

Du Pont Lorox SP Herbicide

E.I. du Pont de Nemours & Company, Inc.
Agricultural Products
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This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that you:

1. Submit/cite all data or other material required for registration/reregistration of your product under FIFRA section 3(c)(5) and FIFRA section 4 when the Agency requires all registrants of similar products to submit such data.

2. Add the phrase "EPA Registration No. 352-562" to your label before you release the product for shipment.

3. Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Robert J. Taylor *JKW*
Product Manager (25)
Fungicide-Herbicide Branch
Registration Division (H7505C)

Enclosure

56096:I:WP50:Taylor:WP25-4:KEVRIC:09/16/92:10/15/92

REGISTRATION CODE 0000-072

PACKAGE SIZE

2 - 2 POUND POUCHES/BAG
5 - 4 POUND BAGS/CARTON



LOROX® SP

HERBICIDE

DISPERSIBLE GRANULES IN WATER SOLUBLE PACKETS

ACTIVE INGREDIENT

Linuron [3-(3,4-dichlorophenyl)-1-methoxy-1-methylurea].....50%

INERT INGREDIENTS.....

50%

TOTAL 100%

EPA Reg. No. 352-XXX

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

ACCEPTED
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 352-562

CAUTION ! HARMFUL IF SWALLOWED. CAUSES EYE IRRITATION. MAY IRRITATE NOSE, THROAT AND SKIN.

Avoid breathing dust or spray mist. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after handling.

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.

For medical emergencies involving this product, call toll free 1-800-441-3637.

ENVIRONMENTAL HAZARDS

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

CAREFULLY OPEN THE OUTER BAG AND IMMEDIATELY DROP THE INNER PACKET(S) INTO THE SPRAY TANK. DO NOT OPEN THE INNER PACKETS OR EXCESSIVELY HANDLE THE INNER PACKETS. MOISTURE WILL CAUSE BREAKAGE.

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 dust powder or 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 "Lorox" SP 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).

GENERAL INFORMATION

Du Pont "Lorox" SP Herbicide is a water dispersible granule formulation contained in a water soluble packet. Each packet is premeasured to contain 2 pounds of herbicide and there are 2 packets in each outer barrier bag. There are 5 outer barrier bags in each carton. Do not excessively handle the water soluble packets or expose them to moisture because this will cause breakage. Do not touch the packets with wet hands or place them on wet surfaces. Protect unused packets by resealing the outer barrier bag.

"Lorox" SP is to be mixed in water and applied as a spray for selective control of weeds in certain crops and for non-selective weed control on non-cropland areas. It is non-corrosive to equipment, non-flammable and non-volatile.

"Lorox" SP is an effective preemergence treatment of soybeans, asparagus, carrots, corn, hybrid poplar, parsnips, potatoes and sorghum for control of weeds listed below. "Lorox" SP 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.

"Lorox" SP 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 "Lorox" SP, where spray nozzles are adjusted so that weeds are sprayed but the crop is not, may be used in emerged asparagus (large ferns), corn (field and sweet), sorghum and soybeans to effectively control susceptible emerged seedling weeds.

"Lorox" SP 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 "Lorox" SP on soils of 1/2% to 3% organic matter. The combination of "Lorox" SP plus Du Pont LEXONE DF Herbicide (or Du Pont LEXONE 4L Herbicide) 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 "Lorox" SP 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 "Lorox" SP 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.

"Lorox" SP 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 "Lorox" SP 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):

"Lorox" SP, at recommended rates, controls annual weeds such as:

Broadleaves

Florida beggarweed	Mustards
Carpetweed	Nettleleaf goosefoot
Chickweed	Pigweeds
Common dayflower	Purslane (common)
Florida purslane (Florida pusley)	Wild radish
Galinsoga	Ragweed (common)
Lambsquarters	Smartweed (Pennsylvania)

Grasses

Barnyardgrass (watergrass)	Foxtails (including giant)
Canarygrass	Gorsegrass
Crabgrasses	Fall panicum

Partial Control

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

"Lorox" SP 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.

"Lorox" SP applied preemergence, before emergence of soybeans, asparagus, 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 "Lorox" SP continues to control weeds for some time as the crop becomes better able to compete. Should weed seedlings begin to break through the preemergence treatment in significant numbers, secondary weed control procedures should be implemented; these include cultivation and postemergence herbicide application.

