



LINURON 4L

Herbicide

ACTIVE INGREDIENT:

Linuron [3-(3,4-dichlorophenyl)-1-methoxy-1-methylurea] 40.7%

INERT INGREDIENTS: 59.3%

TOTAL 100.0%

SHAKE WELL BEFORE USING • KEEP FROM FREEZING
Contains 4 lbs. Linuron Per Gallon

KEEP OUT OF REACH OF CHILDREN

CAUTION

See Below For Additional Precautionary Statements

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EPA EST. NO. _____

NET CONTENTS _____ GALLONS

26259

EXP11P90

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Avoid breathing spray mist. Avoid contact with skin, eyes and clothing.

STATEMENT OF PRACTICAL TREATMENT

If in eyes: Flush with plenty of water. Get medical attention if irritation persists.

If on skin: Wash with plenty of soap and water. Get medical attention if irritation persists.

If swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or wetlands. Do not contaminate water by cleaning of equipment or disposal of wastes.

IMPORTANT—When mixing/loading and spraying wear a wide-brimmed hat, mid-forearm to elbow length chemical resistant gloves, and one-piece overalls which have long sleeves and long pants. Overalls should be constructed of finely woven fabric as specified in the USDA/EPA Guide for Commercial Applicators.

Any article of clothing worn while applying product must be cleaned before reusing. Clothing which has been drenched or has otherwise absorbed concentrated pesticide must be disposed 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).

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

Do not apply (except as recommended), or drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. Do not use on home plantings of trees, shrubs or herbaceous plants, nor on lawns, walks, driveways, tennis courts, or similar areas. Prevent drift of spray to desirable plants. Do not contaminate any body of water. Keep from contact with fertilizers, insecticides, fungicides and seeds.

Do not apply aerially.

Thoroughly clean all traces of LINURON 4L from application equipment immediately after use. Flush tank, pump, hoses, and boom with several changes of water after removing nozzle tips and screens (clean these parts separately).

DIRECTIONS FOR USE

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

LINURON 4L Herbicide should be used only in accordance with recommendations on this label, or in separate published recommendations available through local dealers. Do not use on any crop in Kern County, California, except carrots and asparagus when a permit has been obtained from the Agricultural Commission.

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

Platte Chemical Company will not be responsible for losses or damages resulting from use of this product in any manner not specifically recommended by Platte Chemical Company. User assumes all risk associated with such nonrecommended use.

Fill tank 1/4 full with water. Start agitation system; add LINURON 4L, and continue adding water. Add separately each additional component of any tank mix while adding water. If a surfactant is used, add it last when the tank is nearly full. Continue agitation throughout. If poor mixing should occur with any component, premix the component with two parts water before adding to the spray tank.

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 mixing:

1. Put 1 pint of fertilizer solution in a quart jar.
2. Mix 2 teaspoons LINURON 4L with 2 tablespoons of water; mix thoroughly and add to fertilizer solution.
3. Close jar and shake well.
4. If other herbicides are to be used in the mixture, premix 2 teaspoons of wettable powders or 1 teaspoon of liquids with 2 tablespoons of water; add to LINURON 4L/fertilizer mixture.
5. Close jar and shake well.
6. Watch mixture for several seconds; check again in 30 minutes.
7. If mixture does not separate, foam, gel, or become lumpy, it may be used.
8. Mixing ability may be improved by adding compatibility agents such as Kalo Laboratories "Complex", Witco Chemicals "Sponu" 1680, HACO Inc "Unite" or Loveland Industries "E-Z Mix." Follow directions on container.

If the mixture is compatible, prepare spray by adding the fertilizer solution to the spray tank first, then dilute LINURON 4L with 2 parts of water, thoroughly mix, and add slowly to spray tank with agitator running. For tank mixtures with other herbicides, follow directions above.

EQUIPMENT—SPRAY VOLUMES AND PRESSURES: Application is limited to a ground boom sprayer properly calibrated to a constant speed and rate of delivery. Openings in screens should be equal to or larger than 50 mesh. Continuous agitation in the spray tank is required to keep the material in suspension. Agitate by mechanical or hydraulic means; if bypass or return line is used, it should terminate at bottom of tank to minimize foaming. Avoid overlapping and shut off spray booms while starting, turning, slowing or stopping, or injury to the crop may result. For preemergence application, use 20 to 60 gals per acre and spray pressure of 30 to 40 psi.

For postemergence application, use sufficient volume (min 20 gals per acre) for thorough coverage of weed foliage. Use spray pressure of 20 to 25 psi to keep spray drift to a minimum.

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USE RATES: All rates of LINURON 4L (and tank mixtures) are expressed as broadcast rates; for band treatment, use proportionately less. For example, use 1/3 of the broadcast rate when treating a 14" band where row spacing is 40". Where a range of dosages is given, use the lower rate on coarser soils (low in clay or organic matter) and the higher rate on finer soils (high in clay or organic matter). For postemergence application, use the lower rate on smaller weeds and the higher rate on larger weeds.

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 injury to the treated or subsequent crops may result.

