

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

May 12, 2021

Ann Tillman Agent for Tessenderlo Kerley, Inc. 2910 N. 44th Street, Suite 300 Phoenix, AZ 85018 USA

Subject: PRIA Label Amendment – Expansion of Potato Use Product Name: LINEX® 4L AGRICULTURAL HERBICIDE EPA Registration Number: 61842-21 Application Date: 7/23/2015 Decision Number: 507778

Dear Ann Tillman:

The application referred to above, submitted under the Federal Insecticide, Fungicide and Rodenticide Act, as amended is acceptable under FIFRA sec 3 (c)(5). You must submit and/or cite all data required for registration/registration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Sarah Meadows by phone at 703-347-0505, or via email at <u>meadows.sarah@epa.gov</u>.

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Sincerely,

KellyTinckell

Kelly Tindall, Acting Chief Herbicide Branch Registration Division (7505P) Office of Pesticide Programs

# Linex<sup>®</sup> 4L Agricultural Herbicide

Linuron Liquid			
LINURON	GROUP	7	HERBICIDE
Active Ingradiant		P <sub>v</sub>	Waight

Active Ingredient	By Weight
Linuron 3-(3, 4-dichlorophenyl)-1-	
methoxy-1-methylurea	40.6%
Other Ingredients	59.4%
TOTAL	100.0%

This product contains 4 lbs. of Linuron per gallon.

EPA Reg. No. 61842-21

EPA Est. No. 37429-GA-001 Net Contents:

# KEEP OUT OF REACH OF CHILDREN CAUTION

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

## **FIRST AID**

**IF SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

For medical emergencies involving this product, call toll free 1-866-374-1975. See Label for Additional Precautions and Directions for Use.



Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 24040004

61842-21

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**Caution!** Harmful if swallowed or absorbed through the skin. Avoid contact with eyes, skin, or clothing. Prolonged or frequently repeated skin contact may cause an allergic reaction in some individuals. Remove contaminated clothing and wash clothing before reuse.

## PERSONAL PROTECTIVE EQUIPMENT

#### Mixers and loaders must wear:

- Coveralls over long-sleeved shirt and long pants.
- Chemical resistant footwear.
- Chemical resistant gloves made of any waterproof material, including barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, and viton ≥ 14 mils.

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

- Coveralls over long-sleeved shirt and long pants.
- Chemical-resistant gloves made of any waterproof material including barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, and viton ≥ 14 mils.
- Shoes plus socks.

#### FOR CHEMIGATION APPLICATIONS TO POTATO AND SORGHUM, mixers and loaders must use:

Closed liquid mixing/loading systems.

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

#### ENGINEERING CONTROLS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

# FOR CHEMIGATION APPLICATIONS TO BULB, mixers and loaders must also:

 Wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R or P filter; <u>OR</u> a NIOSH-approved elastomeric particulate respirator with any R or P filter; <u>OR</u> a NIOSHapproved powered air purifying respirator with HE filters.

# 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**

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply where weather conditions favor drift from areas treated. Do not contaminate water when cleaning of equipment or disposing of equipment washwater and rinsate.

#### **Ground Water Advisory:**

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

#### Surface Water Advisory:

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

NON-TARGET ORGANISM ADVISORY: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

# 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.

#### WEED RESISTANCE MANAGEMENT

For resistance management, please note that Linex® 4L Agricultural Herbicide is a Group 7 herbicide. Any weed population may contain or develop plants naturally resistant to Linex® 4L Agricultural Herbicide and any other Group 7 herbicides. Weed species with acquired resistance to Group 7 herbicides may eventually dominate the weed population if Group 7 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of these species by Linex® 4L Agricultural Herbicide or other Group 7 herbicides. Users should scout before and after application. Suspected herbicide-resistant weeds may be identified by these indicators:

- Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.

To delay herbicide resistance:

- Avoid the consecutive use of Linex® 4L Agricultural Herbicide or other target site of action Group 7 herbicides that might have a similar target site of action, on the same weed species.
- Use tank mixtures or premixes with herbicides from different target site of action Groups as long as the involved products are all registered for the same use, have different sites of action and are both effective at the tank mix or prepack rate on the weed(s) of concern (an herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides).
- Base herbicide use on a comprehensive Integrated Pest Management (IPM) program.
- Scout fields prior to application to identify the weed species present and their growth state to determine if the intended application will be effective.
- Contact your local extension specialist, certified crop advisors and/or integrated weed management recommendations for specific crops and resistant weed biotypes.

Report any incidence of non-performance of this product against a particular weed species to your Tessenderlo Kerley, Inc. representative. If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemicals means to remove escapes, as practical, with the goal of preventing further seed production.

# INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

# AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for 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 Workers 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 long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material
- Shoes plus socks
- Chemical-resistant headgear for overhead exposure

#### MANDATORY SPRAY DRIFT MANAGEMENT

#### **Ground Boom Applications:**

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a medium or coarser droplet size (ASABE \$572.3).
- Do not apply when wind speeds exceed 10 mph at the application site.
- Do not apply during temperature inversions.

#### **Boom-less Ground Applications:**

- Applicators are required to use a Medium or coarser droplet size (ASABE S572.1) for all applications.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

#### SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.

BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

#### IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

#### **Controlling Droplet Size – Ground Boom**

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

#### **BOOM HEIGHT- Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

#### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates and inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

#### WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

#### **Boomless Ground Applications:**

Setting nozzles at the lowest effective height will help reduce the potential for spray drift.

