

JAN 14 1991

Specimen Label

RESTRICTED USE PESTICIDE

May Injure (Phytotoxic) Susceptible, Non-Target Plants

For Retail sale to and use only by Certified Applicators or person under their direct supervision and only for those uses covered by the Certified Applicator's certification.

Commercial certified applicators must also ensure that all persons involved in these activities are informed of the precautionary statements

Tordon* 22K

Weed Killer

For Use In Areas West Of The Mississippi River For The Control Of Susceptible Broadleaf Weeds And Woody Plants On Rangeland And Permanent Grass Pastures, Fallow Cropland, Wheat, Barley and Oats Not Underseeded With A Legume And Flax On Grainland (Which Is Not Flood Or Sub-Irrigated And Not rotated To Broadleaf Crops), Non-Cropland, and On Conservation Reserve Program (CRP) Acres

Active Ingredient(s):

Picloram (4-amino-3,5,6-trichloropicolinic acid),

as the potassium salt 24.4%

Inert Ingredient(s):

75.6%

Acid Equivalent:

Picloram (4-amino-3,5,6-trichloropicolinic acid) - 21.1% - 2 lb/gal

E.P.A. Registration No. 62719-6

E.P.A. Est. 464-MI-1

KEEP OUT OF REACH OF CHILDREN

WARNING

AVISO:

PRECAUCION AL USUARIO:

Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

**CAUSES SUBSTANTIAL BUT
TEMPORARY EYE INJURY**

**• HARMFUL IF INHALED OR
ABSORBED THROUGH SKIN**

Do Not Get In Eyes Or On Clothing

**• Wear Goggles, Face Shield Or Safety
Glasses When Handling • Avoid Contact
With Skin • Wash Thoroughly With Soap
And Water After Handling • Remove
Contaminated Clothing And Wash Before
Reuse • Avoid Breathing Spray Mist**

STATEMENT OF PRACTICAL TREATMENT:

If in eyes, flush with plenty of water for at least 15 minutes. Get medical attention.

Environmental Hazards

Do not apply directly to water or wetlands (swamps, bogs, marshes, and potholes) Do not contaminate water when disposing of equipment washwaters Do not contaminate

water used for irrigation or domestic purposes by cleaning of equipment or disposal of wastes. Do not allow run-off or spray to contaminate wells, irrigation ditches or any body of water used for irrigation or domestic purposes. Do not make application when circumstances favor movement from treatment site.

**See additional precautionary statements
elsewhere on this label.**

NOTICE

Read and understand the entire label before using. Use only according to label directions.

Before buying or using this product, read "WARRANTY
LIMITATIONS AND DISCLAIMER" elsewhere on this label.
If terms are not acceptable, return unopened package a-
once to seller for full refund of purchase price, p.a.d.

Otherwise, use by the buyer or any other user constitutes
acceptance of the terms under WARRANTY LIMITATIONS
AND DISCLAIMER.

IN CASE OF AN EMERGENCY

endangering life or property involving this
product, call collect 517-636-4400

AGRICULTURAL CHEMICAL

**Do Not Ship or Store with Food, Feeds,
Drugs, or Clothing**

**Note: Use In Hawaii limited exclusively
to Supplemental labelling. See Use
Precautions section of this label for
details.**

Tordon* 22K

acres, and Wildlife Openings in Forest and Non-crop Areas.

GENERAL INFORMATION

In areas west of the Mississippi River use TORDON 22K Herbicide to control susceptible broadleaf weeds and woody plants on rangeland and permanent grass pastures, fallow cropland, wheat, barley and oats not underseeded with a legume and flax on grainland (which is not flood or sub-irrigated and not rotated to broadleaf crops), non-cropland, and on Conservation Reserve Program (CRP) acres.

Among the woody plant species controlled are:

aspen	absinth wormwood	junipers/cedars	
blackberries	catclaw acacia	pinon pine	locust
	chaparral species	rabbitbrush	
	fringed sagebrush	scotch broom	Scotch
	gorse		

Among the annual and perennial broadleaf weeds controlled are:

buckwheat, wild	brackenfern	lambsquarters	toadflaxes
	buffalobur	leafy spurge	thistles
	bursage	locoweeds	artichoke
	burweed	lupines	beaumont
	camas	milkweed	bull
	death	ox-eye daisy	Canada
clover	carpetthorn	pigweed	distaff
	crupina	pricklypear cactus	golden
	dock	ragweeds	Italian
	field bindweed	common	musk
	goldenrod	bur	plumeless
	horsenettle	lanceleaf	peach Scotch
	Carolina	western	wavy leaf
white	White	rush skeletonweed	volunteer sunflower
	horseweed	Russian thistle	wild buckwheat
	ironweed	snakeweeds	
	knapweed	sowthistle	
	diffuse	starthistles	
	Russian	Iberian	
	spotted	purple	
	squarrose	yellow	
	larkspurs	St. johnswort	sunflower
	Geyer	fansy ragwort	
	plains	tasajillo	
	tail		

To prevent damage to crops and other desirable plants, read and follow all directions and precautions on this label and container label before using.

