11/14/2005





U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (H7505C) 401 "M" St., S.W. Washington, D.C. 20460 EPA Reg. Number: 5905-553

NOV 1 4 2005

Term of Issuance:

Conditional

Name of Pesticide Product:

HM-2025

NOTICE OF PESTICIDE:

<u>x</u> Registration Reregistration

(under FIFRA, as amended)

(under FIFKA, as amended)

Name and Address of Registrant (include ZIP Code):

Helena Chemical Company 225 Schilling Blvd., Suite 300 Collierville, Tennesee 38017

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

- 1. Submit/cite all data required for the registration/reregistration review of your product when the Agency requires all registrants of similar products to submit such data.
 - 2. Make the following label changes:
 - a. Revise the EPA Registration Number to read. "EPA Reg.No. 5905-553
- 3. The results of the one year storage stability (830.6317) and corrosion characteristics (830.6320) studies must be submitted to the Agency within one-year of the date of this registration notice.

Signature of Approving Official

Joanne J. Miller

NOV 1 4 2005

EPA Form 8570-6

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- 4. This product is category 2 for primary eye irritation. Therefore a "Note to Physician" is not required on the labeling.
- 5. Under the "User Safety Requirements" section, add the following statement: "When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.
- 6. The chemical resistance category on the labeling is listed as "F". It could not be determined whether any ingredients that would place it in this category. The labeling should be revised to reflect category "C". Please address these inconsistencies to the Agency so we can determine if any additional precautionary language is needed.
 - 7. Submit two copies of the revised final printed label for the record. A stamped copy of the label is enclosed for your records.

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

Joanne I. Miller Product Manager (23) Herbicide Branch Registration Division (7505C)

Enclosure

ACCEPTED with COMMENTS In EPA Letter Dated:
NOV 1 4 2005

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

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5905-553

2025

ACTIVE INGREDIENT:

2, 4-Dichlorophenoxyacetic Acid*1:.40% Carfentrazone-ethyl: Ethyl α , 2-dichloro-5-[4-(difluoromethyl)-4, 5-dihyrdro-3-methyl-5oxo-1H-1. 2.4-triazol-1-yl]-4-fluorobenzenepropanoate......1.05% INERT INGREDIENTS: 87.55%

TOTAL......100.0% Contains 0.947 lbs of 2,4-D acid and 0.087 lbs of Carfentrazone-ethyl per gallon

*Isomer specific by AOAC Method 6.D01-5 (12th Ed.) US Patent No. 5,580,567; 6,232,672; 5,741,502; other Patents Pending

TEEP OUT OF REACH OF CHILDREN

VARNING - AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand the label, find someone to explain it to you.)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING - AVISO

Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if swallowed.

FIRST AID

- 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.
 - · Call a poison control center or doctor treatment for advice.

IF ON SKIN OR

- **CLOTHING:** Take off contaminated clothing.
 - · Rinse skin immediately with plenty of water for 15-20 minutes.
 - treatment advice.

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 a poison control center or doctor.

 Do not give anything to an unconscious person.

- 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.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency assistance call toll-free, 1-800-424-9300 (ChemTrec).

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

SEE INSIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

EPA REG. NO. 5905-

NET CONTENTS:

EPA EST. NO.

MANUFACTURED BY **HELENA CHEMICAL COMPANY** 225 SCHILLING BOULEVARD, SUITE 300 **COLLIERVILLE, TENNESSEE 38017**

PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category F on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

Long-Sleeved shirt and long pants

Chemical-resistant gloves, such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton.

Shoes plus socks

Protective Eyewear

Chemical-resistant when apron cleaning equipment, mixing or loading.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be re-used until it has been cleaned.

If this container contains over 1 gallon and less than 5 gallons, mixers and loaders who do not use a mechanical system (probe and pump) to transfer the contents of this container must wear coveralls or a chemical-resistant apron in addition to the other required PPE.

If this container contains 5 gallons or more in capacity, do not open pour. A mechanical system (such as a probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal. If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR *70.240 (d) (4)], the handler PPE requirements may be Juced or modified as specified in the WPS.

Engineering Control Statements

When handlers use 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.