#### PRODUCT INFORMATION

Linex<sup>®</sup> 4L Agricultural Herbicide is a liquid herbicide to be mixed in water and applied as a spray for selective control of weeds on certain crops. It is non-corrosive to equipment, non-flammable and non-volatile.

Linex<sup>®</sup> 4L Agricultural Herbicide 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 the amount of chemical applied, soil texture, rainfall and other conditions. Soils high in clay or organic matter require higher dosages than soil low in clay or organic matter to obtain equivalent herbicide performance. Moisture is required to activate the chemical; best results occur if rainfall (or irrigation) occurs within 2 weeks of application. In the Columbia River Basin, use Linex® 4L Agricultural Herbicide only if crop is sprinkler irrigated.

Linex<sup>®</sup> 4L Agricultural Herbicide may also be used to control emerged weeds. Results vary with rate applied and environmental conditions; best results are obtained on succulent weeds growing under conditions of high humidity and temper-atures of 70°F or higher. Addition of a surfactant to the spray (where recommended) increases contact effects of Linex<sup>®</sup> 4L Agricultural Herbicide.

Since the effect of Linex® 4L Agricultural Herbicide varies with soil, uniformity of application and environmental conditions, it is suggested that growers limit their first use to small areas. Observe all precautions and limitations on labeling of all products used in mixtures.

#### GRASSES AND BROADLEAF WEEDS CONTROLLED BY LINEX® 4L AGRICULTURAL HERBICIDE

#### PREEMERGENCE USE (Germinating Weeds) -

Linex<sup>®</sup> 4L Agricultural Herbicide at full specified rates provides good to excellent control of annual weeds as they germinate including:

#### **Broadleaf Weeds**

Amaranth, Palmer Amaranthus palmeri Carpetweed Mollugo verrticillata Chickweed, Common Stellaria media Dog Fennel (Mayweed Chamomile) Anthemis cotula Galinsoga Galinsoga sp. Nettleleaf Goosefoot Chenopodium murale Lambsquarters Chenopodium album Mustard, Tumble Sisymbrium altissimum Mustard, Blue Chorispora tenella Mustard, Wallflower (Treacle) Erysimum cheiranthoides Pigweed, Prostrate Amaranthus blitoides Pigweed, Redroot Amaranthus retroflexus Pigweed, Smooth Amaranthus hvbridus Prickley Lettuce Lactuca serriola Purslane, Common Portulaca oleracea Radish, Wild Raphanus raphanistrum Ragweed, Common Ambrosia artemisiifolia Shepherd's-purse Capsella bursa-pastoris Smartweed, Pennsylvania Polygonum pennsylvanicum Tansymustard, Pinnate Descurainia pinnata Waterhemp, Common Amaranthus rudis Waterhemp Amarathus tuberculatis

#### Grasses

Barnyardgrass (Watergrass) Echinochloa crus-galli Canarygrass Phalaris canariensis Large Crabgrass Digitaria sanguinalis Green Foxtail Setaria viridis Yellow Foxtail Setaria glauca Goosegrass Eleusine indica Fall Panicum Panicum dichotomiflorum Linex® 4L Agricultural Herbicide will provide partial control (suppression) of the following hard to control weeds:

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

The lower dosage rates are effective on the lighter soils and the higher rates on heavier soils and on the more difficult to control broadleaf weeds and grasses. Sufficient moisture of 0.5 to 1 inch on moist soils; 1 to 2 inches on dry soils, in the form of rainfall or sprinkler irrigation is necessary after treatment to carry chemical into the root zone of germinating weeds; best results are obtained when this occurs within 2 weeks after application.

A good seed bed must be prepared before application of Linex® 4L Agricultural Herbicide 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 Linex® 4L Agricultural Herbicide 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.

**POSTEMERGENCE OR BURNDOWN USE -**Linex® 4L Agricultural Herbicide will control up to 2 inch grasses and up to 6 inch broadleaves. For best results, apply to seedling grasses and broadleaves.

#### **Broadleaf Weeds**

Annual morningglories only - see Ipomoae spp. Entire Leaf Morningglory Ipomoae hederacea integriuscula Ivy Leaf Morningglory Ipomoae hederacea Pitted Morningglory Ipomoae ipola & I. lacunose Carpetweed Mollugo verrticillata Chickweed, Common Stellaria media Cocklebur, Common Xanthium strumarium Dayflower, Common Commelina communis Dog Fennel (Mayweed Chamomile) Anthemis cotula Fiddleneck, Coast Amsinckia intermedia Florida beggarweed Desmodium tortuosum Florida pusley (Florida Purslane) Richardia scabra Groundsel, Common Senecio vulgaris Knawel Scleranthus annuus Kochia Kochia scoparia (for best results tankmix with other burndown herbicide)

Lambsquarters Chenopodium album Mustard, Tumble Sisymbrium altissimum Mustard, Blue Chorispora tenella Mustard, Wallflower (Treacle) Erysimum cheiranthoides Nettleleaf Goosefoot Chenopodium murale Pigweed, Prostrate Amaranthus blitoides Pigweed, Redroot Amaranthus retroflexus Pigweed, Smooth Amaranthus hybridus Prickly lettuce Lactuca serriola Prickly sida (Teaweed) Sida spinosa Purslane, Common Portulaca oleracea Ragweed Common Ambrosia artemisiifolia Sesbania, Hemp Sesbania herbacea Sicklepod Senna obtusifolia Smartweed, Pennsylvania Polygonum pennsylvanicum Velvetleaf (Buttonweed) Abutilon theophrasti Wild Buckwheat Polygonum convolvulus

#### Grasses

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

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 Linex® 4L Agricultural Herbicide. Postemergence application can also provide control of emerging susceptible weed seedlings.