DIRECTIONS FOR USE

Do not use for manufacturing or formulating.

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

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

Mix the required amount of TORDON 22K Weed Killer in water and apply as a coarse low pressure spray using ground equipment or aircraft. Use enough spray volume to provide uniform coverage of the weeds. For best results treat when the weeds are growing actively in the spring before full bloom or late summer into fall. Treatments during full bloom or seed stage of some weeds may not give good control.

To prepare the spray, add about half the desired amount of water in the spray tank. Then with agitation, add the recommended amount of TORDON 22K and other registered tank mix herbicides. Finally, with continued agitation, add the rest of the water and additives such as surfactants or drift control and deposition aids.

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WEED CONTROL GUIDELINES FOR TORDON 22K WEED KILLER IN NON-CROPLAND, RANGE AND PASTURE¹

WEED SPECIES ²	RATE PER ACRE	COMMENTS
biennial thistles (bull, musk, plumeless, and scotch Scotch	Fall: ½ pint Spring: 6-8 fl oz with 1.0 lb ae 2,4-D	Apply when thistles are in the rosette stage before bolting in the spring or in the fall prior to soil freeze up.
diffuse and spotted knapweed, fringed sagebrush, snakeweed ³ , yellow starthistle ³ , ox-eye daisy, death camas ³	1 pint	<div>BEST AVAILABLE COPY</div>
absinth wormwood, goldenrod, geyer or plains larkspur ³ , lupines ³ , pricklypear cactus, rabbitbrush sps., locoweeds ³ , common tansy, buffalobur, bursage, crupina	1-2 pints	
Canada thistle, field bindweed, St. Johnswort, perennial sowthistle	1-3 quarts → 2 quarts as a spot treatment. 1-2 pints tank-mixed with 1.0 lb ae of 2,4-D as a broadcast treatment.	Lower rates will require annual re-treatment for several years. → Retreat when control drops below 80%.
dalmatian and yellow toadflax, tall larkspur ³ , Russian knapweed	1-4 quarts → 2 quarts	Lower rates will require annual re-treatment for several years. → Use 2-4 quarts as a spot treatment only.
leafy spurge ³ , rush skeletonweed, tansy ragwort, gorse, juniper		Addition of 1.0 lb ae of 2,4-D may improve control with 1 quart rate. Re-treat when control drops below 80%.

¹ For additional species or more specific rates consult your area's current Weed Control Guide and/or your local DowElanco representative.

² Many seedling annual weeds can be controlled using 1 pint per acre.

³ Denotes poisonous plants.

For rates exceeding 1 quart per acre, apply only as a spot treatment and the total area treated in a single season should not exceed 25% of a landowner's acreage found in any particular watershed.

Local conditions may affect the use of herbicides. State agricultural experiment stations or extension service weed specialists in many states issue recommendations to fit local conditions. Be sure that use of this product conforms to all applicable regulations.

Spot Treatment: To determine the amount of TORDON 22K Weed Killer to be applied to the spray mix, first determine your sprayer output. Mix at the rate of 1 gallon of TORDON 22K Weed Killer per 100 gallons of water. Apply at the rate of 100 gallons of spray mixture per acre. This will provide a rate of 2 pounds of picloram per acre. To prepare smaller amounts of spray solution, mix 2.5 fluid ounces of TORDON 22K per 2 gallons of water. Use proportionately less TORDON 22K per 100 gallons of water to give lower rates of TORDON 22K per acre. For round patches apply as indicated in the table.

Feet across Round Patch to be treated (weed area plus 10 foot border)	Gallons of spray mixture to apply
25	1.0
50	4.5
75	10.0
100	18.0
235 or (1 acre)	100.0

Tank Mixture for Spot or Broadcast Treatment of Susceptible Weeds: TORDON 22K Weed Killer may also be tank mixed with 2,4-D products or other registered herbicides for use on areas having mixed species including those which respond well to 2,4-D. Read and follow all directions and use precautions on other product labels.

Rangeland And Permanent Grass Pastures Insert 3

Use TORDON 22K Weed Killer on rangeland and permanent grass pastures to control susceptible broadleaf weeds and woody plants such as (but not limited to) those shown in the table.