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.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

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 when weather conditions favor drift from target area. Spray equipment used in applying this product should be thoroughly cleaned before using for any other purpose. Use repeated flushing with soap and warm water or suitable chemical cleaner. It is best to use a separate sprayer for application of insecticides and fungicides. Do not contaminate water by cleaning of equipment or disposal of washwaters.

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and non-target plants.

Groundwater Contamination: Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

This product may cause injury to desirable plants by contacting foliage, stems or roots. Use care in all applications to avoid surface water or soil transport to nontarget plant areas. Avoid contamination of irrigation or domestic water supplies.. Avoid applications in the vicinity of susceptible plants or when winds are blowing toward nearby susceptible plants or when temperature inversions are expected. Avoid direct application or spray drift to susceptible plants since very small quantities of this herbicide can cause severe injury in the growing or dormant period. Plants contacted may be killed or suffer significant injury resulting in grade or yield losses. Do not apply in greenhouses.

The following steps may be helpful in reducing possible spray drift from ground or aerial applications:

- 1) Keep the spray discharge as near to the target as possible while getting good coverage,
- 2) Increase the volume of spray mixture per acre,
- Use low spraying pressures (as measured at the nozzle tips),
- 4) Use nozzles which produce coarse spray droplets while still providing adequate weed coverage,
- 5) Limit applications when wind is blowing toward nearby susceptible crops or valuable plants,
- 6) Make applications when wind velocity is more favorable for on-target deposition - a general guide for application would be a) wind velocity of 0-2 mph may indicate a temperature inversion which can permit drift; b) wind velocity of 3-7 mph usually indicates good conditions, but check wind direction relative to nearby susceptible crops always allowing for wind shift, c) wind velocity 7-10 mph is acceptable if wind direction is

favorable and no susceptible crops are in the vicinity always allowing for wind shift, d) wind velocity of 10-15 mph is usually not desirable except in areas of stronger prevailing winds when direction is favorable and no susceptible crops are in the vicinity always allowing for wind shift; an agriculturally accepted drift retardant is suggested, and e) if wind velocity is over 15 mph do not spray,

- 7) Properly maintain and calibrate all spray equipment,
- 8) For aerial applications, use an effective spray boom length that is no more than 75% of the wingspan or rotor diameter, and
- 9) Use an agriculturally accepted drift retardant designed to increase droplet size.

HEMIGATION PROHIBITION

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

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.

.GRICULTURAL USE REQUIREMENTS

Jse this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the 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 interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 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

Chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton

Shoes plus socks

Protective Eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

USE REQUIREMENTS FOR PASTURES, PERENNIAL GRASSLANDS, RANGELAND, FALLOW LAND AND NONCROP AREAS: Do not enter treated areas until spray has dried. For early entry to treated areas, wear eye protection, chemical-resistant gloves, long-sleeved shirt, long pants, shoes and socks.

TURF USE REQUIREMENTS: Do not allow persons (other than applicator) or pets on treated area during application. Do not enter treated areas until spray has dried. NOTE: For application to turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes, follow AGRICULTURAL USE REQUIREMENTS on this label.

STORAGE AND DISPOSAL

PROHIBITIONS: Do not contaminate water, food, or feed by storage or disposal. Do not store under conditions that might adversely affect the container or its ability to function properly.

STORAGE: Do not store below temperature of 0°F. If frozen, warm to 40°F and re-dissolve before using by rolling or shaking container. This product can be stored in an unheated building. Store in a safe manner. Store in original container only. Keep container tightly closed when not in use. Reduce stacking height where local conditions can affect package strength.



PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate groundwater. 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 DISPOSAL:

Metal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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

Returnable-Refillable Container (Drum): After use, return the container to the point of purchase or designated locations. This container must only be filled with 2025™. DO NOT RE-USE THIS CONTAINER FOR ANY OTHER PURPOSE. Prior to refilling, inspect thoroughly for damage such as cracks, punctures, abrasions, and damaged or worn out threads on closure devices. Do not refill or transport damaged or leaking containers. Check for leaks after refilling and before transportation. If the ntainer is not being refilled, return to the point of purchase.