#### **TANK MIXING**

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Linex<sup>®</sup> 4L Agricultural Herbicide is frequently used in tankmix combination with other registered herbicides to provide effective broad spectrum control of weeds. Linex<sup>®</sup> 4L Agricultural Herbicide may be tank mixed or followed with sequential applications of other products registered for the same crops as Linex<sup>®</sup> 4L Agricultural Herbicide. Applications of full or reduced rates of other products may be tank mixed with Linex<sup>®</sup> 4L Agricultural Herbicide, provided:

- the tank mix product is labeled for the same timing, method of application, adjuvants and use restrictions as Linex® 4L Agricultural Herbicide.
- the tank mixture is not specifically prohibited on the label of the tank mix product.

 the tank mix combination is compatible as determined by a 'jar test' described in the TANK MIX COMPATIBILITY TESTING section below.

When tank mixing Linex® 4L Agricultural Herbicide with any other approved pesticide, always read and follow all use directions, restrictions, and precautions of both Linex® 4L Agricultural Herbicide and the tank mix partner(s). When tank mixing, the most restrictive labeling applies.

#### TANK MIX COMPATIBILITY TESTING

Perform a jar test prior to tank mixing to ensure compatibility of Linex® 4L Agricultural Herbicide to other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour. If the mixture balls up, forms flakes, sludges, gels, oily films or layers, or other precipitates, it is not compatible and the tank mix combination should not be used.

#### **REPLANTING:**

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

#### **CROP ROTATION DIRECTIONS:** *East of the Rocky Mountains*

- Any crop registered for the rate of linuron that was applied may be replanted immediately.
- Any crop may be planted after 4 months, except for cereals, where only barley, oats, rye, and wheat may be planted.
- Cereal crops not listed above may be planted after 12 months.

#### West of the Rocky Mountains

- Any crop registered for the rate of linuron that was applied may be replanted immediately.
- Do not plant any other crop until 12 months after the last Linex<sup>®</sup> 4L Agricultural Herbicide application as crop injury may result.

#### **APPLICATION DIRECTIONS**

Linex<sup>®</sup> 4L Agricultural Herbicide must be used only in accordance with directions on this label. Injury to or loss of desirable trees or other plants may result from failure to observe the following restrictions:

#### RESTRICTIONS

Do not apply by air. Do not apply to sand or loamy sand. Do not use on soils with less than 1% organic matter. Do not apply using handheld equipment. All applications with handheld equipment are prohibited.

**GROUND APPLICATION:** Use a fixed-boom power sprayer 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 hydraulic 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 injury to the crop 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<sup>®</sup> 4L Agricultural Herbicide immediately after use. Nozzle tips and screens should be removed and cleaned separately. Flush tank, pump, hoses and boom with several changes of water.

Draining or flushing equipment on or near desirable trees or other plants or in areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots may injure these plants. Linex® 4L Agricultural Herbicide 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:** Mix proper amount of Linex® 4L Agricultural Herbicide into necessary volume of water; for preemergence applications, non-pressure nitrogen solution may be substituted for all or part of the water. Where use of surfactant is recommended dilute with 10 parts of water and add as last ingredient to nearly full tank. All dosages of Linex® 4L Agricultural Herbicide (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-inch band where row spacing is 42 inches. Where range of dosages is given, use the lower rate on lighter soil (low in clay or organic matter) and the higher rate on heavier soils (high in clay or organic matter).

Linex 4L Agricultural Herbicide may be used under the following conditions but the chance of crop injury is increased:

- 1. Applying at the upper level of the rate range
- 2. Applying at or near plant emergence
- 3. Applying to soils low in organic matter.

For postemergence application use the lower rate on smaller weeds and the higher rate on larger weeds.

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

- 1. Measure one pint of intended spray water or fertilizer solution into a jar.
- 2. Add in the order given, the intended ingredients, shaking after each addition.

- a) Surfactants (spreaders), acidifiers, compatibility agents and activators: add 1 teaspoon for each pint/100 gallons.
- b) Dry ingredients (wettable powders, dry flowables): add 1 tablespoon for each pound/100 gallons.
- c) Soluble ingredients: add 1 tablespoon for each pound/100 gallons.
- d) Flowables: add 1 teaspoon for each pint/100 gallons.
- e) Spreaders/stickers: add 1 teaspoon for each pint/100 gallons.
- 3. The final mixture should be uniform and smooth with no evidence of coagulation occurring.

If incompatibility is evident, begin test again with a compatibility agent added first. Six drops is equivalent to four ounces per 100 gallons. If this does not smooth the mixture, try higher concentrations or 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 active ingredients; some combinations will not tank mix.

## **CHEMIGATION INSTRUCTIONS**

Apply this product only through one or more of the following types of systems: sprinkler including center pivot, lateral move, end 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 in the crop can result from the 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® 4L Agricultural Herbicide 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 precautions and limitations on the label of all products used in mixtures.

Linex<sup>®</sup> 4L Agricultural Herbicide should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set or hand moved irrigation systems. Agitation is recommended. Shut off injection equipment after treatment and continue to operate irrigation system until Linex<sup>®</sup> 4L Agricultural Herbicide 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® 4L Agricultural Herbicide 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 precautions and limitations on the label of all products used in mixtures.