Broadcast Treatment (Ground and Aerial Applications): TORDON 22K Weed Killer can be applied as a broadcast treatment by ground or aerially to control several broadleaf weeds and woody plants. Apply TORDON 22K at the suggested rates of 2 or more gallons of water per acre by air or in 10 or more gallons of water per acre by ground. Re-treat as necessary but do not exceed 1 quart of TORDON 22K per acre per season. Insert 4

Wick Applications: Mix 1 part of TORDON 22K with 2 parts of water to prepare a 33% solution. Apply when weeds are actively growing and are above most desirable plants. For best results, apply before seed head develops into purple flower for best results. Later applications may not stop early season seed production. For ironweed and goldenrod, best results are obtained with applications made prior to early bud stage. Wick applicator should be drained and cleaned after each use. Ropes should be changed when flow is reduced from wear, extended use, poor cleaning or intermittent use. Insert 5

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2,4-D, MCPA, or sulfonyleurea herbicides such as Ally.

Grazing Restrictions: When applying more than 1 quart of TORDON 22K per acre, do not cut grass for feed within two weeks after treatment. Meat animals grazing for up to two weeks after treatment should be removed from treated areas three days prior to slaughter. Do not graze lactating dairy animals on treated areas within two weeks after treatment. TORDON 22K at rates over 1 quart may suppress certain established grasses, such as bromegrass, bluegrass, and buffalograss. However, subsequent grass growth should be improved by release from weed competition.

Barley, Oats, And Wheat Not Underseeded With A Legume And Flex On Grainland (Which Is Not Flood Or Sub-Irrigated And Not Rotated To Broadleaf Crops)

Use TORDON 22K Weed Killer for the control of susceptible annual broadleaf weeds such as (but not limited to) volunteer sunflower, wild buckwheat, lambsquarters, pigweed, Russian thistle, and sowthistle.

Broadcast Treatment (Ground or Aerial Application): TORDON 22K Weed Killer can be applied as a single broadcast treatment by ground or aerially to control several broadleaf weeds by itself or as a tank mix with 2,4-D or MCPA herbicides. Apply TORDON 22K at the rates suggested in the table below in 2 to 5 gallons of water per acre by air or in 5 to 20 gallons per acre by ground. The addition of surfactants may aid control under dry conditions, but may cause injury to grain if used over the top. Read and follow directions and precautions on other product labels when tank mixing.

more than 1/2 fl oz of TORDON 22K per acre during the small grain growing season.

Do not apply TORDON 22K Weed Killer within 50 days before harvest.

Spray mixtures may cause shorter straw on some varieties of cereals but grain yields are usually not affected.

Do not graze or feed forage from treated areas for 2 weeks after treatment. Do not harvest hay from treated grain fields.

Use only on land that will be planted the following year to grass, barley, oats, wheat, flax or fallowed. Do not apply more than 1/2 ounce picloram (1 1/2 fl oz of TORDON 22K) 0.023 lb ae per acre during the small grain growing season.

Spring Wheat, Barley and Oats: Apply from the 3 to 5 leaf stage to the early jointing stage of growth as indicated in the table below. Applications at the 3 to 5 stage occasionally causes slight head malformations and straw shortening but normally does not affect yield.

Durum Wheat: Do not treat durum wheat since some varieties of durum wheat may be injured.

Winter Wheat and Barley: Apply after resumption of active growth in the spring until the early jointing stage.

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USE RATES FOR WHEAT, BARLEY AND OATS¹

Weeds	Weed Growth Stage ²	Grain Growth Stage	Amounts of Each Product Per Acre ³		
			4.0 lb 2,4-D or MCPA	6.0 lb 2,4-D or MCPA	
			TORDON 22K + ae/gal	or	ae/gal
More susceptible species, such as lambsquarters, pennycress, wild mustard, mayweed	3 inches	1) 3-5 leaf	1 fl oz	1/2 pt	1/3 pt
	3-6 inches	2) To early jointing	1 1/2 fl oz	3/4 pt	1/2 pt
Less susceptible species such as volunteer sunflower, wild buckwheat, Russian thistle, pigweed and top growth suppression of Canada thistle, Kochia	1-6 inches	3) To early jointing	1 1/2 fl oz	3/4-1 pt	1/2 pt
					1/2-2/3 pt

¹ For oats, do not tank mix with 2,4-D herbicides.

² For best results, treat when weed have 2 to 4 leaves and are actively growing.

³ When measuring small amounts of TORDON 22K, special care should be taken not to exceed suggested rates.

The dosages recommended equate to 1/4 to 1/2 oz picloram (0.016 - 0.023 lb ae); 4 to 6 oz 2,4-D (0.25 - 0.38 lbs a); 4 to 6 oz MCPA (0.25 - 0.38 lbs ae) per acre.