A good seed bed must be prepared before application of "Lorox" SP as crop injury may result if application is made to ground which is cloddy or compacted resulting in improperly planted seed. Plant seed to depth specified. Surface of the soil should not be cultivated or disturbed after application of "Lorox" SP 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 "Lorox" SP.

Note: Consult "Amiben", atrazine, "Bronco", "Dual" 8E, "Lasso", paraquat, propazine, "Prowl", "Ramrod", "Roundup", "Surflan", and "Treflan" labels for additional weeds controlled when "Lorox" SP is used in conjunction with these herbicides.

POSTEMERGENCE USE (Emerging Seedling Weeds):

"Lorox" SP, at recommended rates, controls weeds such as:

Broadleaves

Annual morningglory	Lambsquarters
Carpetweed	Mustards
Cocklebur (common)	Nettleleaf goosefoot
Common dayflower	Pigweeds
Common ragweed	Prickly sida (teaweed)
Dog fennel	Purslane (common)
Fiddleneck (amsinckia)	Sesbania
Florida beggarweed	Sicklepod
Florida purslane (Florida pusley)	Smartweed (Pennsylvania)
Groundsel	Velvetleaf (buttonweed)
Knawel	Wild buckwheat

Grasses

Annual ryegrass	Fall panicum
Barnyardgrass (watergrass)	Foxtails (including giant)
Broadleaf signalgrass	Goosegrass
Canarygrass	Rattail fescue
Crabgrasses	Texas panicum

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 degrees F or higher. Addition of a surfactant to the spray (where recommended) increases contact effects of "Lorox" SP. Application will also provide control of emerging susceptible weed seedlings for an extended period of time.

Note: Consult bromoxynil, "Butoxone", and "Butyrac" 2001 labels for additional weeds controlled when "Lorox" SP is used in conjunction with these herbicides. Best results are obtained under conditions of high humidity and temperatures over 70 degrees F. Control of emerged weeds under drought stress is usually impractical.

DIRECTIONS FOR USE

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

"Lorox" SP Herbicide should be used only in accordance with recommendations on this label or in separate published Du Pont 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.

Du Pont will not be responsible for losses or damages resulting from use of this product in any manner not specifically recommended by Du Pont. User assumes all risk associated with such non-recommended use.

SPRAY PREPARATION: To prepare an application of "Lorox" SP follow the directions below:

1. Begin with a clean spray tank. It is important that spray equipment is clean and free of existing pesticide deposits before using "Lorox" SP.
2. Fill tank 1/4 to 1/2 full with clean water. Begin agitation.
3. Add required number of "Lorox" SP packets. Allow the packets to dissolve and the chemical to fully disperse before adding other pesticides or spray adjuvants. Continue agitation.

NOTE: To add "Lorox" SP packets, open the outer barrier bag and drop the packets directly in to water. The barrier bag is NOT soluble in water. DO NOT place in spray tank. Keep remaining packets in the barrier bag, close the bag tightly and store in a dry place.

4. Once "Lorox" SP is fully dispersed, resume filling the spray tank with clean water. Other materials may be added at this time. Other materials should be added to the tank in the following order:

1. Dry formulations such as wettable powders or dry flowables.
2. Liquid flowables.
3. Emulsifiable concentrates, surfactants, and crop oil concentrates.
4. Water-based solutions and liquid fertilizers.

5. Complete filling the tank with water. Allow all components to become fully dispersed. Maintain agitation throughout the spraying operation. Use "Lorox" SP spray preparations the same day as mixed or product degradation may occur. If allowed to settle, thoroughly reagitrate and remix before using.

6. When spraying is complete, thoroughly clean application equipment. Flush tank, pump, hoses and boom with several changes of water after removing nozzle tips and screen (clean these parts separately).

NOTE: Do not use "Lorox" SP when liquid fertilizer solutions or suspensions are intended to be the carrier. "Lorox" SP is intended to be used only when water is the carrier. Liquid fertilizer solutions or suspensions may be added as spray additives, but should not exceed 10% of the total finished spray volume. Fertilizers must be the last components added to the tank, after the "Lorox" SP has fully dispersed.

EQUIPMENT-SPRAY VOLUMES AND PRESSURES: Application is limited to a ground Loom 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.