Linex<sup>®</sup> 4L Agricultural Herbicide should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set or hand moved irrigation systems. Agitation is recommended. Shut off injection equipment after treatment and continue to operate irrigation system until Linex<sup>®</sup> 4L Agricultural Herbicide has been cleared from the last sprinkler head.

#### LABELED USES

#### BULB

Tulip, Calla Lily, Daffodil, Dutch Iris (California) RESTRICTIONS:

- Do not apply more than 2 pints (1 lb. ai) per acre per application.
- Do not apply more than 2 pints (1 lb. ai) per acre per year.
- Do not make more than 2 applications per year.
- The minimum number of days between applications is 30.

After planting of bulbs, settle the soil with sprinkler irrigation (rainfall will serve the same purpose). Before emergence of plants (bulbs) apply 2 pints (1 lb. ai) Linex® 4L Agricultural Herbicide per acre in a minimum of 20 gallons of water per acre. Treat only during growing season.

#### CORN (FIELD)

#### East of Rocky Mountains Only

#### **RESTRICTIONS:**

- Do not apply more than 1.5 pints (0.75 lb. ai) per acre per application.
- Do not apply more than 1.5 pints (0.75 lb. ai) per acre per year.
- Do not make more than 2 applications per year.
- The minimum number of days between applications is 30.
- Do not apply within 75 days of harvest.Do not spray over top of emerged corn.

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

Use Linex® 4L Agricultural Herbicide alone at 1 to 1.5 pts. (0.5 - 0.75 lb. ai) per acre. Use lower rates on lighter soils and higher rates on heavier soils. For improved grass and broadleaf weed residual, tank mix Linex® 4L Agricultural Herbicide with such products registered for field corn as atrazine, pendimethalin, or S-metolachlor. See the table below for listed tank mix rates for Linex® 4L Agricultural Herbicide and atrazine.

#### Linex<sup>®</sup> 4L Agricultural Herbicide + Atrazine:

	Rate Per Acre		
	1-2%	2-5%	
	<b>Organic Matter</b>	<b>Organic Matter</b>	
	pts Linex® 4L	pts Linex® 4L	
Soil Texture	Agricultural	Agricultural	
	Herbicide (pts) +	Herbicide (pts) +	
	Atrazine (lb ai)	Atrazine (lb ai)	
Coarse:	0.67 to 1	1 to 1.5	
Sandy loam	(0.34 – 0.5 lb. ai)	(0.5 – 0.75 lb. ai)	
	+	+	
	0.4 to 0.5	0.5 to 1	
Medium:	1 to 1.5	1.5	
Loam, Silt	(0.5 - 0.75  lb. ai)	(0.75 lb. ai)	
Loam, Silt,	(0.5 - 0.75 10. al) +	(0.75 lb. al) +	
Sandy Clay	0.5 to 0.8	0.8 to 1.2	
Loam	0.5 10 0.0	0.0 10 1.2	
Fine:	$1.22 \pm 1.5$	1.5	
Silty Clay,	1.33 to 1.5 (0.67 – 0.75 lb. ai)	(0.75 lb. ai)	
Silty Clay	(0.07 - 0.75  ID. al)	(0.75 lb. al) +	
Loam, Clay,	0.6 to 0.8	0.8 to 1.6	
Clay Loam	0.0 10 0.0	0.0 10 1.0	

**Directed Postemergence Application:** Make a single application as a directed spray after corn is at least 15 inches high (measured to the highest leaf surface on free standing plants). Do not spray over top of corn. Apply only when there is sufficient differential between height

of corn and weeds so that the directed spray thoroughly covers all weed foliage without contact of upper leaves or whorl of corn by spray or drift, as such contact may cause crop injury. Early cultivation (rotary hoe or other suitable equipment) will aid in achieving proper differential between height of corn and weeds.

Use 1.25 to 1.5 pints (0.625 - 0.75 lb. ai) per acre; add 1 pint of surfactant for each 25 gallons of spray mixture.

Non-pressure nitrogen solution may be substituted for all or part of the water. Use the lower rate on lighter soils (low in clay or organic matter) and when weeds do not exceed 2 inches in height; use the higher rate on heavier soils (high in clay or organic matter) for weeds up to 5 inches in height.

#### COTTON

#### **East of Rocky Mountains**

**RESTRICTIONS:** 

- Do not spray over top of cotton.
- Do not apply more than 1.5 pints (0.75 lb. ai) per acre per application.
- Do not apply more than 1.5 pints (0.75 lb. ai) per acre per year.
- Do not make more than 1 application per year.
- Do not apply within 76 days of harvest.
- Do not use on Pima varieties of cotton.

**Directed Postemergence Application:** Apply as a directed spray, adjust nozzles to minimize contact to cotton leaves with spray or drift as crop injury may result.

Make first application of 1 pt (0.5 lb. ai) per acre when cotton is at least 12 inches tall. Use 1 to 1.5 pints (0.5 - 0.75 lb. ai) per acre when cotton is at least 18 inches tall and emerged weeds do not exceed 2 inches in height. Add 1 pint surfactant for each 25 gallons spray mixture. Alternatively, after cotton is 20 inches tall, make a single application of 1.5 pints (0.75 lb. ai) per acre following last cultivation; if emerged weeds are present, add surfactant as directed above.