Delete

~~Flax: Use TORDON 22K to treat flax when 2 to 6 inches tall, before buds begin to form. Apply a tank mixture that delivers 1 fluid ounce TORDON 22K plus 1/2 pint MCPA Amine Herbicide per acre. For best results and crop safety, apply when flax is 2 to 3 inches tall and the weeds are young and growing well. Treat wild buckwheat before it begins to form a vine. For aerial or ground treatment, use enough water dilution to provide adequate spray coverage, usually 1 to 4 gallons per acre by air or 5 to 20 gallons per acre by ground equipment.~~

~~The use of some preplant herbicides such as Eptam or Trellan, or the presence of crop stress from drought, disease or other elements, may increase risk of crop injury and poor weed control from postemergence herbicide.~~

~~Treatment: Also, flax varieties may vary in tolerance to herbicides. Do not treat flax unless the possibility of crop injury can be tolerated. Consult local Extension or University Extension Specialists for further information.~~

Fallow Cropland

TORDON 22K can be applied as a single broadcast treatment by ground or aerially to control susceptible broadleaf weeds by itself or as a tank mix with 2,4-D or other herbicides registered for this use. Apply TORDON 22K at suggested rates in 2 or more gallons of water per acre by air or in 5 or more gallons per acre by ground. Read and follow directions and precautions on other product labels when tank mixing.

(Not Rotated to Broadleaf Crops)

In fallow grainland to control susceptible annual broadleaf weeds such as Russian thistle, apply 1/2 to 1 pint of TORDON 22K Weed Killer alone or with 1/2 to 1 lb of 2,4-D per acre if weeds are growing well.

In fallow grainland to control susceptible perennial broadleaf weeds such as bindweed and Canada thistle, apply TORDON 22K Weed Killer at 1/2 to 1 pint plus 1/2 to 1 lb of 2,4-D per acre after grain harvest. The treated area should extend at least 10 feet beyond the visible weeds. During the next season, treat the same fallow area with 1/2 pint of TORDON 22K Weed Killer plus 1/2 to 1 lb of 2,4-D per acre after weeds have emerged and are growing well, preferably at least 60 days before planting grain.

Control may be reduced if weeds are under stress from drought or extreme temperatures. Use 1/2 pint per acre to control light to moderate infestations under good growing conditions or to reduce the risk of crop injury. Use higher rates for heavy infestations and longer term control. Some regrowth will occur the following season.

Between crops of small grains, treat annually to maintain control of perennial weed infestation. For best results with continuous small grain production, treat field bindweed infested areas in June or July following small grain harvest, when bindweed is actively growing, applying the 1/2 pint rate of TORDON 22K Weed Killer and 1/2 to 1 lb 2,4-D ae/acre.

Spot treatments of TORDON 22K at rates over 1 pint per acre can be made on fallow, non-irrigated cropland if the treated areas comprise less than 10% of the immediate field in any one year. TORDON 22K should not be applied to cropland at rates exceeding 1 gallon per acre. When TORDON 22K at 1/2 to 1 gallon per acre is used, injury to small grains may result for periods up to two years after treatment.

TORDON 22K at 1 pint or less per acre alone or plus 2,4-D or other registered herbicides may be applied by air in 2 or more gallons of spray under conditions that will prevent injury to any nearby susceptible crops or ornamentals. Refer to Use Precautions for suggestions to reduce off-target drift hazard.

Treated areas may be relocated more readily if marked with flags or painted stakes. A permanent record of rates of TORDON 22K Weed Killer and dates of treatment should be made by the grower to prevent inadvertent planting to susceptible crops before disappearance of injurious residues.

Do not apply more than 1 pint in any calendar year.

Use only on land that will be planted the following year to grass, barley, oats, wheat, flax, or fallowed. Most broadleaf crops are extremely sensitive to soil residues of TORDON 22K and should not be planted in treated areas for a least 36 months after application. A bioassay is recommended prior to planting of sensitive crops.

Small grains planted after fallow land treatment with TORDON 22K may result in yield reductions to varying degrees depending on the rate of application, soil organic matter, rainfall, temperature and incidence of cereal disease.

Allow a minimum of 45 days of soil temperatures above 40°F between application of 1/2 pint of TORDON 22K and planting. Allow a minimum of 60 days of soil temperatures above 40°F for rates greater than 1/2 pint per acre. These intervals reduce, but do not eliminate, the risk of crop injury. Growers should evaluate the benefit of weed control versus the risk of crop damage. Treat with TORDON 22K only if the risk of injury to the small grain crop can be tolerated.

Non-Cropland Areas

Use TORDON 22K Weed Killer to control susceptible broadleaf weeds and woody plants on non-cropland areas such as roadsides or other rights-of-way, along fence

rows, and around farm buildings. Use up to 1/2 gallon of TORDON 22K Weed Killer per acre in 50 to 100 gallons of water and spray to wet foliage and soil. (See table for rate guidelines.)

Conservation Reserve Program (CRP) For Seeding To Permanent Grasses Only
Do not use TORDON 22K Weed Killer if legumes are a desired cover during CRP.

~~Grass grown on CRP acres cannot be grazed or used for hay.~~

Conditions that stress grasses, such as drought, will increase potential for injury to the grass at all stages of growth.

To reduce potential damage to subsequent small grain crops, use the lower rate or discontinue the use of TORDON 22K Weed Killer at least 2 years prior to the seeding of small grain crops. After CRP, do not plant broadleaf crops in treated acres until an adequately sensitive bioassay shows that no detectable picloram is present in the soil.