REPLANTING: If initial seeding fails to produce a stand, crops registered for the rate of LINURON 4L that has been applied may be replanted into the treated area. Thoroughly rework soil before replanting. Do not retreat during the same crop year as injury to the crop 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 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.

STORAGE AND DISPOSAL

STORAGE

Do not store below temperature of (32°F.)
Store in safe manner. Store in original container only
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

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke

GENERAL INFORMATION

LINURON 4L Herbicide is a liquid suspension to be mixed in water and applied as a spray for selective control of weeds in certain crops and for nonselective weed control on noncropland areas. It is noncorrosive to equipment, nonflammable and nonvolatile.

LINURON 4L is an effective preemergence treatment of soybeans, asparagus, bulbs, carrots, corn, hybrid poplar, parsnips, potatoes and sorghum for control of weeds listed below. LINURON 4L is particularly effective in non-tillage soybean production. Treatment is made after planting but before emergence of soybeans. Weeds have usually emerged and the treatment controls susceptible weeds. Treatment also controls susceptible emerging weeds for an extended time.

LINURON 4L may be sprayed postemergence over-the-top of emerged asparagus (before or after cutting and to small ferns), carrots (at least 3" tall) and celery (transplants) to effectively control susceptible emerged seedling weeds.

Directed postemergence applications of LINURON 4L, where spray nozzles are adjusted so that weeds are sprayed but the crop is not, may be used in emerged asparagus (larger ferns), corn (field and sweet), cotton, sorghum and soybeans to effectively control susceptible emerged seedling weeds.

LINURON 4L may be applied to soil prior to emergence of weeds to control susceptible weed seedlings for an extended period of time; the degree of control and duration of effect will vary with:

Soil Organic Matter Content—High organic matter requires higher dosages than low organic matter for equivalent herbicide performance. Best results accompany preemergence use of LINURON 4L on soils of 1/2% to 3% organic matter. The combination of LINURON 4L plus Lexion® herbicides (such as Lexion® or Sencor®) provides most effective preemergence weed control on soils from 1% to 4% organic matter content.

Soil Texture—High clay content requires higher dosage rates than those with less clay. Best results accompany preemergence use of LINURON 4L on coarse to medium soils.

Rainfall—Moisture is required to activate the chemical following pre-emergence application to soil. Best results accompany rainfall (or irrigation) that occurs within 2 weeks of application. In the Columbia River Basin, use LINURON 4L only if the crop is sprinkler irrigated.

Weed Species And Conditions of Growth—Species vary in susceptibility and may be more difficult to control when under stress. LINURON 4L is recommended for use in conjunction with certain other herbicides for treatment of field corn, potatoes, sorghum, and soybeans; observe all cautions and limitations on labeling of all products used in mixtures.

Since the effect of LINURON 4L varies with soils, crop varieties, uniformity of application, and environmental conditions, it is suggested that growers limit their first use to small areas.

PREEMERGENCE USE (Germinating Weeds): LINURON 4L, at recommended rates, controls annual weeds such as:

Broadleaves	Grasses
Florida beggarweed	Mustards
Carpetweed	Nettleleaf goosefoot
Chickweed	Pigweeds
Common dayflower	Purslane (common)
Florida purslane	Wild radish
(Florida Pusley)	Ragweed (common)
Galinsoga	Smartweed
Lambquarters	(Pennsylvania)
	Partial Control
Cocklebur (common)	
Annual morningglory	
Prickly sida (leafweed)	
Sicklepod	
Velvetleaf	
(buttonweed)	
	Barnyardgrass
	(watergrass)
	Canarygrass
	Crabgrasses
	Forbats
	(including giant)
	Goosegrass
	Fall Panicum

LINURON 4L will not control established perennials such as bermudagrass, Canada thistle, field bindweed, johnsongrass and purple nutsedge. The lower dosage rates are effective on coarser soils and the higher rates on finer soils and on the more resistant seedling weeds. Sufficient moisture (1/2" to 1" on moist soils; 1" to 2" on dry soils) in the form of rainfall or sprinkler irrigation is necessary after treatment to carry the chemical into the root zone of germinating weeds; best results are obtained when this occurs within two weeks after application. If heavy rainfall occurs soon after application, injury to crop may result.

LINURON 4L applied preemergence, before emergence of soybeans, asparagus, bulbs, carrots, corn (field), parsnips, potatoes, and sorghum, and weeds, is an effective procedure because susceptible weeds are controlled in an early, vulnerable seedling stage before they compete with the crop. With favorable moisture conditions, LINURON 4L continues to control weeds for some time as the crop becomes better able to compete. Should weed seedlings begin to break through the preemergence treatment in significant numbers, secondary weed control procedures should be implemented; these include cultivation and postemergence herbicide application.

A good seed bed must be prepared before application of LINURON 4L as crop injury may result if application is made to ground which is cloddy or compacted resulting in improperly planted seed. Plant seed to depth specified. Surface of the soil should not be cultivated or disturbed after application of LINURON 4L and before emergence of the crop as weed control may be reduced and crop injury may result. However, if moisture is insufficient to activate the herbicide, a shallow cultivation (rotary hoe preferred) should be made after emergence of row crops while weeds are small enough to be controlled by mechanical means. Deep cultivation reduces the effectiveness of LINURON 4L.