#### **HYBRID POPLAR**

#### Midwest

#### **RESTRICTIONS:**

- Do not apply more than 3 pints (1.5 lbs. ai) per acre per application.
- Do not apply more than 3 pints (1.5 lbs. ai) per acre per year.
- Do not make more than 2 applications per year.
- The minimum number of days between applications is 30.
- Do not apply this product to hybrid poplar through any type of irrigation system.

Apply 2 to 3 pints (1 - 1.5 lbs. ai) Linex® 4L Agricultural Herbicide per acre before bud break in the spring. For application after bud break, apply 2 to 3 pints (1 - 1.5 lbs. ai) Linex® 4L Agricultural Herbicide 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.

## KENAF

#### **RESTRICTIONS:**

- Do not apply more than 2 pints (1.0 lb. ai) per acre per application.
- Do not apply more than 2 pints (1.0 lb. ai) per acre per year.
- Do not make more than 1 application per year.
- Do not apply this product to kenaf through any type of irrigation system.

Linex<sup>®</sup> 4L Agricultural Herbicide may be used on Kenaf being managed for the production of fiber or pulp.

**Directed Application:** Make a single application of 1 to 2 pints (0.5 - 1 lb. ai) per acre as a directed spray to the base of 8 to 10 inch tall Kenaf plants. Direct the spray to contact the Kenaf plants at no higher than 3 inches above the soil surface. The addition of a surfactant to the spray mixture may increase the activity of Linex® 4L Agricultural Herbicide on emerged weeds. The addition of MSMA at 2.66 pints per acre to the spray mixture may improve the control of emerged grasses.

### PARSNIP

#### **RESTRICTIONS:**

- Do not apply more than 3 pints (1.5 lbs. ai) per acre per application.
- Do not apply more than 3 pints (1.5 lbs. ai) per acre per year.
- Do not make more than 1 application per year.
- Do not apply this product to parsnip through any type of irrigation system.

**Preemergence Application:** Make a single application of 1.5 to 3 pts. (0.75 - 1.5 lbs. ai) per acre. Apply after planting but before crop emerges. Plant seed at least 0.5 inches deep.

## ΡΟΤΑΤΟ

#### **RESTRICTIONS:**

- Not for use in California, Southern Arizona or New Mexico.
- Do not spray over top of emerged potatoes.
- Do not apply more than 3 pints (1.5 lbs. ai) per acre per application.
- Do not apply more than 3 pints (1.5 lbs. ai) per acre per year.
- Do not make more than 1 application per year.

**East of Rocky Mountains:** Apply 1.5 to 2.5 pts. (0.75 – 1.25 lbs. ai) per acre on the lighter soils (sandy loams, silt loams; 1 to 2% organic matter) and 2.5 to 3 pts. (1.25 – 1.5 lbs. ai) per acre on heavier soils (silts, clay loams; 2 to 5% organic matter). On soils over 5% organic matter, use 3 pts. (1.5 lbs. ai) per acre to emerged weeds (before potatoes emerge). For improved annual grass and

nutsedge control, see table below for listed tank mixes with S-metolachlor.

West of Rocky Mountains: Apply 1.0 to 1.25 pints (0.5 - 0.625 lbs. ai) per acre on sandy loams; apply 1.0 to 1.5 pints (0.5 - 0.75 lbs. ai) per acre on medium texture soils (loam, silt loam, silt, sandy clay and sandy clay loam). Use lower rates on soils with low organic matter.

For improved annual grass and nutsedge control, Linex 4L Agricultural Herbicide may be tank mixed with other herbicides registered for use in this crop. When tank mixing, use the most restrictive label limitations for each of the products being used in the tank mix.

For example, see table below for listed tank mixes with S-metolachlor.

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

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

Linex <sup>®</sup> 4L Agricultural Herbicide + S-Metolachlor			
	1-3%	3-5%	
	<b>Organic Matter</b>	<b>Organic Matter</b>	
	Linex <sup>®</sup> 4L	Linex <sup>®</sup> 4L	
Soil Texture	Agricultural	Agricultural	
	Herbicide (pts)	Herbicide (pts)	
	+ S-metolachlor	+ S-metolachlor	
	(lb. ai)	(lb. ai)	
Coarse:	1 to 1.5	1.5 to 2	
Sandy loam	(0.5 – 0.75 lb. ai)	(0.75 – 1 lb. ai)	
	+	+	
	0.95 to 1.43	1.9	
Medium:			
Loam, Silt	1 to 1.5	1.5	
Loam, Silt,	(0.5 – 0.75 lb. ai)	(0.75 lb. ai)	
Sandy Clay,	+	+	
Sandy Clay	0.48 to 0.76	0.76 to 1.1	
Loam			
Fine:	1.5 to 2	$2 \pm 25$	
Silty Clay,	1.5  to  2	2  to  2.5	
Silty Clay	(0.75 – 1 lb. ai) +	(1 – 1.25 lb. ai) +	
Loam, Clay,	1.9	2.4 to 2.5	
Clay Loam	1.7	2.4 10 2.3	

#### SORGHUM

#### **RESTRICTIONS:**

- Do not apply over top of emerged sorghum.
- Do not apply more than 2 pints (1 lb. ai) per acre per application.

- Do not apply more than 2 pints (1 lb. ai) per acre per year.
- Do not make more than 2 applications per year.
- The minimum number of days between
- applications is 30.
- Do not apply 75 days within harvest.
- Do not graze or feed plants to livestock within 3 months after direct postemergence application.