Broadcast Applications (Aerial and Ground): Applications of TORDON 22K Weed Killer should be made when perennial grasses have become established (has developed a good secondary root system and shows good vigor) since most perennial grasses have shown better tolerance to the herbicide at that stage.

For control of actively growing perennial weeds, use up to 1 quart per acre of TORDON 22K Weed Killer after the grass is established. For best results, use in 2 or more gallons of water per acre by air or in 5 or more gallons of water per acre by ground. Increasing the rate of application can increase the risk of injury.

For control of actively growing susceptible annual broadleaf weeds, (including Russian thistle) apply 1/2 to 1 pint per acre of TORDON 22K Weed Killer. TORDON 22K can also be tank-mixed with 1/2 to 1 lb/acre 2,4-D where species present are sensitive to 2,4-D. Read and follow all directions for use and use precautions on other product labels.

Spot Application: For spot applications when perennial grasses are established, use 1 pint to 4 quarts per acre of TORDON 22K Weed Killer. Rates of 2 quarts per acre or more should only be used for control of deep-rooted perennial broadleaf weeds.

TORDON 22K at rates over 1 quart per acre may suppress certain established grasses such as brome grass, blue grama and buffalograss. However, subsequent grass growth should be improved by release from weed competition.

USE PRECAUTIONS

Use this product only as specified on this label. Observe any special use and application restrictions and limitations, including method of application and permissible areas or use as promulgated by state or local authorities.

Do Not Make Application When Circumstances Favor Movement From Treatment Site.

Do Not Apply or Otherwise Permit TORDON 22K or Sprays Containing TORDON 22K to Contact Crops or Other Desirable Broadleaf Plants including but not limited to alfalfa, beans, grapes, melons, peas, potatoes, safflower, soybeans, sugar beets, sunflower, tomatoes, and other vegetable crops, flowers, fruit plants, ornamentals, shade trees nor the soil containing roots of nearby valuable plants.

Avoid Injurious Spray Drift: Applications should be made to avoid spray drift since very small quantities of the spray, which may not be visible, may severely injure susceptible crops during both growing and dormant periods.

To minimize spray drift, use low nozzle pressure; apply as a coarse spray; and use nozzles designed for herbicide application that do not produce a fine droplet spray.

To aid in further reducing spray drift, a drift control and deposition aid such as Nalco-Trol may be used with this product. If such a drift control aid is used, follow all use recommendations and precautions on the product label.

Adequate soil moisture is critical during this period

Insert 7.

Ground Equipment: With ground equipment spray drift can be lessened by keeping the spray boom as low as possible, by applying 20 gallons or more of spray per acre, by keeping the operating spray pressures at the manufacturers recommended minimum pressures for the specific nozzle type used (low pressure nozzles are available from spray equipment manufacturer(s)), by spraying when the wind velocity is low (follow state regulations). Avoid calm conditions which may be conducive to air inversions. In hand-gun applications, select the minimum spray pressure that will provide adequate plant coverage (without forming a mist).

Aerial Application: With aerial applications, drift may be lessened by using a coarse spray; by using a drift control system, or by using Nalco-Trol drift control additive or equivalent; by keeping spray pressures low enough to provide coarse spray droplets; and by using nozzles which do not create fine droplets. Spray boom should be no longer than $\frac{1}{4}$ of the wingspan or rotor length. Do not use a thickening agent with the Microfol or the Thru-Valve booms, or other systems that cannot accommodate thick sprays. Spray only when the wind velocity is low (follow state regulations). Avoid calm conditions which may be conducive to air inversions.

Determine Air Movement and Direction Before Foliar Application: Do not spray when wind is blowing toward susceptible crops or ornamental plants near enough to be injured. It is suggested that a continuous smoke column at or near the spray site or a smoke generator on the spray equipment be used to detect air movements, lapse conditions, or temperature inversions (stable air). If the smoke layers or indicates a potential of hazardous spray drift, do not spray.

Do Not Contaminate Water Intended for Irrigation or Domestic Purposes. To avoid injury to crops or other desirable plants, do not treat or allow spray drift or run-off to fall onto banks or bottoms of irrigation ditches, either dry or containing water, or other channels that carry water that may be used for irrigation or domestic purposes.

Do not use on flood or sub-irrigated land.

Do not spray if the loss of forage legumes cannot be tolerated. TORDON 22K may injure or kill legumes. New legume seedlings may not grow within 2 years following application of this herbicide.

Do not use manure from animals grazing treated areas on land used for growing broadleaf crops, ornamentals, orchards or other susceptible, desirable plants. Manure may contain enough picloram to cause injury to susceptible plants.

Do not use grass or hay from treated areas for composting or mulching of susceptible broadleaf crops.

