. Add 1.5 quarts of glyphosate per acre for control of emerged annual weeds or 2 to 4 quarts per acre for control of emerged perennial annual weeds. Use 20 to 30 gallons of water per acre.

Tank Mixture Linex 50DF with Bronco:

Do not add paraquat or glyphosate to this combination.

Product Per Acre	Soil Texture ½ to 5 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Linex 50DF (lbs.)	0.75-2	1.13-2.5	1.25-3
PLUS			
Bronco (lbs.)	3.25-5	4-5	4-5

Do not use on soils with less than ½ % organic matter or on sand, loamy sand or muck soils as crop injury may result.

Use the high rate of Bronco for dense stubble, heavy crop residue or heavy weed population.

Replanting Soybeans: Treated fields may be replanted to soybeans if initial seeding fails to produce a stand. Soil should not be reworked. Crop injury may result if second application is applied. Do not replant treated areas to any crop other than soybeans within 4 months after treatment as injury to subsequent crops may result.

Bronco Combinations - Mix Linex 50DF with water in spray tank as directed on the package label and then add Bronco to the dilute mix. Maintain continuous agitation. Use 20 to 30 gallons of water per acre.

Tank Mix Linex 50DF with Paraquat or Glyphosate:

Linex 50DF should be thoroughly mixed with paraquat or glyphosate in spray tank following directions under Paraquat Combinations or Glyphosate Combinations.

Product Per Acre	Soil Texture ½ to 3 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Linex 50DF (lbs.)	1-1.67	1.25-2.33	1.33-2.67
Product Per Acre	Soil Texture 2 to 5 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Linex 50DF (lbs.)	1.67-3	2.33-4	2.67-5

(Over 5 % Organic Matter, Use 6 pounds)

Replanting: Soybeans or field corn may be replanted within 4 months. Any crop may be planted after 4 months.

Directed Postemergence Application:

Linex 50DF and 2,4-DB can be tank mixed with Premerge 3 as a directed spray to cover weed foliage with minimum contact of the soybean plant. Do not spray higher than 3 inches on the soybean stem or crop injury may result. Do not spray over top of soybean plants. For broadcast application, use a single flood type spray nozzle. ("K" series or equivalent) per middle mounted on an oiling shoe or gauge wheel. For band treatment use two nozzles per row mounted on an oiling shoe or gauge wheels, one on each side of row. Spray drift may cause crop injury. Do not exceed nozzle pressure of 25 psi nor use nozzle tips smaller than 8002 T-jet (or equivalent) and do not spray under windy conditions. A pint of surfactant may be added for each 25 gallons of spray mixture. Use a preemergence treatment or cultivation to control early weed growth and to increase the differential between height of soybeans and weeds for best results.

Linex 50DF with 2,4-DB:

Apply 1 pound Linex 50DF plus 0.2 pound 2,4-DB per acre when soybeans are at least 8 inches high and when weeds do not exceed 4 inches in height. Make a second application if needed, but not more than two applications per season.

Do not use on soils with less than ½ % organic matter. Do not apply more than 2 pounds Linex 50DF per acre per season for postemergence treatments. Do not apply within 60 days of harvest. Do not feed soybean forage or hay to livestock from fields treated postemergence. Harvested soybeans may be used for food, feed or oil purposes.

Linex 50DF Alone:

Apply 0.5 to 1 pound Linex 50DF per acre for soybeans at least 8 inches high and when weeds do not exceed 2 inches in height. A second application should be made at the same rate if new flush of weeds occurs.

A single application of 1 to 2 pounds of Linex 50DF per acre should be made for soybeans at least 12 inches high and when weeds do not exceed 4 inches high. A split application can be made of 1 pound per acre followed by a second application at the same rate after 1 week or later.

NONCROP WEED CONTROL

Apply 2 to 6 pounds Linex 50DF per acre in 40 to 100 gallons of water for short term control of annual weeds on noncropland 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.

WARRANTY STATEMENT

GRIFFIN CORPORATION warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of GRIFFIN. In no case shall GRIFFIN be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. The exclusive remedy of any buyer or user of this product for any and all losses, injuries, or damages resulting from or in any way arising from the use, handling, or application of this product, whether in contact, warranty, tort, negligence, strict liability, or otherwise, shall not exceed the purchase price paid for this product or at Griffin Corporation's election, the replacement of this product. GRIFFIN MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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