USE RATES: All rates of "Lorox" SP (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 42". Where a range of dosages is given, use the lower rate on coarser soils (low in clay or organic matter) and the higher rate on finer soils (high in clay or organic matter); for postemergence application, use the lower rate on smaller weeds and the higher rate on larger weeds.

Use rates of "Lorox" SP are expressed as pounds of formulated product per acre. "Lorox" SP is premeasured in 2 pound water soluble packets. Add whole packets only. DO NOT attempt to open the packets.

Number of Acres Treated per Packet of "Lorox" SP at Various Use Rates

RATE PER ACRE (POUNDS)	1 PACKET WILL COVER (ACRES)
1/4	8
1/3	6
1/2	4
3/4	2 2/3
2/3	3
1	2
2	1
3	2/3
4	1/2

For use rates other than those listed in the table above, divide the product use rate (in pounds) into 2 (pounds of product per packet) to determine the number of acres that one packet will treat. For example, if the product use rate is 1 1/2 pounds per acre:

$$\frac{2 \text{ pounds per packet}}{1.5 \text{ pounds per acre}} = 1.33 \text{ acres per packet}$$

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 "Lorox" SP 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 the Rocky Mountains: Carrots or celery may be planted 4 months after last application; do not plant any other crop until 1 year after the last application as injury may result.

CROP USES

ASPARAGUS

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

Direct Seeded or Newly Planted Crowns: Do not exceed 4 lbs total per acre per season; do not use surfactant or fertilizer solution in spray mixture.

Preemergence Application: Make a single application of 2 to 4 lbs per acre after planting seed 1 1/2" deep in coarse soil and 1" deep in fine soils. During planting operation, spray activated charcoal ("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 lbs per acre when ferns are in 6" to 18" stage and weeds are not over 4" tall.

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

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

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

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

In California, dudain melon and annual nightshade are controlled.

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

CARROTS

Preemergence Application--Florida, Michigan, Ohio, and Wisconsin: Make a single application of 1 to 2 lbs per acre in Florida and 1 to 3 lbs 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 lbs "Lorox" SP per acre per season. Do not apply within 14 days of harvest.

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

"Lorox" SP 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 "Lorox" SP provided treatments are at least 2 weeks apart. Shorter time intervals between applications may result in injury to the crop. Do not apply "Lorox" SP as a tank mixture with Stoddard solvent, surfactants, nitrogen or fertilizer solution, other pesticides, nor when temperature exceeds 85 degrees F as crop injury may result.

Note: Because carrot varieties vary in their resistance, determine tolerance to "Lorox" SP 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 "Lorox" SP. 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 lbs per acre. Apply as a non-directed spray after celery is transplanted and established, but before celery is 8" 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 degrees 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 3/4" deep on flat or raised seedbeds only or injury to the crop may result. Do not spray over top of emerged corn.

"Lorox" SP at 3/4 to 1 lb per acre (tank mixed with standard registered herbicides for corn) controls triazine-resistant lambsquarters on soils of 1 to 4% organic matter east of the Rocky Mts.

"Lorox" SP + "Lasso"

Soil Texture Description	Pounds of "Lorox" SP + Quarts of "Lasso" per acre	
	Percent Organic Matter in Soil	
	1 to 3%	3 to 6%
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 1-2/3 + 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".

"Lorox" SP + "Ramrod"

Soil Texture Description	Pounds of "Lorox" SP + Gallons of "Ramrod" (4 lb/gal) per acre	
	Percent Organic Matter in Soil	
	1 to 3%	3 to 6%
Coarse: Sandy Loam	2/3 to 1-1/3 + 1-1/3 to 2-3/5	1-1/3 to 2 + 2-3/5 to 3-9/10
Medium: Loam, Silt loam, Silt, Sandy clay, Sandy clay loam	1 to 1-2/3 + 2 to 3-1/3	1-2/3 to 2-1/2 + 3-1/3 to 5-1/5
Fine: Silty clay, Silty clay loam, Clay, Clay loam	1-1/4 to 2 + 2-3/5 to 3-9/10	2 to 3 + 3-9/10 to 6-1/5

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

"Lorox" SP + atrazine (Tank Mixture)

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

"Lorox" SP + atrazine

Soil Texture Description	Pounds of "Lorox" SP + Pounds of atrazine 80% per acre	
	Percent Organic Matter in Soil	
	1 to 2%	2 to 5%
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	1-1/3 to 1-2/3 + 3/4 to 1	1-2/3 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 lbs 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".

