

Griffin

Reg # 1812-320

PM-25

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ACCEPTED

SEP 2 1972

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 U.S.

DRY FLOWABLE

ACTIVE INGREDIENT:

Linuron 3-(3, 4-dichlorophenyl)-1-methoxy-1-methylurea.....

INERT INGREDIENTS:

TOTAL

51.4%

50%

100%

KEEP OUT OF REACH OF CHILDREN

CAUTION

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Induce vomiting

IF ON SKIN: Remove by washing with soap and water

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

GRIFFIN CORPORATION

VALDOSTA, GA 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. Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or wetlands. 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.

PERSONAL PROTECTIVE EQUIPMENT

One piece overalls which have long sleeves and long pants constructed of finely woven fabric as specified in the USDA/EPA Guide to Commercial Applicators. Wide brimmed hats. Chemical resistant gloves which are mid-forearm to elbow length. Any article worn while applying linuron must be cleaned before re-using. Clothing which has been drenched or has otherwise absorbed concentrated pesticide must be disposed of in a sanitary landfill, or incinerated, or if allowed by state and local authorities, by burning. Instead of clothing and equipment specified above, the applicator can use an enclosed tractor cab which provides a filtered air supply as described by Taschenberg and Bourke, 1975. Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product.

DIRECTIONS FOR USE

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

RE-ENTRY STATEMENT

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons. Do not re-enter treated areas for 24 hours following application unless protective clothing is worn. Because certain states may require more restrictive entry intervals for various crops treated with this product, consult your State Department of Agriculture for further information. Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Indicate oral warnings which inform workers of areas or fields that may not be entered without specific protective clothing, period of time field must be vacated and appropriate actions to take in case of accidental exposure. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: CAUTION: Area treated with Linex 50 DF on (date of application). Do not re-enter treated areas for 24 hours following application unless protective clothing is worn. In case of accidental exposure see Statement of Practical Treatment.

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: 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

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

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

When using Linex 50 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, additions of a surfactant to the spray increases contact effects of Linex 50 DF.

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

PREEMERGENCE USE - Linex 50 DF controls weeds as they germinate:

Broadleaf Weeds	Grasses
Carpet weed	Barnyardgrass
Chickweed	(watergrass)
Dayflower, common	Canarygrass
Florida pusley	Crabgrass
Galinsoga	Foxtail
Nettleleaf goosefoot	(including giant)
Lambsquarter	Goosegrass
Mustard	Fall panicum
Pigweed	
Purslane	
Radish, wild	
Ragweed, common	
Smartweed	

Linex 50 DF will provide partial control of the following:

Annual morningglory
Cocklebur
Prickly sida (teaweed)
Sicklepod
Velvetleaf (buttonweed)

Linex 50 DF 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 for control of 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 if moisture of $\frac{1}{2}$ " to 1" on moist soils; 1" to 2" on dry soils, is applied within two weeks after application.

POSTEMERGENCE USE - Linex 50DF will control seedlings of these weeds:

Broadleaf

Grasses

Annual morningglory
Carpetweed
Cocklebur
Dayflower, common
Dog Fennel
Fiddleneck (amsinckia)
Florida beggarweed
Florida purslane
(Florida pusley)
Groundsel
Knawel
Lambsquarters
Mustard
Nettleleaf goosefoot
Pigweed
Prickly sida (teaweed)
Purslane
Sesbania
Sicklepod
Smartweed
Velvetleaf (buttonweed)
Wild buckwheat

Barnyardgrass
(watergrass)
Broadleaf (signalgrass)
Canarygrass
Crabgrass
Fall panicum
Foxtail (including giant)
Goosegrass
Rattail fescue
Ryegrass, annual
Texas panicum

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APPLICATION DIRECTIONS

Linex 50 DF should be used only in accordance with recommendations on this label. Do not apply this product through any type of irrigation system.

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

SERIAL APPLICATION - Preemergence Only - Potatoes and Soybeans - Apply Linex 50 DF 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. Avoid applications directly to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and contact with skin. Wash thoroughly before eating and at the end of each days operation.