Do not transfer livestock from treated grazing areas onto sensitive broadleaf crop areas without first allowing 7 days of grazing on an untreated grass pasture. Otherwise, urine may contain enough picloram to cause injury to sensitive broadleaf plants.

Do not apply to snow or frozen ground. Application during very cold (near freezing) weather is not advisable.

TORDON 22K Weed Killer should not be applied in residential areas or near ornamental trees and shrubs. Untreated trees can occasionally be affected by root uptake of the herbicide through movement into the top soil or by excretion of the product from the roots of nearby treated trees. Do not apply TORDON 22K within the root zone of desirable trees, unless such injury can be tolerated.

Do not rotate food or feed crops on treated land if they are not registered for use with picloram until an adequately sensitive bioassay or chemical test shows that no detectable picloram is present in the soil.

Do not move treated soil to other areas or use it to grow plants if they are not registered for use with picloram until an adequate sensitive bioassay or chemical test shows that no detectable picloram is present in the soil.

This product NOT for sale or use in the San Luis Valley of Colorado.

Do Not Mix with Dry Fertilizer.

PRECAUTIONARY STATEMENTS

Environmental Hazards

Picloram is a chemical which can travel (seep or leach) through soil and under certain conditions has the potential to contaminate groundwater which may be used for irrigation and drinking purposes. Users are advised not to apply picloram where soils have a rapid to very rapid permeability throughout the profile (such as loamy sand to sand) and the water table of an underlying aquifer is shallow or to soils containing sinkholes over limestone bedrock, severely fractured surfaces, and substrates which would allow direct introduction into an aquifer. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

An aquifer is defined as "an underground, saturated, permeable, geologic formation capable of producing significant quantities of water to a well or spring. It is the ability of the saturated zone, or portion of that zone, to yield water which makes it an aquifer" (American Chemical Society, 1983).

STORAGE AND DISPOSAL

Prohibitions: Do not contaminate water, food, feed or fertilizer by storage or disposal. Open dumping is prohibited.

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

Container Disposal (METAL): Do not reuse container. Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Container Disposal (PLASTIC): Do not reuse container. Triple rinse (or equivalent). 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.

Sprayer Clean-Out: To avoid injury to desirable plants, equipment used to apply TORDON 22K Weed Killer should be thoroughly cleaned before reusing to apply any other chemicals.

- 1) Rinse and flush application equipment thoroughly after use. Dispose of rinse water in non-cropland area away from water supplies.
- 2) Rinse a second time, adding 1 quart of household ammonia for every 25 gallons of water. Circulate the solution through the entire system, so that all internal surfaces are contacted (15-20 min.) Let the solution stand for several hours, preferably overnight.
- 3) Flush the solution out the spray tank through the boom.
- 4) Rinse the system twice with clean water, recirculating and draining each time.
- 5) Nozzles and screens should be removed and cleaned separately.

General: Consult federal, state or local disposal authorities for approved alternative procedures.

WARRANTY LIMITATIONS AND DISCLAIMER

DowElanco warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions therein under normal conditions of use. THIS IS THE ONLY WARRANTY MADE ON THIS PRODUCT. NO OTHER EXPRESS AND NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE OUTSIDE OF THIS LABEL. Therefore, neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of this product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), under abnormal conditions (such as excessive rainfall, drought, tornadoes

not

for several years

Insert 8.

hurricanes, etc.) or under conditions not reasonably foreseeable to or beyond the control of seller.

When buyer or user suffers losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability, or other legal theories), buyer or user must promptly notify in writing DowElanco of any claims to be eligible to receive either remedy given below. The EXCLUSIVE REMEDY OF THE BUYER OR USER and the LIMIT OF LIABILITY of DowElanco or any other seller will be one of the following, at the election of DowElanco:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

The seller will not be liable for consequential or incidental damages or losses.

The terms of this Warranty Limitations And Disclaimer cannot be varied by any written or verbal statements or agreements. Any employee or sales agent of the seller is not authorized to vary or exceed the terms of this Warranty Limitations And Disclaimer in any manner.

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Revisions Include:

1. **Woody Species Controlled:** Revised and edited species list.
2. **Directions for Use:** Clarified directions for use of surfactants and directions for application in liquid fertilizers.
3. **Weed Control Guidelines Table:** Revised application rates and comments.
4. **Spot Treatment:** Revised general directions on page 3.
5. **Non-cropland Areas:** Revised directions and moved this section to a position following spot treatment.
6. **Rangeland and permanent Pastures:** Revised directions for broadcast treatment (ground and aerial applications). Added "Spot Concentrate Application" to this section.
7. **Use Rates for Wheat, Barley and Oats:** Revised use rates table and limited use rate on small grains to 1 1/2 fl oz where certain rotational crops are to be planted.
8. **Fallow Cropland:** Use directions edited and use limited to land "not rotated to broadleaf crops".
9. **Use of Flax Deleted:** Use directions for flax removed from label.
10. Clarified use precautions for moving treated soil (page 6).
11. Reference to Supplemental labeling for Hawaii added to container label and Use Precautions