GENERAL INFORMATION

When used as directed, 2025TM provides selective control of broadleaf weeds in post, fallow, burn-down, Rights-of-way, and Industrial vegetation management applications. Local conditions, crop varieties, and application method may affect performance of this product. User should consult local extension service, agricultural experiment station, or university weed specialists, and state regulatory agencies for recommendations in your area. Best results are obtained when product is applied to young succulent weeds that are actively growing. Application rates lower than recommended will not be satisfactory on susceptible annual weeds. For perennial weeds and conditions such as the very dry areas of the western states, where control is difficult, the higher recommended rates should be used.

When product is used for weed control in crops, the growth stage of the crop must be considered. Some plants and weeds, especially woody varieties, are hard to control and may require repeat applications. Application rates should be 3 to 5 gallons of total spray by air or 10 to 25 gallons by ground equipment unless otherwise directed. In either case, use the same amount of 2025™ per acre. 2025™ should not be allowed to come into contact with desirable. susceptible plants such as beans, cotton, fruit trees, grapes, legumes, ornamentals, peas, tomatoes and other vegetables. 2025™ should not be used in greenhouses. Under warm moist conditions, herbicide symptoms may be accelerated and crop responses encountered. To minimize the potential for crop injury, applications should not be made within 6-8 hours of either rain or irrigation. The addition of oil-based adjuvants and surfactants are not required unless directed otherwise.

If stored below freezing, it may be necessary to warm product to 40° and agitate before using. This does not affect the efficiency of the product. Spray equipment used to apply 2025™ or other products containing 2,4-D should not be used for any other purpose until thoroughly cleaned with a suitable chemical cleaner.

WEEDS CONTROLLED

2025™ will control or partially control the following as well as many other noxious plants susceptible to 2,4-D and Carfentrazone-ethyl:

Alligatorweed Artichoke Bittercress, smallflowered Blue Thistle Boxelder

Buckhorn
Bulrush
Burdock,common
Butterrup smallflowere

Buttercup, smallflowered Carpetweed Chickweed

Cinquefoil, common & rough Coffeeweed

Creeping jenny Curly indigo Duckweed

Evening primrose, common

Fanweed Four o'clock Goatsbeard Hemp Honeysuckle

Indigo Jerusalem artichoke Jimsonweed Arrowhead
Bitter wintercress
Blue lettuce
Blueweed, Texas
Broomweed, common

Bull nettle
Bur ragweed
Burhead
Carolina geranium
Catnip

Chicory Cocklebur, common Cornflower

Croton (Texas, woolly) Dogfennel (mayweed)

Dogfennel (mayweed) Elderberry

Evening primrose, cutleaf Flowort

ндwort Galinsoga (elderberry, hairy)

Healall
Hoary Cress
Horsetail
Ironweed
Jewelweed
Klamathweed



Ladysthumb Loco, Bigbend Marestail

Mexican weed

Morningglory (annual, common, ivy, woolly) Mustards (except blue), prior to bolting

Parrotfeather Pennywort

Pigweed, redroot (up to 4")

Plantains Pokeweed Poverty weed Purslane, common Ragweeds (common, giant) Rough fleabane Shepherdspurse

Sneezeweed, bitter Spanishneedles

`tinkweed unflower Tumbleweed

Vetches, except hairy Virginia creeper

Water liv Wild hemp Wild mustard Wild radish Wild sweet potato Witchweed Yellow goatsbeard Yellow starthistle

Lambsquarters, common Mallow (Venice, dwarf, little)

Marshelder Milk vetch Mousetail Nutorass

Nightshade, Eastern Black (<4") Pennycress (fanweed)

Pepperweeds (except perennial)

Poison ivv Poorioe Puncture vine Quickweed Redstem Rush Sicklepod

Sowthistle (annual, spiny)

Speedwell Sumacs

Sweetclover (annual)

Velvetleaf

Virginia copperleaf Water hyacinth

Water Hemp (up to 2" tail)

Water primrose Wild lettuce Wild parsnip Wild rape Willow Wormwood Yellow rocket

Weeds Partially Controlled (Higher rates and/or repeated applications may be needed):