Note: Consult atrazine, "Bronco", "Dual" 8E, Alachlor, paraquat, "Prowl", "Ramrod", Glyphosate, "Surflor", or 3 Trifluralin labels for additional weeds controlled when LINURON 4L is used in conjunction with these herbicides.

POSTEMERGENCE USE (Emerged Seedling Weeds): LINURON 4L, at recommended rates, controls weeds such as:

Broadleaves	Grasses
Annual morningglory	Lambquarters
Carpetweed	Mustards
Cocklebur (common)	Nettleleaf goosefoot
Common dayflower	Pigweeds
Common ragweed	Prickly sida (leafweed)
Dog fennel	Purslane (common)
Fiddleneck (amaranthus)	Seabarn
Florida beggarweed	Sicklepod
Florida purslane	Smartweed
(Florida pusley)	(Pennsylvania)
Groundsel	Velvetleaf
Knapwe	(buttonweed)
	Wild buckwheat
	Annual ryegrass
	Barnyardgrass
	(watergrass)
	Broadleaf signalgrass
	Canarygrass
	Crabgrasses
	Fall panicum
	Forbats (including giant)
	Goosegrass
	Partial panicum
	Texas panicum

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Results of postemergence treatment of emerged weeds vary with rate applied and environmental conditions; best results are obtained on succulent weeds growing under conditions of high humidity and temperatures of 70°F or higher. Addition of a surfactant to the spray (where recommended) increases contact effects of LINURON 4L. Application will also provide control of emerging susceptible weed seedlings for an extended period of time.

Note: Consult bromoxynil, and 2,4-DB labels for additional weeds controlled when LINURON 4L is used in conjunction with these herbicides. Best results are obtained under conditions of high humidity and temperatures over 70°F. Control of emerged weeds under drought stress is usually impractical.

CROP USES

ASPARAGUS

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

Direct Seeded or Newly Planted Crowns—Do not exceed 4 pints 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 pints per acre after planting seed 1 1/2" deep in coarse soil and 1" deep in fine soils. During planting operation, spray activated charcoal ("Aqua Nu-Char" or "Gro-Safe") 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).

Postemergence Application: Make 1 or 2 applications of 1 to 2 pints 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 pints total per acre per season; do not use surfactant or fertilizer solution in spray mixture. Do not reenter treated areas for 24 hours following application unless protective clothing is worn.

Preemergence Application: Make a single application of 2 to 4 pints per acre.

Postemergence Application: Make 1 to 4 applications of 1 to 2 pints per acre before weeds exceed 4" in height. Apply before cutting season or immediately after cutting. Do not reenter 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 pints per acre as a directed spray to base of plants for control of dudain melon.

Note: If more than 4 pts. LINURON 4L per acre is applied per season, do not plant any other crop until 1 year after last application. See "Replanting". Do not enter areas treated postemergence for 24 hours following application unless protective clothing is worn.

* Preemergence weed control will be reduced in soils with high organic matter (greater than 5% and peat or muck).

BULBS (Tulip, Calla Lily, 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 pints LINURON 4L per acre in a minimum of 20 gallons of water per acre. Treat only once during the growing season.

Note: Unless other directed, do not use on sand, loamy sand, gravelly soils, or exposed subsoils nor on soils containing less than 1% organic matter as injury to the crop may result. Do not reenter treated areas for 24 hours following application unless protective clothing is worn.

CARROTS

Preemergence Application—Florida, Michigan, Ohio, and Wisconsin: Make a single application of 1 to 2 pints per acre in Florida and 1 to 3 pints per acre in Michigan, Ohio, and Wisconsin, apply after planting but before carrots emerge; plant seed at least 1/2" deep. Use the lower rate on lighter soils (low in clay or organic matter) and higher rate on heavier soils (high in clay or organic matter). Subsequent postemergence application may be made provided the total does not exceed 4 pints LINURON 4L per acre per season.

Postemergence Application—U.S.: Apply 1 1/2 to 3 pints per acre as a nondirected 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 pints LINURON 4L per acre (West of Rocky Mountains, do not exceed 3 pints LINURON 4L per acre). Do not exceed 40 psi spray nozzle pressure as crop injury may result.

LINURON 4L 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 LINURON 4L provided treatments are at least 2 weeks apart. Shorter time intervals between applications may result in injury to the crop. Do not apply LINURON 4L 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 LINURON 4L 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 LINURON 4L. Do not reenter treated areas treated postemergence for 24 hours following application unless protective clothing is worn. See "Replanting".

CELERY

East of Rocky Mountains—Post-transplant Application: Make a single application of 1 1/2 to 3 pints per acre. Apply as a non-directed spray after celery is transplanted and established, but before celery is 5" 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 replant to crops other than celery or carrots within 4 months after application as injury to subsequent crops may result. See "Replanting".

Do not reenter treated areas for 24 hours following application unless protective clothing is worn.