#### **Preemergence** Application

Select a registered herbicide treatment for application as a tank mixture. Make a single application after planting but before crop emerges. In soil with 1 to 2% organic matter, apply 0.625 to 1.25 pints (0.313 - 0.625 lb. ai) per acre on sandy loam and 1 to 1.5 pints (0.5 - 0.75 lb. ai) 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 pints (0.5 - 0.75 lb. ai) per acre on sandy loam and 1 to 2 pints (0.5 - 0.75 lb. ai) 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 pints (0.5 - 0.75 lb. ai) per acre on sandy loam and 1 to 2 pints (0.5 - 1 lb. ai) per acre on loam, silt loam, silt, sandy clay or sandy clay loam. Plant seed at least 1 inch deep on flat or raised seedbeds only as injury to the crop may result.

#### **Directed Postemergence Application:**

Make a single application of Linex® 4L Agricultural Herbicide 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 pint (0.5 lb. ai) per acre when sorghum is 12 inches tall (free standing plants) and weeds are up to 2 inches in height; use 1 to 2 pints (0.5 - 1 lb. ai) per acre when sorghum is 15 inches tall and weeds are 2 to 4 inches in height. Apply only when there is sufficient differential between height of sorghum and weeds so that the directed spray thoroughly covers all weed foliage without contact of upper leaves or whorl of sorghum by spray or drift as such contact may cause crop injury.

#### SOYBEAN

#### **RESTRICTIONS:**

- Do not apply more than 1.6 pints (0.8 lb. ai) per acre per application.
- Do not apply more than 1.6 pints (0.8 lb. ai) per acre per year.
- Do not make more than 1 application per year.
- Soybeans planted too shallow have increased potential for injury.
- Do not apply this product to soybeans through any type of irrigation system.
- Do not spray over the top of emerged soybeans.
- Do not feed treated forage or hay to livestock.

#### Preemergence application- all tillage types

Apply Linex® 4L Agricultural Herbicide prior to soybean emergence at the rates listed in Table 1. For improved control or for a broader spectrum of control, Linex® 4L Agricultural Herbicide may be tank mixed with such herbicides as S-metolachlor, metribuzin, thifensulfuron+chlorimuron, chlorimuron, pendimethalin, S-metolachlor + metribuzin, and flumioxazin+chloransulam-methyl. For specific tank mix rate directions for Linex® 4L Agricultural Herbicide + Metribuzin, see Table 2.

#### No-till or Minimum till

#### Timing

Apply Linex® 4L Agricultural Herbicide up to 30 days prior to soybean planting. For maximum in-season residual control, apply no earlier than 14 days before planting.

#### Adjuvants and tank mixes

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

- For best results, use 1 gallon crop oil concentrate per 100 gallons of spray.
- Alternatively, use 1 qt nonionic surfactant per 100 gallons of spray.
- To burndown larger than 2 inch grasses and 6 inch broadleaves, tank mix Linex® 4L Agricultural Herbicide with such herbicides as 2,4-D LVE, thifensulfuron+chlorimuron, glyphosate and/or paraquat. When tank-mixing Linex® 4L Agricultural Herbicide with glyphosate, substitute nonionic surfactant (1 qt per 100 gallons spray) for crop oil concentrate. Follow the glyphosate manufacturer's instructions for addition of ammonium sulfate.
- 1 pt (0.5 lb ai) Linex® 4L Agricultural Herbicide + 1 pt 2,4-D LVE + 1 gallon Crop oil concentrate per 100 gallons spray will burn down the following winter annual weeds (up to 6 inches in size) as well as the weeds included in "Postemergence Use" at the beginning of this label.

Wallflower, bushy Erysimum repandum Chickweed, common Stellaria media Chickweed, mouseear Cerastium fontanum sp. vulgare Evening-Primrose cutleaf Oenothera laciniata Deadnettle, red\* Lamium purpureum Henbit Lamium amplexicoule Pennycress, field Thlaspi arvence Purselane, common Portulaca oleracea Shepherds-purse Capsella bursa-pastoris Speedwell, corn Veronica agrestis Speedwell, field Veronica arvensis Aster, white heath Symphyotrichum pilosum \*suppression

# Table 1. Preemergence rates of Linex® 4L

#### Agricultural Herbicide for soybeans - all tillage types

#### Linex® 4L Agricultural Herbicide Pts. Per Acre

	1-3%	3-6%
Soil Texture	<b>Organic Matter</b>	<b>Organic Matter</b>
Coarse:	1 to 1.25	1.25 to 1.6
Sandy loam	(0.5 – 0.625 lb. ai)	(0.625 – 0.8 lb. ai)
Medium:		
Loam, Silt	1 to 1.6	15 16
Loam, Silt,	(0.5 - 0.8  lb. ai)	1.5 - 1.6 (0.75 - 0.8 lb. ai)
Sandy Clay	(0.3 - 0.8  ID. al)	(0.73 - 0.8  ID. al)
Loam		
Fine:	1.25 to 1.6	1.6
Silty Clay,	(0.625 – 0.8 lb. ai)	(0.8 lb. ai)

Silty Clay		
Loam, Clay,		
Clay Loam		

# Table 2. Tank mix of Linex® 4L AgriculturalHerbicide + Metribuzin 75 DF\*

Soil Texture	1-3% Organic Matter pts Linex® 4L Agricultural Herbicide + lbs Metribuzin	3-5% Organic Matter pts Linex® 4L Agricultural Herbicide + lbs Metribuzin
Coarse:	0.5	0.5 to 0.75
Sandy	(0.25 lb. ai)	(0.25 – 0.375 lb. ai)
loam	+	+
	0.167 to 0.25	0.25 to 0.5
Medium:		
Loam, Silt	0.5 to 0.75	0.5 to 1.5
Loam,	(0.25 – 0.375 lb. ai)	(0.25 – 0.75 lb. ai)
Silt, Sandy	+	+
Clay	0.25 to 0.5	0.25 to 0.5
Loam		
Fine:		
Silty Clay,	0.75 to 1.5	1.5 to 1.6
Silty Clay	(0.375 – 0.75 lb. ai)	(0.75 – 0.8 lb. ai)
Loam,	+	+
Clay, Clay	0.25 to 0.5	0.5 to 0.75
Loam		

\* read and follow all precautions and restrictions on the Metribuzin label, especially with respect to soybean varietal sensitivity and environmental conditions that may favor soybean injury from Metribuzin.