BEST AVAILABLE COPY**REVISIONS INCLUDE:**

- 1) ADDED USE ON RANGELAND AND PERMANENT GRASS PASTURES
- 2) ADDED USE ON WHEAT, BARLEY, OATS
- 3) ADDED USE ON FLAX AND FALLOW CROPLAND
- 4) ABOVE INCORPORATES ALL PREVIOUS SPECIAL LOCAL NEEDS
- 5) CHANGED REGISTRATION NUMBER FROM 464-328 TO DOWELANCO 62719-6
- 6) CHANGED WARRANTY STATEMENT TO REFLECT TRANSFER TO DOWELANCO

SPECIMEN LABEL 86-1764-DATE CODE +98-
 REPLACES 86-1764-DATE CODE E-1009-
 DISCARD PREVIOUS SPECIMEN LABELS
 THIS IS AN INITIAL DOWELANCO PRINTING

Insert 1.

Use with surfactants: Addition of wetting or penetration agents is not usually necessary when using TORDON 22K Weed Killer. Under extreme conditions, such as drought, addition of a surfactant may improve efficacy. However, if foliar burn occurs too rapidly, translocation of TORDON 22K Weed Killer will not occur and control of perennial weeds, such as field bindweed, may be reduced.

Use With Sprayable Liquid Fertilizer Solutions: TORDON 22K Weed Killer is compatible with most non-pressurized liquid fertilizer solutions, however, if these solutions are to be sprayed with TORDON 22K Weed Killer, a compatibility test (jar test) should be made prior to mixing. Jar tests are particularly important when a new batch of fertilizer or pesticide is used, when water sources change, or when tank mixture ingredients or concentrations are changed. Compatibility may be determined by mixing the spray components in the desired order and proportions in a clear glass jar before large scale mixing of spray components in the spray tank. Use of a compatibility aid such as Unite or Compex may help obtain and maintain a uniform spray solution during mixing and application. Agitation in the spray tank must be vigorous to be comparable with jar test agitation. For best results, liquid fertilizer rates should not exceed 50% of the total spray volume. Premix TORDON 22K Weed Killer with water and add to the liquid fertilizer/water mixture while agitating contents of the spray tank. Apply the spray the same day it is prepared while maintaining continuous agitation. Rinse spray tank thoroughly after use.

Note: Foliar applied liquid fertilizers can cause yellowing or leaf burn of crop foliage.

Insert 2.

Spot Treatment: Use application rates as suggested in the above table or recommended by your area weed control specialist. Apply in a total spray volume of 20 to 100 gallons per acre. Make sure equipment is properly calibrated and that the amount of TORDON 22K Weed Killer added to the spray mixture corresponds to the desired rate and spray volume (Contact your DowElanco Representative for a Calibration Guide.).

Do not exceed 4 quarts per acre in any one year as a spot treatment.

Insert 3.

Non-Cropland Areas: Use TORDON 22K Weed Killer to control susceptible broadleaf weeds and woody plants on non-cropland areas such as on roadsides or other rights-of-way, along fence rows, and around farm buildings. Use up to 1/2 gallon of TORDON 22K Weed Killer per acre as a broadcast treatment and spray to wet foliage and soil.

Insert 4.

For control of actively growing susceptible annual broadleaf weeds, including Russian thistle, apply 1/4 to 1/2 pint per acre of TORDON 22K Weed Killer. TORDON 22K can also be tank mixed with 1/2 to 1 lb/acre 2,4-D where species present are sensitive to 2,4-D.

Insert 5.

Spot Treatment: See Directions for Use.

Spot Concentrate Application: Eastern red cedar can be controlled with spot concentrate applications of TORDON 22K Weed Killer in either the spring (April-May) or fall (September-October). For best results use 3 ml to 4 ml of TORDON 22K Weed Killer (undiluted) per 3 feet of plant height. Application should precede periods of expected rainfall. Apply directly to soil within the dripline and on the upslope side of the tree. Application to trees taller than 15 feet is not recommended. Do not use more than 2 pints of TORDON 22K Weed killer per acre in any one year.

Insert 6.

Wheat, Barley, Oats Table: Growth Stage Revisions

- 1) 3-5 leaf to early tillering.
- 2) Tillering to early jointing.
- 3) Tillering to early jointing.

Insert 7.

In Hawaii, approved uses of TORDON 22K are limited to those described in Supplemental Labeling. This supplemental labeling may be obtained from your DowElanco representative or chemical dealer. Refer to this Supplemental labeling for specific use directions and precautions.

Insert 8.

Do not move treated soil to areas other than those treatment sites for which TORDON 22K Weed Killer is registered for use. Also, do not use treated soil to grow plants for which use of TORDON 22K is not registered until an adequately sensitive bioassay or chemical test shows that no detectable residue of picloram is present in the soil.