CORN (FIELD)

Preemergence Application—East of Rocky Mountains: Select one of the following herbicide treatments for application as a tank mixture. Make a single application after planting but before crop emerges. Plant seed at least 1 1/4" deep on flat or raised seedbeds only or injury to the crop may result. Do not spray over top of emerged corn.

LINURON 4L at 3/4 to 1 pint per acre (tank mixed with standard registered herbicide for corn) controls triazine-resistant lambsquarters on soils of 1 to 4% organic matter east of the Rocky Mountains.

LINURON 4L + Alachlor

Soil Texture	Product Per Acre	
	1 to 3% Organic Matter LINURON 4L + Alachlor (pts.)	3 to 6% Organic Matter LINURON 4L + Alachlor (pts.)
Coarse Sandy loam	2/3 to 1 1/4 + 3/4 to 1	1 1/4 to 2 + 1 to 1 1/2
Medium Loam, Silt loam, Silt Sandy clay, Sandy clay loam	1 to 1 1/2 + 1 to 1 1/2	1 2/3 to 2 1/2 + 1 1/2 to 2
Fine Silty clay, Silty clay loam, Clay, Clay loam	1 1/4 to 2 + 1 1/2 to 2	2 to 3 + 2 to 2 1/2

Replanting: Corn or soybeans may be replanted within 4 months, see "Replanting".

LINURON 4L + "Rimrod"

Soil Texture	Pints Per Acre	
	1 to 3% Organic Matter LINURON 4L + "Rimrod" (4 lbs./gal.)	3 to 6% Organic Matter LINURON 4L + "Rimrod" (4 lbs./gal.)
Coarse Sandy loam	2/3 to 1 1/2 + 1 1/2 to 2 1/2	1 1/2 to 2 + 2 1/2 to 3 1/2
Medium Loam, Silt loam, Silt Sandy clay, Sandy clay loam	1 to 1 1/2 + 2 to 3 1/2	1 2/3 to 2 1/2 + 3 1/2 to 5 1/2
Fine Silty clay, Silty clay loam, Clay, Clay loam	1 1/4 to 2 + 2 1/2 to 3 1/2	2 to 3 + 3 1/2 to 6 1/2

Replanting: Corn may be replanted within 4 months; after 4 months, see "Replanting".

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LINURON 4L + atrazine (Tank Mixture)—

For improved control of annual grasses, add Alachlor as recommended on Alachlor labeling for Alachlor/atrazine combinations.

Soil Texture	Product Per Acre	
	1 to 2% Organic Matter LINURON 4L + atrazine 80% (pts.) (lbs.)	2 to 5% Organic Matter LINURON 4L + atrazine 80% (pts.) (lbs.)
Coarse Sandy loam	2/3 to 1 + 1/2 to 2/3	1 to 2 + 2/3 to 1 1/4
Medium Loam, Silt loam, Silt Sandy clay, Sandy clay loam	1 to 1 1/2 + 2/3 to 1	1 1/2 to 2 1/2 + 1 to 1 1/2
Fine Silty clay, Silty clay loam, Clay, Clay loam	1 1/2 to 2 1/2 + 2/3 to 1	2 1/2 to 3 + 1 to 2

Replanting: Corn may be replanted within 6 months; after 6 months, see "Replanting".

CORN (FIELD AND SWEET)

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

Use 1 1/4 to 3 pints per acre; add 1 pint surfactant for each 25 gals. spray mixture. For field corn, non-pressure nitrogen solution may be substituted for all or part of the water. Use the lower rate on lighter soils (low in clay or organic matter) and when weeds do not exceed 2" in height; use the higher rate on heavier soils (high in clay or organic matter) for weeds up to 5" in height. Do not reenter treated areas for 24 hours following application unless protective clothing is worn. See "Replanting".

COTTON

Directed Postemergence Application—East of Rocky Mountains: Apply as a directed spray; adjust nozzles to minimize contact to cotton leaves with spray or drift or crop injury may result. Do not spray over top of cotton.

Apply 1 to 1 1/2 pints per acre when cotton is at least 8" tall and emerged weeds do not exceed 2" in height; add 1 pint surfactant for each 25 gals. spray mixture. If needed, a second application at same rate may be made one week or later after initial treatment. Alternatively, after cotton is 20" tall, make a single application of 2 to 3 pints per acre following last cultivation; if emerged weeds are present, add surfactant as directed above.

Note: Do not use on Pima varieties of cotton. Do not graze treated fields or feed forage from treated areas to livestock. Do not feed gin trash to livestock. Do not reenter treated areas for 24 hours following application unless protective clothing is worn. See "Replanting".

HYBRID POPLAR (MIDWEST)

Apply 2 to 4 pints LINURON 4L per acre before bud break in the spring. For application after bud break, apply 2 to 4 pints LINURON 4L 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 pints LINURON 4L per acre should be applied per year.

PARSNIPS

Preemergence Application: Make a single application of 1 1/2 to 3 pints per acre. Apply after planting but before crop emerges. Plant seed at least 1/2" deep. See "Replanting".