# WHEAT (WINTER)

**RESTRICTIONS:** 

- Do not apply more than 2 pints (1 lb. ai) per acre per application.
- Do not apply more than 2 pints (1 lb. ai) per acre per year.
- Do not make more than 1 application per year.
- Do not apply this product to wheat through any type of irrigation system.
- Do not apply after wheat has reached the boot stage of maturity nor when maximum daily temperature exceeds 60°F.; do not use Linex® 4L Agricultural Herbicide in combination with other pesticides (except as noted), surfactants, or nitrogen solution after wheat has emerged.
- Do not treat wheat where winter climatic conditions have caused heaving of plants, or where plants are lacking in vigor due to poor emergence, insect damage, disease, high alkalinity, or other causes.

#### (DRILL-PLANTED) IDAHO, OREGON, WASHINGTON

Plant seed at least 1 inch deep; when seed is planted during abnormally dry weather, treat after soil has been settled by rainfall or irrigation. Apply as a broadcast spray prior to emergence of wheat or to semi-dormant wheat plants. Application to actively growing plants may result in temporary yellowing (chlorosis) of wheat.

Crop injury may result where severe winter stress, disease or insect damage follows application, and also from failure to observe correct planting depth and soil type restrictions.

**West of Cascade Range:** Make a single application of Linex® 4L Agricultural Herbicide at 2 pts. (1 lb. ai) per acre as soon as possible after planting. If wheat and weeds have emerged, apply before weeds are 3 inches to 4 inches tall.

### Where Average Annual Rainfall Exceeds 16 Inches

**Fall Treatment:** For early fall-planted wheat (seeded before September 10), apply 1 to 1.5 pts. (0.5 - 0.75 lb. ai) Linex® 4L Agricultural Herbicide per acre either before or after wheat has emerged but before weeds are 2 inches tall. Treatment after October 1 generally gives best results. Do not apply after soil freezes in the fall.

**Spring Treatment:** Apply 1 to 1.25 pts. (0.5 - 0.625 lb. ai) Linex **®** 4L Agricultural Herbicide per acre as soon as wheat starts to grow in the spring. Application after weeds have reached a height of 2 inches may give poor results.

### Where Average Annual Rainfall is 10 to 16 Inches:

**Fall or Winter Treatment:** After wheat is planted in the fall, apply 1 to 1.25 pts. (0.5 - 0.625 lb. ai) Linex® 4L Agricultural Herbicide per acre when sufficient moisture is available to germinate wheat seed. Apply either before or after wheat has emerged, but before weeds are 2 inches tall and before the soil freezes. Application later than March 1 may give poor results.

## Where Average Rainfall is 10 to 20 Inches:

**Fall or Spring Treatment:** Apply 0.5 pt. (0.25 lb. ai) Linex® 4L Agricultural Herbicide plus 0.25 lb. bromoxynil per acre as a tank mixture, either in the fall after wheat has emerged but before soil freezes or in the spring as soon as soil thaws; apply before weeds are 2 inches tall or across.

# STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

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

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows:

Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure 2 more times. Then offer for recycling if available 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.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire or other emergency, call 1-866-374-1975 day or night.

**NOTICE TO BUYER:** Purchase of this material does not confer any rights under patents of countries outside of the United States.

#### WARRANTY AND LIMITATION OF DAMAGES

Tessenderlo Kerley, Inc. (TKI) warrants only that this product conforms to the product description on the label. Except as warranted by this label, TKI makes no representation or warranty or guarantee, whether expressed or implied, of fitness for a particular purpose of merchantability, or of product performance. TKI does not authorize any agent or representative to make any such

representation, warranty or guarantee. To the extent consistent with applicable law, TKI's maximum liability for breach of its warranty or for use of this product, regardless of the form of action, shall be limited to the purchase price of this product. To the extent consistent with applicable law, buyer and user acknowledge and assume all risks and disposal liability resulting from handling, storage, use and disposal of this product. If buyer does not agree with or accept these warranty and liability limitations, buyer may return the unopened container to the place of purchase for full refund. Buyer's use of this product shall constitute conclusive evidence of buyer's acknowledgement and acceptance of the forgoing limitations. Some jurisdictions do not allow the exclusion of implied warranties or the limitation of certain damages, so the above may not apply. The purchase, delivery, acceptance and use of this product by the buyer are subject to the terms and conditions of seller's sales invoice for this product.