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) 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 50 DF 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 50 DF 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. Lines 50 DF 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: Fill tank $\frac{1}{4}$ full with clean water. Start agitation system, add Linex 50 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 through. 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 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: Unless otherwise directed do not use on sand, loamy sand, gravelly soils or exposed subsoils nor on soils containing less than 1% organic matter as crop injury 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. Do not replant treated area to any other crop within 4 months after last application unless otherwise stated as crop injury may result. Do not rotate crops used for food or feed which are not registered for use with linuron into areas previously treated with this chemical.

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 the last application. Do not plant any crop until 1 year after the last application as crop injury may result.

FERTILIZER SPRAY MIXTURES: For preemergence application, nonpressure 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 one teaspoon for each pint/100 gallons.
 - (b) Dry ingredients (wetable powders, dry flowables): add one tablespoon for each pound/100 gallons.
 - (c) Soluble ingredients: add one tablespoon for each pound/100 gallons.
 - (d) Flowables: add teaspoon for each pint/100 gallons.
 - (e) Spreaders/stickers: add one 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 four 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.

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RECOMMENDED USES

ASPARAGUS

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

Direct Seeded or Newly Planted Crowns:

Do not exceed 4 lbs. 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 lbs. per acre after planting seed 1 1/2" deep in coarse soil and 1" deep in fine soils. During planting operation, spray activated charcoal as a 1" band on soil surface directly over seed rows at the rate of 300 lbs. per acre (equivalent to 15 lbs. per acre of crop with 20" row spacing). Preemergence weed control will be reduced in soils with high organic matter (greater than 5% and peat or muck).

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

Established Beds:

Do not apply within 1 day of harvest. Do not exceed 8 lbs. total per acre per season. Do not use surfactant or fertilizer solution in spray mixture. Do not re-enter treated areas for 24 hours following application unless protective clothing is worn.

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

Postemergence Application: Make 1 to 4 applications of 1 to 2 lbs. per acre before weeds exceed 4" in height. Apply before cutting season or immediately after cutting. Do not re-enter treated areas for 24 hours following application unless protective clothing is worn.

Directed Postemergence Application (Fern Stage):

Make a single application of 4 to 8 lbs. per acre as directed: spray to base of plants for control of Dutch elm.

Note: If more than 4 lbs. Lixes 50 DF per acre is applied per season, do not plant any other crop until 1 year after last application. Do not enter areas treated postemergence for 24 hours following application unless protective clothing is worn.

In California, Dutch elm 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 lbs. Lixes 50 DF per acre in a minimum of 20 gallons of water per acre. Treat only once during the growing season.

CARROTS

Preemergence Application — Florida, Michigan, Ohio and Wisconsin:

A single application of 1 to 3 lbs. per acre should be made after planting but prior to carrots emerging. Seed should be planted at least 1/2" 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 lbs. of Lixes 50 DF per acre per season.

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

Postemergence — Entire U.S.:

Apply 1 1/2 to 3 lbs. per acre as a non-directed spray after carrots are at least 3" tall. Apply before annual grasses exceed 2" in height and before broadleaf weeds exceed 6" in height. Repeat application may be made but do not exceed 4 lbs. Lixes 50 DF per acre (West of Rocky Mountains, do not exceed 3 lbs. Lixes 50 DF per acre). Do not exceed 40 psi spray nozzle pressure as crop injury may result.

Lixes 50 DF may be applied following an application of Stoddard solvent provided treatments are at least one day apart. Stoddard solvent may be applied following application of Lixes 50 DF provided treatments are at least 2 weeks apart. Shorter time intervals between applications may result in injury to the crop. Do not apply Lixes 50 DF as a tank mixture with Stoddard solvent, surfactants, nitrogen or fertilizer solution, other pesticides, nor when temperature exceeds 85°F as crop injury may result.

NOTE: Because carrot varieties vary in their resistance, determine tolerance to Lixes 50 DF 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 Lixes 50 DF. Do not re-enter treated areas treated postemergence for 24 hours following application unless protective clothing is worn. Do not apply within 14 days of harvest.

Postemergence Application - Alternate Treatment for New York: For control of emerged leaf weeds early in the development of the carrot crop, apply 0.25 lb. per acre to carrots having at least one fully developed true leaf and 0.5 lb. 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 effect should be transitory, with no yield losses attributable to crop injury. At normal rate recommendations, carrots must be at least three 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.