HYBRID POPLAR (MIDWEST)

Apply to 2 to 4 lbs "Lorox" SP per acre before bud break in the spring.

For application after bud break, apply to 2 to 4 lbs "Lorox" SP per acre as a directed spray. Spray should be directed 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 lbs "Lorox" SP per acre should be applied per year.

PARSNIPS

Preemergence Application: Make a single application of 1 1/2 to 3 lbs 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 broadleaf 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 lbs per acre on the coarser soils (sandy loams, silt loams; 1 to 2% organic matter) and 2 1/2 to 4 lbs per acre on finer soils (silt, clay loams; 2 to 5% organic matter); on soils over 5% organic matter, use 4 lbs per acre and apply to emerged weeds (before potatoes emerge).

Wisconsin-Central Sands Area: Apply 1 lb per acre on sands and 2 lbs per acre on loamy sands.

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

"Lorox" SP + "Dual" 8E

Soil Texture Description	Pounds of "Lorox" SP + Pints of "Dual" 8E per acre	
	Percent Organic Matter in Soil	
	1 to 3%	3 to 5%
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 "Lorox" SP. 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.

"Lorox" SP-Southwest

Soil Texture Description	Pounds of "Lorox" SP per acre	
	Percent Organic Matter in Soil	
	1 to 2%	2 to 4%
Coarse: Sandy Loam	5/8 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" and replanting on the companion product labeling. Prior to replanting, thorough seedbed preparation including fall or spring plowing is recommended.

Directed Postemergence Application: Make a single application of "Lorox" SP 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 lb per acre when sorghum is 12" tall (free standing plants) and weeds are up to 2" in height; Use 1 to 2 lbs per acre when sorghum is 15" tall and weeds are 2" to 4" in height. If boom drops are used, apply 1 to 2 lbs 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 post-emergence 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 3/4" deep or 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. "Lorox" SP + "Lexone" DF*

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

"Lorox" SP + "Lexone" DF*

Soil Texture Description	Pounds Per Acre: "Lorox" SP + "Lexone" DF	
	Percent Organic Matter in Soil	
	1/2 to 3%	3 to 6%
Coarse: Sandy Loam	1/3 to 1/2 OR (Lexone* 4L - 1/4 to 2/5 pt)	1/6 to 1/4 OR (Lexone* 4L - 2/5 to 1/2 pt)
Medium: Loam, Silt loam, Silt, Sandy clay, Sandy clay loam	1/2 to 3/4 + 1/4 to 1/3 OR (Lexone* 4L - 2/5 to 1/2 pt)	3/4 to 1 1/2 + 1/3 to 1/2 OR (Lexone* 4L - 1/2 to 3/4 pt)
Fine: Silty clay, Silty clay loam, Clay, Clay loam	3/4 to 1 1/2 + 1/3 to 1/2 OR (Lexone* 4L - 1/2 to 3/4 pt)	1 1/2 to 2 + 1/2 to 2/3 OR (Lexone* 4L - 3/4 to 1 pt)

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

Herbicide Recropping/Restrictions

"Lasso" Soybeans or field corn may be replanted within 4 months; after 4 months, see "Replanting". Treated vines may be grazed or fed to livestock 40 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 Allona, Coker 102 and 156, C. van, 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 "Lexone". Injury may occur if "Lexone" is used on these varieties. Before use on any other soybean variety, tolerance to "Lexone" must first be determined. Varieties showing above average tolerance to "Lexone" are Americana Revere, Asgrow 1937, Asgrow 3659, Asgrow 3850, DSR 171, DSR 207, Essex, Fayette, Hisoy 170, Lakota, Lawrence, LOL 4207,

NKS 1492, Pride B216, Pride B242, SRF 250, SRF 350 P, Union, Wayne, Wells II and Williams 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 "Lexone" is used on soil: 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", "Disyston", "Mocap", "Nemacur", "Thimet", "Parathion", "Lorsban" 15G or "Counter". Injury may occur if atrazine was applied on the soil the year before use of "Lexone". 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-cultivate, 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".