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[EPA Approval Date]

Tessenderlo Kerley, Inc., 2910 N 44<sup>th</sup> Street, Suite 100, Phoenix, AZ 85018 USA 1-602-889-8300

#### TKI Customer Service: 1-800-525-2803

#### **TKI Safety Hotline: 1-866-374-1975**

#### CHEMTREC Safety Hotline: 1-800-424-9300



# SUPPLEMENTAL LABELING LINEX<sup>®</sup> 4L Agricultural Herbicide

# For Weed Control in Potato

READ THE ENTIRE LABEL FOR LINEX<sup>®</sup> 4L AGRICULTURAL HERBICIDE AND FOLLOW ALL APPLICABLE DIRECTIONS, RESTRICTIONS AND PRECAUTIONS BEFORE PROCEEDING WITH THE USE DIRECTIONS CONTAINED IN THIS SUPPLEMENTAL LABELING.

This labeling must be in the possession of the user at the time of pesticide application. This label expires May 12, 2024.

"Label" as used in this supplemental labeling refers to the label booklet for LINEX 4L and this supplement.

# Linex<sup>®</sup> 4L Agricultural Herbicide

EPA Reg. No. 61842-21

# FOR WEED CONTROL IN POTATOES

# **KEEP OUT OF REACH OF CHILDREN**

# CAUTION

## **DIRECTIONS FOR USE**

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

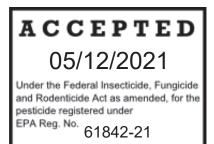
## **PRODUCT INFORMATION**

Linex 4L Agricultural Herbicide is a liquid herbicide to be mixed in water and applied as a spray for selective control of weeds on certain crops. It is non-corrosive to equipment, non-flammable and non-volatile.

Linex 4L Agricultural Herbicide 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 the amount of chemical applied, soil texture, rainfall and other conditions. Soils high in clay or organic matter require higher dosages than soil low in clay or organic matter to obtain equivalent herbicide performance. Moisture is required to activate the chemical; best results occur if rainfall (or irrigation) occurs within 2 weeks of application. In the Columbia River Basin, use Linex 4L Agricultural Herbicide only if crop is sprinkler irrigated.

Linex 4L Agricultural Herbicide may also be used to control emerged weeds. Results vary with rate applied and environmental conditions; best results are obtained on succulent weeds growing under conditions of high humidity and temper-atures of 70°F or higher. Addition of a surfactant to the spray (where recommended) increases contact effects of Linex 4L Agricultural Herbicide.

Since the effect of Linex 4L Agricultural Herbicide varies with soil, uniformity of application and environmental conditions, it is suggested that growers limit their first use to small areas. Observe all precautions and limitations on labeling of all products used in mixtures.



## POTATO RESTRICTIONS

- Not for use in California, Southern Arizona or New Mexico.
- Do not spray over top of emerged potatoes.
- Do not apply more than 3 pints (1.5 lbs. ai) per acre per application.
- Do not apply more than 3 pints (1.5 lbs. ai) per acre per year.
- Do not make more than 1 application per year.

**East of Rocky Mountains:** Apply 1.5 to 2.5 pts. (0.75 - 1.25 lbs. ai) per acre on the lighter soils (sandy loams, silt loams; 1 to 2% organic matter) and 2.5 to 3 pts. (1.25 - 1.5 lbs. ai) per acre on heavier soils (silts, clay loams; 2 to 5% organic matter). On soils over 5% organic matter, use 3 pts. (1.5 lbs. ai) per acre to emerged weeds (before potatoes emerge). For improved annual grass and nutsedge control, see table below for listed tank mixes with S-metolachlor.

West of Rocky Mountains: Apply 1.0 to 1.25 pts. (0.5 - 0.625 lbs. ai) per acre on sandy loams; apply 1.0 to 1.5 pts. (0.5 - 0.75 lbs. ai) per acre on medium texture soils (loam, silt loam, silt, sandy clay and sandy clay loam). Use lower rates on soils with low organic matter.

For improved annual grass and nutsedge control, LINEX 4L may be tank mixed with other herbicides registered for use in this crop. When tank mixing, use the most restrictive label limitations for each of the products being used in the tank mix.

For example, see table below for listed tank mixes with S-metolachlor.

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

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

	1-3% Organic Matter Linex 4L Agricultural Herbicide (pts) + S-Metolachlor (lb. ai)	3-5% Organic Matter Linex 4L Agricultural Herbicide (pts) + S-Metolachlor (lb. ai)
Soil Texture		
Coarse: Sandy loam	1 to 1.5 (0.5 – 0.75 lb. ai) +	1.5 to 2 + 2 (0.75 – 1 lb. ai) +
	0.95 to 1.43	1.9
Medium:		
Loam, Silt	1 to $1.5 (0.5 - 0.75 \text{ lb. ai})$	1.5 (0.75 lb. ai)
Loam, Silt,	+	+
Sandy Clay, Sandy Clay	0.48 to 0.76	0.76 to 1.1
Loam		
Fine: Silty Clay,	1.5 to 2 (0.75 – 1 lb. ai)	2 to 2.5 (1 – 1.25 lb. ai)
Silty Clay Loam, Clay,	+	+
Clay Loam	1.9	2.4 to 2.5

Linex 4L Agricultural Herbicide + S-Metolachlor

Linex<sup>®</sup> and NovaSource<sup>®</sup> are registered trademarks of Tessenderlo Kerley, Inc. Tessenderlo Kerley, Inc. 2910 N. 44<sup>th</sup> Street, Suite 300 Phoenix, AZ 85018 USA **1-602-889-8300 TKI Customer Service: 1-800-525-2803 TKI Safety Hotline: 1-866-374-1975** 

CHEMTREC Safety Hotline: 1-800-424-9300