Notes: The activity of Lixes 50 DF 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 Lixes 50 DF must be reduced. Do not apply when the temperature exceeds 85°F. Lixes 50 DF 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 Lixes 50 DF applications and application of insecticides.

CELERY

East of Rocky Mountains only

Post-transplant Application:

Make a single application of 1 to 3 lbs. per acre. Apply as a non-directed spray after celery is transplanted and established, but before celery is 3" tall. Apply before annual grasses exceed 2" in height and before broadleaf weeds exceed 6" in height. In the Northeast, use only on celery grown on muck soils.

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 transplant 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 3/4" 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 Lixes 50 DF + Lasso:

Product Per Acre	Soil Texture		
	1 to 3 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Lixes 50 DF (lbs.)	2/3 - 1 1/4	1 - 1 2/3	1 1/4 - 2
PLUS			
Lasso (quarts)	3/4 - 1	1 - 1 1/2	1 1/2 - 2
Product Per Acre	3 to 6 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Lixes 50 DF (lbs.)	1 1/4 - 2	1 2/3 - 2 1/2	2 - 3
PLUS			
Lasso (quarts)	1 - 1 1/2	1 1/2 - 2	2 - 2 1/2

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

Tank Mixture Lixes 50 DF + Atrazine:

Product Per Acre	Soil Texture		
	1 to 2 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Lixes 50 DF (lbs.)	2/3 to 1	1 to 1 1/2	1 1/3 to 1 2/3
PLUS			
Atrazine 80% (lbs.)	1/2 to 2/3	2/3 to 1	3/4 to 1
Product Per Acre	2 to 5 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
Lixes 50 DF (lbs.)	1 to 2	1 1/2 to 2 1/2	1 2/3 to 3
PLUS			
Atrazine 80% (lbs.)	2/3 to 1 1/4	1 to 1 1/2	1 to 2

CORN (Field and Sweet)

Directed Postemergence Application:

A single application as a directed spray should be made after corn is at least 15" 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 1/4 to 3 lbs. Lixes 50 DF 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" in height. The higher rate should be used on heavier soils (soils high in clay or organic matter) and for weeds up to 5" in height.

COTTON

East of Rocky Mountains only

Directed Postemergence Application:

Lixes 50 DF 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" tall and weeds are not over 2" tall, apply 1 to 1 1/2 lbs. Lixes 50 DF. 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 one week or later after first treatment. Alternatively, a single application of 2 to 3 lbs. per acre following last cultivation can be made after cotton is 20" tall if emerged weeds are present and surfactant as directed above.

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

HYBRID POPLAR

Midwest

Apply 2 to 4 lbs. Lixes 50 DF per acre before bud break in the spring. For application after bud break, apply 2 to 4 lbs. Lixes 50 DF 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 emerging weeds treat at the seeding stage.

More than one treatment may be made but no more than 8 lbs. Lixes 50 DF per acre should be applied per year.

PARSNIPS

Preemergence Application:

A single application of 1 1/2 to 3 lbs. per acre should be made after planting but prior to crop emergence. Seed should be planted at least 1/2" deep.

POTATOES

Preemergence Application:

A single application of Lixes 50 DF should be made as a broadcast spray after planting but prior to crop emergence. Seed should be planted at least 2" 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" tall and before broadleaf weeds are 6" 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" 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 loam, silty loam, silty clays, silty clays with 1 to 2% organic matter (coarser soils) apply 1 1/2 to 2 1/2 lbs. of Lixes 50 DF per acre. On silty clay, clays and soils with 2 to 5% organic matter (fine soils), apply 2 1/2 to 4 lbs. per acre to emerged weeds before potato emergence.

Wisconsin — Central Sands Area:

Lixes 50 DF should be applied at the rate of 1 lb. per acre on sands and 2 lbs. per acre on heavy sands.

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

Note: See Aerial Application Instructions.

SORGHUM

Preemergence Application: Select a registered herbicide treatment for application as a tank mixture. Make a single application after planting but before crop emergence. In soil with 1 to 2% organic matter apply 1 to 1 1/4 lbs/acre on sandy loam and 1 to 1 1/4 lbs/acre on loam, silt loam, silt, sandy clay or sandy clay loam. In soil with 2 to 4% organic matter apply 1 to 1 1/4 lbs/acre on sandy loam and 1 to 2 lbs/acre on loam, silt loam, silt, sandy clay, or sandy clay loam. Plant seed at least 1" 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 Lines 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 lb/acre when sorghum is 12" tall (free standing plants) and weeds are up to 2" in height. Use 1 to 2 lbs/acre when sorghum is 15" tall and weeds are 2" to 4" in height. If boom drop nozzles are used, apply 1 to 2 lbs/acre when sorghum is at least 18" tall and weeds are 2 to 4" 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 of 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 sugar beets, 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.