Supplemental Labeling



DowElanco

Quad IV, 9002 Purdue Road

P.O. Box 681428

Indianapolis, Indiana 46268-1189 USA

RESTRICTED USE PESTICIDE

**Tordon* 22K Herbicide (EPA Reg. No. 62719-6)
(For Distribution and Use Only in the State of Hawaii)**

**Tordon* 22K Weed Killer for Control of Certain
Troublesome Woody Plants on Rangelands, Permanent
Grass Pastures and Non-Cropland Areas**

**REGISTERED USES OF TORDON 22K FOR THE STATE OF HAWAII
(SALE AND USE RESTRICTED TO TORDON 22K PERMIT HOLDERS)**

NOTICE:

- This supplemental labeling must be in the possession of the user at the time of application.
- Before using TORDON 22K Herbicide, read and carefully follow all applicable Use Directions, Use Precautions, Precautionary Statements and Storage and Disposal directions on the label affixed to the product container. Also, Read and carefully follow all Use Precautions in this Supplemental Labeling
- Before buying or using this product, read "Warranty Limitations and Disclaimer" on the TORDON 22K label. If terms are not acceptable, return unopened package at once to seller for refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under "Warranty Limitations and Disclaimer".
- Do not apply TORDON 22K through any type of irrigation system.
- Before applying, be certain that use of TORDON 22K Weed Killer conforms to all local regulations.

DIRECTIONS FOR USE

Use TORDON 22K Weed Killer to control troublesome woody plants such as lantana, melastoma, guava, Java plum, pamakani, cat's claw, gorse, firebush and hau as well as many other woody plants, broadleaf weeds and vines infesting rangelands and permanent grass pastures and non-cropland area in the state of Hawaii. Treat anytime during the year when the plants are actively growing. Do not apply as a broadcast spray.

Individual Plant Follar Treatment: Mix TORDON 22K at the rate of 2 quarts per 100 gallons of water. Add 2 quarts of surfactant to the spray mixture. Apply as a low pressure (10-30 psi) spray to thoroughly wet target vegetation, including leaves, stems and trunks of woody plants. For preparing smaller amounts of spray mixture, mix 2.5 fluid ounces of TORDON 22K and 2.5 fluid ounces of surfactant per 4 gallons of water and apply as above.

Re-treat in subsequent years as needed.

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Cut Surface Treatments: For control of firebush, hau, Java plum and guava with trunks of 3 inches in diameter or larger. Use TORDON 22K Weed Killer diluted 1 to 4 in water as directed below.

Tree Injector Application: Application should be made by injecting 1 milliliter of the diluted herbicide solution through the bark at intervals of 3 inches between edges of the injection wound. The injections should completely surround the tree trunk at any convenient height.

Frill or Girdle Application: Make a single girdle through the bark completely around the tree trunk at a convenient height. Wet the cut surface with the diluted herbicide solution.

USE PRECAUTIONS

- Do not graze dairy animals on treated areas within two weeks after application. Do not slaughter meat animals grazing on treated areas until two weeks have elapsed after application.
- Do not allow spray drift. TORDON herbicides are highly active. Very small amounts may cause damage to plants if applied during either growth or dormant periods. Do not apply or otherwise permit TORDON 22K or sprays containing it to contact desirable plants such as pineapple, papaya, macadamia, coffee, vegetables, flowers, grapes, fruits trees, ornamentals, tomatoes, potatoes, beans of all types and other valuable broadleaf plants, nor soil containing roots of nearby valuable plants. Apply TORDON 22K only when there is little or no wind or no hazard from spray drift.
- Do not contaminate water. To avoid injury to crops or other desirable plants, do not contaminate irrigation ditches or water intended for irrigation or domestic purposes. Do not treat or allow spray drift to fall onto inner banks or bottom of irrigation ditches, either dry or containing water, or other channels that carry water that may be used for irrigation purposes.
- Do not transfer livestock directly from treated areas onto broadleaf crop areas without allowing 7 days on untreated grass pastures. Urine may contain enough picloram to cause crop injury.
- Do not use manure from animals grazing treated areas on land used for growing broadleaf crops, ornamentals, orchards or other valuable plants. Manure may contain enough picloram to cause crop injury.
- Do not mix with other Pesticides unless the pesticide is EPA approved for use on sites for which TORDON 22K use is approved. Use pesticide mixtures only in accordance with University of Hawaii treatment recommendations.
- Cleaning Spray Equipment. Carefully follow equipment cleaning instructions on TORDON 22K label.
- Container Disposal. Carefully follow container disposal instructions on TORDON 22K label.

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M1ASPXXX Approved ___/___/___

Revisions: Labeling edited for clarity and reformatted as Supplemental labeling. Use directions are exclusively for use in the state of Hawaii.