POTATOES

Preemergence Application: Make a single application as a broadcast spray after planting but before crop emerges. Plant seed 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. Apply before grasses are 2" tall and before broadcast weeds are 6" tall, preferably just before or when weed seedlings emerge. If emerged weeds are present, add 1 pint surfactant for each 25 gals. spray mixture. In irrigated areas, best results are obtained when application is made to moist soil, followed within 2 weeks by 1" to 2" of sprinkler irrigation (or rainfall). On powder dry soils, irrigate prior to herbicide application and follow with sprinkler irrigation to activate the herbicide.

East of Rocky Mountains: Apply 1 1/2 to 2 1/2 pints per acre on the coarser soils (sandy loams, silt loams; 1 to 2% organic matter) and 2 1/2 to 4 pints per acre on finer soils (silt, clay loams; 2 to 5% organic matter); on soils over 5% organic matter, use 4 pints per acre and apply to emerged weeds (before potatoes emerge).

Wisconsin—Central Sands Area: Apply 1 pint per acre on sands and 2 pints per acre on loamy sands.

Northeast: For improved control of annual grasses (see "Dual" labeling), apply:

Soil Texture	Product Per Acre	
	1 to 3% Organic Matter LINURON 4L + "Dual" BE (pts.) (lbs.)	3 to 5% Organic Matter LINURON 4L + "Dual" BE (pts.) (lbs.)
Coarse Sandy loam	1 to 1 1/2 + 1 1/2	1 1/2 to 2 + 2
Medium Loam, Silt loam, Silt Sandy clay, Sandy clay loam	1 1/2 to 2 + 2	2 to 2 1/2 + 2 1/2 to 3
See Replanting		

SORGHUM

Preemergence Application: Select a registered herbicide treatment for application as a tank mixture with LINURON 4L. Make a single application after planting but before crop emerges. Plant seed at least 1" deep on flat or raised seedbeds only or injury to the crop may result. Do not spray over top of emerged sorghum.

Soil Texture Description	Pints of LINURON 4L per acre	
	Percent Organic Matter in Soil	
	1 to 2%	2 to 4%
Coarse: Sandy Loam	1 1/2 to 1	1 to 1 1/2
Medium: Loam, Silt loam, Silt, Sandy clay, Sandy clay loam	1 to 1 1/2	1 to 2
Replanting: See Replanting on the companion product labeling. Prior to replanting, through seeded preparation including fall or spring plowing is recommended.		

Directed Postemergence Application: Make a single application of LINURON 4L as a directed spray; add 1 pint surfactant for each 25 gals. spray mixture. If sprayer is equipped with skids, shoes or shields, apply 1 pint per acre when sorghum is 12" tall (free standing plants) and weeds are up to 2" in height. Use 1 to 2 pints per acre when sorghum is 15" tall and weeds are 2" to 4" in height. If boom drops are used, apply 1 to 2 pints per 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.

Note: Do not graze or feed plants to livestock within 3 months after postemergence application. See "Replanting". Do not reenter treated areas for 24 hours following application unless protective clothing is worn.

SOYBEANS—CONVENTIONAL TILLAGE

Preemergence Application: For broad spectrum weed control, select one of the following herbicide combination treatments and make a single application after planting but before crop emerges. Plant seed at least 1 1/2" deep on flat or raised seedbeds only or injury to the crop may result. Injury to soybeans may result if application is made to fields with standing water or fields too wet to cultivate. Do not spray over top of emerged soybeans. Do not use on sand or loamy sand nor any soil containing less organic matter than listed below.

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LINURON 4L + Metribuzin DF herbicides

For control of common ragweed, hemp sesbania, jimsonweed, lambsquarters, pigweeds, prickly sida, sicklepod, velvetleaf, spotted spurge, Venice mallow, purslane, carpetweed, Pennsylvania smartweed, and partial control of cocklebur*, use the following:

Soil Texture	Product Per Acre	
	1/2 to 3% Organic Matter in soil LINURON 4L + Metribuzin DF (pts.)	3 to 6% Organic Matter in soil LINURON 4L + Metribuzin DF (pts.)
Coarse Sandy loam	1/2 to 1/2 + 1/4 to 1/4 or (Metribuzin 4L—1/4 to 1/2 pt.)	1/2 to 3/4 + 1/4 to 1/2 or (Metribuzin 4L—1/2 to 1/2 pt.)
Medium Loam, Silt loam, Silt Sandy clay, Sandy clay loam	1/2 to 3/4 + 1/4 to 1/2 or (Metribuzin 4L—1/2 to 1/2 pt.)	3/4 to 1 1/2 + 1/2 to 1/2 or (Metribuzin 4L—1/2 to 3/4 pt.)
Fine Silty clay, Silty clay loam, Cl. y. Clay loam	3/4 to 1 1/2 + 1/2 to 1/2 or (Metribuzin 4L—1/2 to 3/4 pt.)	1 1/2 to 2 + 1/2 to 3/2 or (Metribuzin 4L—3/4 to 1 pt.)