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

SOYBEANS

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 3/4" 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 Lines 50 DF as a separate operation using rates recommended below for Lines 50 DF alone. For rotation crops, follow instructions on Trifluralin or Prowl labels.

Lines 50 DF Alone:

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

Product Per Acre	Soil Texture		
	Coarse Sandy Loam	Medium Silt, Loam, Silt Loam	Fine Silty Clay, Silty Clay Loam
Lines 50 DF (lbs.)	1 to 1 2/3	1 1/4 to 2 1/3	1 1/3 to 2 2/3
	2 to 5 % Organic Matter		
Lines 50 DF (lbs.)	1 2/3 to 3	2 1/3 to 4	2 2/3 to 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 Lines 50 DF with Lexone DF Herbicide and Lasso

Product Per Acre	Soil Texture		
	Coarse Sandy Loam	Medium Loam, Silt Loam, Silt, Sandy Clay, Sandy Clay Loam	Fine Silty Clay, Silty Clay Loam, Clay
Lines 50 DF (lbs.) PLUS Lexone DF (lbs.) PLUS Lasso (qts.)	1/3 to 1/2 1/8 to 1/4 3/4 to 1	1/2 to 3/4 1/4 to 1/3 1 to 1 1/2	3/4 to 1 1/2 1/3 to 1/2 1 1/4 to 2
	3 to 6 % Organic Matter		
Lines 50 DF (lbs.) PLUS Lexone DF (lbs.) PLUS Lasso (qts.)	1/3 to 3/4 1/4 to 1/3 1 to 1 1/2	3/4 to 1 1/2 1/3 to 1/2 1 1/2 to 2	1 1/2 to 2 1/2 to 2/3 2 to 3

NOTE: Soybean varieties such as Atlanta, Coker 102 and 156, Govan, NKs 1884, Semmes, Tracy, Vansoy, Terra Vig 505 and 506, 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 phosphorus pesticides such as Dasanit, Dyston, 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"), 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 four months after treatment as injury to subsequent crops may result.

Tank Mixture Lines 50 DF with Lasso:

Product Per Acre	Soil Texture		
	Coarse Sandy Loam	Medium Silt, Loam, Silt Loam	Fine Silty Clay, Silty Clay Loam
Lines 50 DF (lbs.) PLUS Lasso (qts.)	2/3 to 1 1/4 3/4 to 1	1 to 1 2/3 1 to 1 1/2	1 1/4 to 2 1 1/2 to 2
	3 to 6 % Organic Matter		
Lines 50 DF (lbs.) PLUS Lasso (qts.)	1 1/4 to 2 1 to 1 1/2	1 2/3 to 2 1/2 1 1/2 to 2	2 to 3 2 to 2 1/2
For Control of Black Nightshade Apply:			
Product Per Acre	Sandy Loam	Silt Loam	Clay Loam
Lines 50 DF (lbs.) PLUS Lasso (qts.)	3/4 to 1 1/2 2	1 to 1 2/3 2 1/2 to 3	1 1/4 to 2 3

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

Tank Mixture Lines 50 DF with Lexone DF and Dual SE:

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

Product Per Acre	Soil Texture		
	Coarse Sandy Loam	Medium Loam, Silt Loam, Silt, Sandy Clay, Sandy Clay Loam	Fine Silty Clay, Silty Clay Loam, Clay
Lines 50 DF (lbs.) PLUS Lexone DF (lbs.) PLUS Dual SE (pts.)	1/3 to 1/2 1/8 to 1/4 1 to 1 1/4	1/2 to 3/4 1/4 to 1/3 1 1/4 to 1 1/2	3/4 to 1 1/2 1/3 to 1/2 1 1/2 to 2
	3 to 6 % Organic Matter		
Lines 50 DF (lbs.) PLUS Lexone DF (lbs.) PLUS Dual SE (pts.)	1/3 to 3/4 1/4 to 1/3 1 1/2 to 2	3/4 to 1 1/2 1/3 to 1/2 1/2 to 2/3	1 1/2 to 2 1/2 to 2/3 2 to 2 1/2

NOTE: Soybean varieties such as Atlanta, Coker 102 and 156, Govan, NKs 1884, Semmes, Tracy, Vansoy, Terra Vig 505 and 506, 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 phosphorus pesticides such as Dasanit, Dyston, 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"), 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 four months after treatment as injury to subsequent crops may result.