"Lorox" SP*

Soil Texture Description	Pounds of "Lorox" SP per acre	
	Percent Organic Matter in Soil	
	1/2 to 3%	3 to 6%
Coarse: Sandy Loam	2/3 to 1 1/4	1 1/4 to 2
Medium: Loam, Silt loam, Silt, Sandy clay, Sandy clay loam	1 to 1 2/3	1 2/3 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

"Lasso" 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.

or

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

For control of black nightshade, apply:

"Lorox" SP + "Lasso"

Soil Texture Description	Pounds of "Lorox" SP + Quarts of "Lasso" per acre	
	1 to 3% Percent Organic Matter in Soil	
Coarse: Sandy Loam	3/4 to 1 1/2	2
Medium: Loam,		
Silt loam, Silt, Sandy	1 to 1 2/3	2 1/2 to 3
clay, Sandy clay loam		
Fine: Silty clay, Silty		
clay loam, Clay,	1 1/4 to 2	3
Clay loam		

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:

"Lorox" SP + "Dual" 8E

Soil Texture Description	Pounds of "Lorox" SP + Pints of "Dual" 8E per acre	
	1 to 3% Percent Organic Matter in Soil	
Coarse: Sandy Loam	3/4 to 1 1/2	1 1/2
Medium: Loam,		
Silt loam, Silt, Sandy	1 to 1-2/3	2
clay, Sandy clay loam		
Fine: Silty clay, Silty		
clay loam, Clay,	1 1/4 to 2	2 to 2 1/2
Lay loam		

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 "Treflan" or "Prowl" Preplant: Where "Treflan" or "Prowl" has been used as a preplant incorporated treatment (according to directions on product label), apply "Lorox" SP preemergence (after planting and before emergence of soybeans) as a separate operation using rates recommended below for "Lorox" SP alone. For rotation crops, follow instructions on "Treflan" or "Prowl" labels 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.

"Lorox" SP Alone—If weeds have emerged, add 1 pint surfactant for each 25 gals spray mixture.

"Lorox" SP*

Soil Texture Description	Pounds of "Lorox" SP per acre	
	Percent Organic Matter in Soil	
	1/2 to 2%	2 to 5%
Coarse: Sandy Loam	1 to 1 2/3	1-2/3 to 3
Medium: Loam,		
Silt loam, Silt, Sandy	1 1/4 to 2 1/3	2 1/3 to 4
clay, Sandy clay loam		
Fine: Silty clay, Silty		
clay loam, Clay,	1 1/3 to 2 2/3	2 2/3 to 5
Clay loam		(Over 5% organic matter, use 6 lbs.)

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—"Lorox" SP preemergence (any combination listed) followed by a directed postemergence spray of "Lorox" SP + 2,4-DB.

Broadleaf signalgrass—"Lorox" SP + "Lexone" DF preemergence followed by a directed postemergence spray of "Lorox" SP, if needed.

Cocklebur (common)—"Lorox" SP + "Lexone" DF preemergence followed by a directed postemergence spray of "Lorox" SP + 2,4-DB.

Hemp sesbania—"Lorox" SP + "Lexone" DF preemergence followed by a directed postemergence application of "Lorox" SP, if needed.

Prickly sida—"Lorox" SP + "Lexone" DF preemergence followed by a directed postemergence spray of "Lorox" SP, if needed.

Velvetleaf—"Lorox" SP + "Lexone" DF preemergence followed by a directed postemergence application of "Lorox" SP, if needed.

Other weeds—Directed postemergence application of "Lorox" SP 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: "Lorox" SP 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. "Lorox" SP Alone

"Lorox" SP*

Soil Texture Description	Pounds of "Lorox" SP per acre	
	Percent Organic Matter in Soil	
	1/2 to 2%	2 to 5%
Coarse: Sandy Loam	1 to 1 2/3	1-2/3 to 3
Medium: Loam,		
Silt loam, Silt, Sandy	1 1/4 to 2 1/3	2 1/3 to 4
clay, Sandy clay loam		
Fine: Silty clay, Silty		
clay loam, Clay,	1 1/3 to 2 2/3	2 2/3 to 5
Clay loam		(Over 5% organic matter, use 6 lbs.)

Replanting: Soybeans 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 "Roundup" or "Bronco" as described under these combinations; these treatments will also suppress some perennial weeds.

"Lorox" SP + "Lasso" or "Dual" 8E or "Surflan"—will improve control of grasses and volunteer small grains.