*For improved control of annual grasses, tank mix with Alachlor or "Dual" (per labeling):

Herbicide Recropping/Restrictions

Alachlor Soybeans or field corn may be replanted within 4 months; after 4 months, see "Replanting". Treated vines may be grazed or fed to livestock 60 days after application.

or
"Dual"

Soybeans or field corn may be replanted within 4 months, for rotation crops, see "Replanting" and follow instructions on "Dual" label. Do not graze or feed forage from treated areas to livestock.

Note: Soybean varieties such as Altona, Coker 102 and 156, Govan, NKS 1884, Semmes, Tracy, Vansoy, Terra Vig 505 and 606, Agripro 55, Asgrow 6520, Maple Amber, Portage, Vinton 81, and AP 71 are sensitive to Metribuzin. Injury may occur if Metribuzin is used on these varieties. Before use on any other soybean variety, tolerance to Metribuzin must first be determined. Varieties showing above average tolerance to Metribuzin are Americana Revere, Asgrow 1937, Asgrow 3659, Asgrow 3860, DSR 17, DSR 207, Essex, Fayette, Hisoy 170, Lakota, Lawrence, LOL 4207, NKS 1492, Pride B216, Pride B242, SRF 250, SRF350 P, Union, Wayne, Wells II and William 82; for maximum weed control, use the higher rate (where a range of rates is listed) for the appropriate soil type and organic matter as shown in the following tables.

Injury to soybeans may occur if Metribuzin is used on soils having a calcareous surface layer or pH of 7.5 or higher, or if used in conjunction with soil applied organic phosphate pesticides such as "Dasanit", "Disulfoton", "Mocap", "Nemacur", Phorate, Parathion, "Lorsban", 15G or Counter. Injury may occur if atrazine was applied on the soil the year before use of Metribuzin. Seedling disease, cold weather, deep planting (more than 2"), excessive moisture, high soil pH (pH 7.5 or higher), high salt concentration, or drought may weaken soybean seedlings and increase possibility of crop injury.

Do not use on sand nor loamy sand.

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: If initial seeding fails to produce a stand, treated fields may be replanted to soybeans, do not rework soil; do not retreat field with a second application as injury to the crop may result. Do not replant treated areas to any crop other than soybeans within four months after treatment as injury to subsequent crops may result. See "Replanting".

LINURON 4L*

Soil Texture	Product Per Acre	
	1/2 to 3% Organic Matter LINURON 4L (pts.)	3 to 6% Organic Matter LINURON 4L (pts.)
Coarse Sandy loam	3/4 to 1 1/4	1 1/4 to 2
Medium Loam, Silt loam, Silt Sandy clay, Sandy clay loam	1 to 1 1/2	1 1/2 to 2 1/2
Fine Silty clay, Silty clay loam, Clay, Clay loam	1 1/4 to 2	2 to 3

*For improved control of annual grasses, add as per the following labeling:

Herbicide Recropping/Restrictions

Alachlor Soybeans or field corn may be replanted within 4 months; after 4 months, see "Replanting".

or
"Dual"

Soybeans or field corn may be replanted within 4 months; for rotation crops, see "Replanting" and follow instructions on "Dual" label. Do not graze or feed forage from treated areas to livestock.

or
"Prowl"

Soybeans or field corn may be replanted within 4 months; crops listed in "Replanting" may be planted the following year.

or
"Surflan"

Soybeans may be replanted within 4 months; after 4 months, see "Replanting" but do not plant potatoes within 12 months. Do not use treated vines for feed or forage.

For control of black nightshade, apply:

Soil Texture	Product Per Acre 1 to 3% Organic Matter	
	LINURON 4L (pts.)	Alachlor (qts.)
Coarse Sandy loam	3/4 to 1 1/2	2
Medium Loam, Silt loam, Silt Sandy clay, Sandy clay loam	1 to 1 1/2	2 1/2 to 3
Fine Silty clay, Silty clay loam, Clay, Clay loam	1 1/4 to 2	3

Do not use on sand or loamy sands.

Replanting: Soybeans or field corn may be replanted within 4 months; after 4 months, see "Replanting".

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

Soil Texture	Product Per Acre 1 to 3% Organic Matter	
	LINURON 4L (pts.)	"Dual" 8E (qts.)
Coarse Sandy loam	3/4 to 1 1/2	2
Medium Loam, Silt loam, Silt Sandy clay, Sandy clay loam	1 to 1 1/2	2
Fine Silty clay, Silty clay loam, Clay, Clay loam	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 4 months; after 4 months, see "Replanting".

Preemergence Following Trifluralin or "Prowl" Preplant: Where Trifluralin or "Prowl" has been used as a preplant incorporated treatment (according to directions on product label), apply LINURON 4L preemergence (after planting and before emergence of soybeans) as a separate operation using rates recommended below for LINURON 4L alone. For rotation crops, follow instructions on Trifluralin or "Prowl" label and see "Replanting". Plant seed at least 1 3/4" deep on flat or raised seedbeds only or injury to the crop may result. Injury to soybeans may result if application is made to fields with standing water or fields too wet to cultivate. Do not spray over top of emerged soybeans. Do not use on sand or loamy sand nor any soil containing less organic matter than listed below.