Tank Mixture Lines 50 DF with Dual SE:

Product Per Acre	Soil Texture		
	Coarse Sandy Loam	Medium Silt, Loam, Silt Loam	Fine Silty Clay, Silty Clay Loam
Lines 50 DF (lbs.) PLUS Dual SE (pts.)	2/3 to 1 1/4 1 1/4	1 to 1 2/3 1 1/2	1 1/4 to 2 2
	3 to 6 % Organic Matter		
Lines 50 DF (lbs.) PLUS Dual SE (pts.)	1 1/4 to 2 1 1/2	1 2/3 to 2 1/2 2	2 to 3 2 to 2 1/2

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

Replanting: Soybeans or field corn may be replanted within 4 months. Other crops follow instructions on the Dual SE label.

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

Product Per Acre	Soil Texture		
	Coarse Sandy Loam	Medium Silt, Loam, Silt Loam	Fine Silty Clay, Silty Clay Loam
Lines 50 DF (lbs.) PLUS Dual SE (pts.)	3/4 to 1 1/2 1 1/2	1 to 1 2/3 2	1 1/4 to 2 2 to 2 1/2

Do not use on sand or loamy sands.

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

Tank Mixture Lines 50 DF with Prowl:

Product Per Acre	Soil Texture		
	Coarse Sandy Loam	Medium Silt, Loam, Silt Loam	Fine Silty Clay, Silty Clay Loam
Lines 50 DF (lbs.) PLUS Prowl (pts.)	2/3 to 1 1/4 1 to 1 1/2	1 to 1 2/3 1 1/2 to 2	1 1/4 to 2 1 1/2 to 2
	3 to 6 % Organic Matter		
Lines 50 DF (lbs.) PLUS Prowl (pts.)	1 1/4 to 2 1 1/2	1 2/3 to 2 1/2 1 1/2 to 2	2 to 3 2 to 2 1/2

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

Tank Mixture LINEX 50 DF and

Surflan® AS

Soil Texture
1/2 to 3 % Organic Matter
Silt Loam

Product Per Acre	Sandy Loam	Silt Loam	Clay Loam
LINEX 50 DF (lbs.)	2 3/4 to 1 1/4	1 to 1 2/3	1 1/4 to 2
PLUS			

Surflan AS (qts.) 1/2 to 3/4 3/4 to 1 1 to 1 1/4

Do not feed treated plant parts to livestock.

Replanting: Soybeans may be replanted within 4 months. Any crop except root crops may be planted after 4 months. Do not plant root crops within 12 months.

Notes: See Aerial Application Instructions.

SOYBEANS - MINIMUM OR NO TILLAGE

LINEX 50DF on soybeans may be used with paraquat, gramoxone or Bronco 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 (single seedbed), cover crop or in previous crop residue such as corn or small grain stubble. Use rates as described for preemergence application for conventional seedbed preparation in reduced tillage systems. Adding Lasso, Dual SE or Surflan AS to the tank mixture improves control of grasses and volunteer small grains. Apply aerially or with ground equipment immediately before, during or after planting but before crop emerges. Maintain continuous agitation of spray mixture.

Tank Mix LINEX 50DF With Lasso and Paraquat or Gramoxone:

LINEX 50 DF and Lasso should be thoroughly mixed first according to directions. Add paraquat or gramoxone as directed under paraquat combinations or gramoxone combinations below.