"Lorox" SP + "Lasso" (or "Dual" or "Surflan") + Paraquat or "Roundup"—Thoroughly mix "Lorox" SP and companion herbicide in spray tank first according to directions; then add paraquat, or "Roundup" as directed under Paraquat Combinations or "Roundup" Combinations below.

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"Lorox" SP + "Lasso"

Soil Texture Description	Pounds of "Lorox" SP + Quarts of "Lasso" per acre	
	Percent Organic Matter in Soil	
	1/2 to 3%	3 to 6%
Coarse: Sandy Loam	3/4 to 1 1/2 + 2	1 1/2 to 2 2/5 + 2 1/2
Medium: Loam, Silt loam, Silt, Sandy clay, Sandy clay loam:	1 1/8 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

- "Lasso" 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 "Roundup" as shown below:

"Lorox" SP + "Lasso"

Soil Texture Description	1 to 3% Percent Organic Matter in Soil	
	Pounds of "Lorox" SP +	Quarts of "Lasso" per acre
Coarse: Sandy Loam	3/4 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 lb. active ingredient paraquat 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 "Ortho" X-77 Spreader 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.

Roundup" Combinations-Select and tank mix one of the above treatments. As last ingredient, add 1 1/2 quarts of "Roundup" 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.

"Lorox" SP + "Bronco"-Do not add paraquat or "Roundup" to this combination.

"Lorox" SP + "Bronco"

Soil Texture Description	1/2 to 5% Percent Organic Matter in Soil(s)	
	Pounds of "Lorox" SP +	Quarts of "Bronco" (b) per acre
Coarse: Sandy Loam	3/4 to 2 +	3 1/4 to 5
Medium: Loam, Silt loam, Silt, Sandy clay, Sandy clay loam	1 1/8 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 reenter 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 "Lorox" SP alone or as a 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 mount 1 on 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 T-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 "Lorox" SP) 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 lbs "Lorox" SP 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.

"Lorox" SP Alone-For soybeans at least 8" high and when weeds do not exceed 2" in height, apply 1/2 to 1 lb 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 lbs per acre. Alternatively, make a split application of 1 lb per acre followed by a second application at the same rate after 1 week or later.

"Lorox" SP + 2,4-DB-For soybeans at least 8" high and when weeds do not exceed 4" in height apply 1 lb "Lorox" SP plus 1/5 lb 2,4-DB (13 fl oz "Butyrac" 200 or 1 pint "Butoxone") per acre. A second application may be made if needed, but do not make more than 2 applications per season.

NON-CROP WEED CONTROL

For short-term control of annual weeds on non-cropland areas such as roadsides and fence rows-apply 2 to 6 lbs "Lorox" SP 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 Degrees F and before weed growth exceeds 8" in height.

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

STORAGE AND DISPOSAL

STORAGE: Keep from freezing. Store product in original container only, away from other pesticides, fertilizer, food, or feed.

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

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

NOTICE OF WARRANTY

Du Pont warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Du Pont. In no case shall Du Pont 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. DU PONT MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

- 1 Registered trademark of Union Carbide Agricultural Products Company, Inc. "Amiben" contains 2 lbs chloramben per gal; "Butyrac" 200 contains 2 lbs 2,4-DB per gal.
- 2 Registered trademark of Ciba-Geigy Corporation, "Dual" 8E contains 8 lbs metolachlor per gal.
- 3 Registered trademark of Monsanto Company, "Lasso" contains 4 lbs alachlor per gal. "Roundup" contains 4 lbs glyphosate per gal. "Bronco" contains 2.6 lbs alachlor and 1.04 lbs glyphosate per gal. "Ramrod" contains 4 lbs propachlor per gal.
- 4 Paraquat contains 2 lbs active per gal, paraquat is a restricted use pesticide.
- 5 Registered trademark of American Cyanamid Company, "Prowl" contains 4 lbs pendimethalin per gal.
- 6 Registered trademark of Elanco Products Company, "Surflan" 75W contains 75% W.P. oryzalin, "Surflan" AS contains 4 lbs oryzalin per gal. "Trellan" contains 4 lbs trifluralin per gal.
- 7 Registered trademark of Rhone-Poulenc Inc., "Butoxone" contains 1.75 lbs dimethylamine salt and 2 lbs isooctyl ester of 2,4-DB per gal.
- 8 Registered trademark of Westvaco Corporation.
- 9 Registered trademark of ICI United States, Inc.

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