LINURON 4L Alone—If weeds have emerged, add 1 pint surfactant for each 25 gals. spray mixture

Soil Texture	Pints LINURON 4L Per Acre	
	1/2 to 3% Organic Matter	3 to 6% Organic Matter
Coarse Sandy loam	1 to 1 1/2	1 1/2 to 3
Medium Loam, Silt loam, Silt Sandy clay, Sandy clay loam	1 1/4 to 2 1/2	2 1/2 to 4
Fine Silty clay, Silty clay loam, Clay, Clay loam	1 1/2 to 2 1/2	2 1/2 to 5 (over 5% organic matter, us. C & S)

Replanting: Soybeans or field corn may be replanted within 4 months; after 4 months, see "Replanting".

Preemergence followed by Postemergence (Directed) Application: Both preemergence and postemergence (directed to weeds with minimum contact with soybean plants) treatment may be required for control of:

Annual morningglory—LINURON 4L preemergence (any combination listed) followed by a directed postemergence spray of LINURON 4L + 2,4-DB.

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Broadleaf signalgrass—LINURON 4L + Metribuzin DF preemergence followed by a directed postemergence spray of LINURON 4L, if needed.

Cocklebur (common)—LINURON 4L + Metribuzin DF preemergence followed by a directed postemergence spray of LINURON 4L + 2,4-DB.

Hemp Sesbania—LINURON 4L + Metribuzin DF preemergence followed by a directed postemergence application of LINURON 4L, if needed.

Prickly sida—LINURON 4L + Metribuzin DF preemergence followed by a directed postemergence spray of LINURON 4L, if needed.

Velvetleaf—LINURON 4L + Metribuzin DF preemergence followed by a directed postemergence application of LINURON 4L, if needed.

Other weeds—Directed postemergence application of LINURON 4L should be used as a backup treatment for listed preemergence treatments and will extend the duration and degree of weed control obtained with preemergence treatment. Postemergence treatment should be used only as needed.

For dosage rates, refer to "Preemergence" and "Directed Postemergence" sections under "Soybeans".

SOYBEANS—MINIMUM OR NO-TILLAGE

Preemergence to soybeans Postemergence to Weeds: LINURON 4L preemergence to soybeans may be used for preemergence and postemergence control of many broadleaf weeds and grasses 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. Apply with ground equipment immediately before, during or after planting but before crop emerges; maintain constant agitation of spray mixture.

LINURON 4L Alone

Soil Texture	Pints LINURON 4L per acre	
	1/2 to 2% Organic Matter	2 to 5% Organic Matter
Coarse Sandy loam	1 to 1 1/2	1 1/2 to 3
Medium Loam, Silt loam, Silt Sandy clay, Sandy clay loam	1 1/4 to 2 1/2	2 1/2 to 4
Fine Silty clay, Silty clay loam, Clay, Clay loam	1 1/2 to 2 1/2	2 1/2 to 5 (over 5% organic matter, use 5 pts.)

Replanting: Soybean* or field corn may be replanted within 4 months; after 4 months, see "Replanting".

If small seedling weeds are present, add 1 pint surfactant for each 25 gals. spray mixture for improved contact activity. On larger weeds, add Paraquat or Glyphosate or "Bronco" as described under these combinations; these treatments will also suppress some perennial weeds.

LINURON 4L + Aalachlor or "Dual" 8E or "Surflan"—will improve control of grasses and volunteer small grains.

LINURON 4L + Aalachlor* (or "Dual" or "Surflan") + Paraquat or Glyphosate—Thoroughly mix LINURON 4L and companion herbicide in spray tank first according to directions, then add paraquat, or Glyphosate as directed under Paraquat Combinations or Glyphosate Combinations below.

Soil Texture	Product Per Acre	
	1/2 to 3% Organic Matter LINURON 4L + Aalachlor* (pts.)	3 to 6% Organic Matter LINURON 4L + Aalachlor* (pts.)
Coarse Sandy loam	1/4 to 1 1/2 + 2	1 1/2 to 2 1/2 + 2 1/2
Medium Loam, Silt loam, Silt Sandy clay, Sandy clay loam	1 1/4 to 2 + 2 1/2	2 to 3 + 3
Fine Silty clay, Silty clay loam, Clay, Clay loam	1 1/4 to 2 1/4 + 2 1/2	2 1/4 to 3 1/2 + 3

*For improved control of annual grasses and volunteer small grains, add as per labeling.

Herbicide	Recropping/Restrictions
Aalachlor	Soybeans or field corn may be replanted within 4 months; after 4 months, see "Replanting."
or "Dual"	Soybeans or field corn may be replanted within 4 months; for rotation crops see "Replanting" and follow instructions on "Dual" label. Do not graze or feed forage from treated areas to livestock.
or "Surflan"	Do not use treated vines for feed or forage. Soybeans may be replanted within 4 months, after 4 months, see "Replanting" and do not plant potatoes within 12 months.