Beggarticks

Canada thistle

Buckbrush

Clover, red

Alfalfa Bindweeds (hedge, European)

II thistle .iamise Jorn gromwell Dandelion Dogbanes Ground ivy Henbit Knotweed

Coyotebrush Docks Goldenrod Hawkweed Hoary cress Manzanita Musk thistle Nettles Peppergrass Prickly lettuce Rabbitbrush Russian thistle Sage, coastal

Sagebrush (big, sand) Sand shinnery oak Smartweed, Pennsylvania Vervains

Western ironweed Wild garlic

Many-flowered aster Salsify (western, common)

Smartweed, annual Tansy ragwort Vetch, hairy

Wild carrot Wild onion

MIXING INSTRUCTIONS

2025™ is a water dispersible herbicide concentrate that forms a macro-emulsion when diluted with water. For certain specified applications, liquid fertilizer or oil may replace part or all of the water as a diluent. If dry flowable (DF), wettable powder (WP) or flowable (F) tank mix products are to be used, these should generally be added to the spray tank first. Refer to the mixing directions on the labels of the tank mix products. For best results, thoroughly clean sprayer immediately after use by flushing system with water and heavy duty detergent such as Wipe Out®.

Water Spray. To prepare a water spray mixture, fill clean spray tank about 1/2 to 2/3 full with clean water. With agitation turned on, add the required amount of 2025™. Continue agitation while adding balance of water and during spray operations. NOTE: In water this product forms a macro-emulsion and can separate upon prolonged standing. If spray mixture is allowed to stand, agitate again to assure uniformity.

Liquid Fertilizer Spray. Due to increased risk of crop foliage burn with fertilizer, use only as recommended on this label or supplemental labeling distributed for 2025™. Use fertilizer rate recommended locally. Fill clean spray tank about 1/2 to 2/3 full with liquid nitrogen fertilizer (UAN or urea) solution. Add required amount of product with vigorous agitation running. Continue agitation while adding balance of liquid fertilizer and during spray operations. Application should be made immediately. storage of mixture is not recommended. Application during very cold (near freezing) temperatures is not advisable because of the likelihood of crop injury. This product is formulated to be compatible with most liquid nitrogen solutions, however, due to variability in fertilizers, users may wish to perform a jar compatibility test before large scale mixing.

Oil Spray: Use only as recommended on this label or supplemental labeling distributed for 2025™. Fill clean spray tank about 1/2 to 2/3 full with an oil approved for agricultural use. (diesel, fuel oil, MSO, soybean etc.) Add required amount of product with agitation turned on. Continue agitation while adding balance of oil. resulting mixture is a solution and will generally remain uniform without agitation once mixed. However, agitation is suggested if available. Do not allow any water to get into the spray mixture to avoid formation of an invert emulsion (mayonnaise consistency).

Water Spray With Oil: Use only as recommended on this label or supplemental labeling distributed for 2025™. Where a combination of water and oil diluent is recommended, the use of emulsifiable crop oil or crop oil concentrate is suggested since mild agitation will be sufficient. Mix in the sequence of water, product, and oil. If diesel or other non-emulsified oils listed above under "Oil Spray" are desired for use with water, add no more than 1 quart of such oil per 1 gallon of water and agitate vigorously until tank is emptied. If possible, premix non-emulsified oil with this product and add this premix to a mostly filled spray tank with agitation on. Follow these procedures carefully to avoid formation of an invert emulsion (mayonnaise consistency).

APPLICATION PROCEDURES

e calibrated spray equipment for all types of applications , assure applying the recommended amount of spray inixture per acre. Use sufficient spray volume within the ranges specified to obtain good coverage of weeds. 2025TM is absorbed sufficiently within 1-4 hours after application to provide adequate weed control.

Ground Broadcast Spray: Unless otherwise specified in the appropriate crop or non-crop directions, apply in 10 or more gallons of spray solution per acre. Use enough spray volume to provide uniform coverage of weeds, taking into account the amount of vegetation present and the type of application equipment to be used. As crop canopy and weed density increase, a higher spray volume may be needed for equivalent coverage and weed control. Typical

op applications utilize 10 to 50 gallons of spray solution er acre, while certain high volume non-crop applications may utilize more than 100 gallons per acre. Use coarse sprays to minimize potential spray drift. Do not apply with hollow cone nozzles or other nozzles that produce fine spray droplets. Boom spraying with flat fan or low volume nozzles is generally most suitable for ground broadcast applications.