Product Per Acre	Soil Texture 1/2 to 3 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
LINEX 50 DF (lbs.)	3/4 to 1 1/2	1 1/8 to 2	1 1/4 to 2 1/4
PLUS			
Lasso (qts.)	2	2 1/2	2 1/2
	3 to 6 % Organic Matter		
LINEX 50 DF (lbs.)	1 1/2 to 2 2/5	2 to 3	2 1/4 to 3 1/2
PLUS			
Lasso (qts.)	2 1/2	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 50 DF (lbs.)	3/4 to 1 1/2	1 to 2	1 1/4 to 2 1/4
PLUS			
Lasso (qts.)	2	2 1/2 to 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 (2.5% active per gallon) per acre for control of emerged weeds. The higher rate should be used for weeds 4 to 6" high. Add 1/2 pint of surfactant or spreader per 100 gallons of spray mixture as the last ingredient. Maintain continuous agitation. Use 20 to 50 gallons of water per acre. Use the higher gallonage for dense stubble or vegetation.

Gramoxone Combinations — Choose and tank mix one of the above treatments. Add 1 1/4 quarts of gramoxone 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 50 DF with Bronco®

Do not add paraquat or gramoxone to this combination.

Product Per Acre	Soil Texture 1/2 to 3 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
LINEX 50 DF (lbs.)	3/4 to 2	1 1/8 to 2 1/2	1 1/4 to 3
PLUS			
Bronco (lbs.)	3 1/4 to 5	4 to 5	4 to 5

Do not use on soils with less than 1/2 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 reseed treated areas to any crop other than soybeans within four months after treatment as injury to subsequent crops may result.

Bronco Combinations — Mix LINEX 50 DF 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 Surflan AS and Paraquat or Gramoxone:

LINEX 50DF should be thoroughly mixed with Surflan AS first in the tank. Follow all label directions on the Surflan label. Add paraquat or gramoxone as directed under paraquat combinations or gramoxone combinations below.

Product Per Acre	Soil Texture 1/2 to 3 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
LINEX 50 DF (lbs.)	3/4 to 1 1/2	1 1/8 to 2	1 1/4 to 2 1/4
PLUS			

Surflan AS (qts.) 1/2 to 3/4 3/4 to 1 1 to 1 1/4

Do not feed treated plant parts to livestock.

Replanting: Soybeans may be replanted within 4 months. After 4 months any crop may be planted except do not plant root crops within 12 months.

Tank Mix LINEX 50DF With Paraquat or Gramoxone:

LINEX 50DF should be thoroughly mixed with paraquat in spray tank following directions under paraquat combinations or gramoxone combinations below.

Product Per Acre	Soil Texture 1/2 to 3 % Organic Matter		
	Sandy Loam	Silt Loam	Clay Loam
LINEX 50 DF (lbs.)	1 to 1 2/3	1 1/4 to 2 1/3	1 1/3 to 2 2/3
	2 to 5 % Organic Matter		
LINEX 50 DF (lbs.)	1 2/3 to 3	2 1/3 to 4	2 2/3 to 5

(Over 5 % Organic Matter, Use 6 lbs.)

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

Directed Postemergence Application:

LINEX 50 DF and 2,4-DB can be tank mixed as a directed spray to cover weed foliage with minimum contact of the soybean plant. Do not spray higher than 3" 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 (1" K" series or equivalent) per nozzle mounted on an oblique shoe or gauge wheel. For band treatment use two nozzles per row mounted on an oblique shoe or gauge wheel, one on each side of row. Spray drift may cause crop injury. Do not exceed nozzle pressure of 25 psi nor use nozzle nos 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 50 DF with 2,4-DB:

Apply 1 lb LINEX 50 DF plus 1/5 lb 2,4-DB per acre when soybeans are at least 8" high and when weeds do not exceed 4" in height. Make a second application if needed, but not more than 2 applications per season.

Do not use on soils with less than 1/2% organic matter. Do not apply more than 2 lbs LINEX 50 DF per acre per season for postemergence treatments. Do not apply within 50 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 50 DF Alone:

Apply 1/2 to 1 lb LINEX 50 DF per acre for soybeans at least 8" high and when weeds do not exceed 2" 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 lbs of LINEX 50 DF per acre should be made for soybeans at least 12" high and when weeds do not exceed 4" high. A split application can be made of 1 lb per acre followed by a second application at the same rate after 1 week or later.

NONCROP WEED CONTROL

Apply 2 to 6 lbs LINEX 50 DF per acre in 40 to 100 gallon 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 qts 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 3" in height.

WARRANTY

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. GRIFFIN MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. POSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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TEST A