For control of black nightshade apply with paraquat or "Glyphosate" as shown below:

Soil Texture	Products Per Acre	
	1 to 3% Organic Matter	
	LINURON 4L (pts.)	Aalachlor (qts.)
Coarse Sandy loam	1/4 to 1 1/2	2
Medium Loam, Silt loam, Silt Sandy clay, Sandy clay loam	1 to 2	2 1/2 to 3
Fine Silty clay, Silty clay loam, Clay, Clay loam	1 1/4 to 2 1/4	3

Replanting: Soybeans or field corn may be replanted within 4 months; after 4 months, see "Replanting".

Paraquat Combinations—Select and tank mix in water one of the above treatments; then add 1/4 to 1/2 lbs. active ingredient per acre for control of emerged weeds. Use the higher rate for weeds 4" to 6" tall. As the last ingredient, add 1/2 pint surfactant such as Loveland Activator 90 per 100 gals. of spray mixture. Maintain constant agitation. Use 20 to 60 gals. of water per acre. Use the higher gallonage for dense stubble or vegetation.

Glyphosate Combinations—Select and tank mix one of the above treatments. As last ingredient, add 1 1/2 quarts of Glyphosate per acre for control of emerged annual weeds or 2 to 4 quarts per acre for control of emerged perennial and annual weeds. Use 20 to 30 gals. of water per acre.

Soil Texture	Products Per Acre	
	1/2 to 5% Organic Matter in soils	
	LINURON 4L (pts.)	"Bronco" (b) (qts.)
Coarse Sandy loam	1/4 to 2	3 1/4 to 5
Medium Loam, Silt loam, Silt Sandy clay, Sandy clay loam	1 1/4 to 2 1/2	4 to 5
Fine Silty clay, Silty clay loam, Clay, Clay loam	1 1/4 to 3	4 to 5

(a) Do not use on soils with less than 1/2% organic matter nor on sand, loamy sand, or muck soils as crop injury may result.

(b) Use the higher rate for dense stubble, heavy crop residue, or heavy weed population.

Replanting Soybeans: If initial seeding fails to produce a stand, treated fields may be replanted to soybeans; do not rework soil; do not retreat field with a second application as injury to the crop may result. Do not replant treated areas to any crop other than soybeans within four months after treatment as injury to subsequent crops may result. See "Replanting".

SOYBEANS—CONVENTIONAL OR MINIMUM OR NO-TILLAGE

Directed Postemergence Application: Apply LINURON 4L alone or as tank mixture with 2,4-DB, 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 ("K" series or equivalent) per middle mounted or an oiling shoe or gauge wheel. For band treatment, use two nozzles per row mounted on an oiling shoe or gauge wheels, one of each side of row. To avoid spray drift, which may cause crop injury, do not exceed nozzle pressure of 25 psi nor use nozzle tips smaller than 8002 F-Jet (or equivalent) and do not spray under windy conditions. Add 1 pint surfactant for each 25 gals. spray mixture. For best results, use a preemergence treatment (such as LINURON 4L) or cultivation to control early weed growth and to increase the differential between height of soybeans and weeds.

NOTE: Do not use on soils with less than 1/2% organic matter. Do not apply more than 2 pints LINURON 4L 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. See "Replanting". Do not reenter treated areas for 24 hours following application unless protective clothing is worn.

LINURON 4L Alone—For soybeans at least 8" high and when weeds do not exceed 2" in height, apply 1/2 to 1 pint per acre. Make a second application at same rate if new flush of weeds occur.

For soybeans at least 12" high and when weeds do not exceed 4" in height, make a single application of 1 to 2 pints per acre. Alternatively, make a split application of 1 pint per acre followed by a second application at the same rate after 1 week or later.

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LINURON 4L + 2,4-DB—For soybeans at least 8" high and when weeds do not exceed 4" in height, apply 1 pint LINURON 4L plus 1/3 pint 2,4-DB per acre. A second application may be made if needed, but do not make more than two applications per season.

NONCROP WEED CONTROL

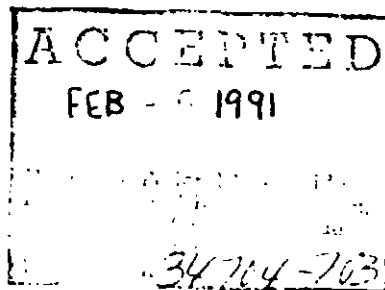
For short-term control of annual weeds or non-cropland areas such as roadsides and fence rows—apply 2 to 6 pints LINURON 4L per acre in 40 to 100 gals. of water. For best results, apply shortly before weed growth begins or at early seedling stage of growth. For control of established annual weeds, add surfactant at rate of 2 qts. per 100 gals. of spray mixture and apply as a thorough coverage spray during periods when daily temperatures exceed 70°F. and before weed growth exceeds 8" in height.

Do not reenter treated areas for 24 hours following application unless protective clothing is worn.

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Platte warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for the purposes stated on such label only when used in accordance with the directions under normal use conditions. It is impossible to eliminate all risks inherently associated with the use of the 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 Platte. In no case shall Platte 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. Platte 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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