Ground Band Spray: Determine band equivalents to broadcast rates and volumes by the following formulas:

Band width in inches
Row width in inches

x Broadcast = Band rate rate per acre per acre

Band width in inches
Row width in inches

x Broadcast = Band volume volume per acre per acre

Aerial Broadcast Spray: Unless otherwise specified in the appropriate crop or non-crop directions, apply in 3 to 5 gallons of spray solution per acre. For best coverage and weed control, as well as reduced potential for spray drift, a minimum of 3 gallons per acre is suggested. Avoid using nozzles or nozzle configurations that generate fine droplets. One configuration usually found to be suitable includes straight stream nozzles (such as disk with no swirl plate) directed straight back along the wind stream. Mechanical flagging or

GPS (Global Positioning Systems) systems are suggested to obtain more uniform application.

With fixed-wing or helicopter application, an exactly even swath deposition may not be achieved, and consequently, crop injury or pesticide nonperformance may result wholly or in part. Do not apply by air during periods of thermal inversion. Avoid application if potential for drift is excessive and/or susceptible crops are growing in the vicinity.

TANK MIXES

Unless otherwise prohibited on this label or the label of an intended tank mix product, this product may be applied in combination with any herbicide registered for the same crop, timing, and method of application. Observe the most restrictive label statements of various tank mix products used. LIABILITY FOR CROP INJURY RESULTING FROM A TANK MIXTURE NOT SPECIFIED ON THIS LABEL, OR SUPPLEMENTAL LABELING DISTRIBUTED FOR 2025™, IS SPECIFICALLY DISCLAIMED BY HELENA CHEMICAL COMPANY.

COMPATIBILITY

Before full-scale mixing of this product with other herbicides, fertilizer solutions and adjuvants, it is advisable to determine the compatibility of the proposed mixture. Use proportionate quantities of each ingredient and mix in a small container. Always mix one product thoroughly with the diluent before adding another product. If no incompatibility is evident after 30 minutes, the mixture is generally compatible for spraying.

PLANTING IN TREATED AREAS

Labeled Crops: Within 29 days following an application of this product, plant only those crops named as use sites on this or other registered 2,4-D or carfentrazone-ethyl labels. Follow more specific limitations, if any, provided in the

directions for individual crops. Labeled crops may be at risk for crop injury or loss when planted soon after application, especially in the first 14 days. Degradation factors described below should be considered in weighing this risk.

Other Crops: All other crops may be planted 30 or more days following an application without concern for illegal residues in the planted crop. However, under certain conditions, there may be a risk of injury to susceptible crops. Degradation factors described below should be considered in weighing this risk. Under normal conditions, any crop may be planted without risk of injury if at least 90 days of soil temperatures above freezing have elapsed ince application.

Degradation Factors: When planting into treated areas, the risk of crop injury is less if lower rates of product were applied and conditions following application have included warm, moist soil conditions that favor rapid degradation of 2,4-D. Risk is greater if higher rates of product were applied and soil temperatures have been cold and/or soils have been excessively wet or dry in the days following application. Consult your local Agricultural Extension Service for information about susceptible crops and typical soil conditions in your area.

APPLICATIONS

READ ALL PRECEDING GENERAL SECTIONS OF ABEL AND WARRANTY BEFORE USE.

Unless otherwise specified, applications may be made by ground or air equipment. Ground applications may provide more thorough coverage and better weed control. For selective postemergent weed control in crops, do not add oil, surfactant, fertilizer or other additives unless specifically recommended on this label or supplemental labeling.

CORN (Field, Sweet and Pop)

This product may be applied to corn at several different timings. In all cases, plant corn to a uniform depth of at least 1½ inches. Avoid applying this product with Accent® SP Herbicide because severe grass control antagonism may occur. Apply this product at least 7 days before or 3 days after Accent® SP Herbicide. **Note:** Do not apply more than 42 ounces of **2025™** (0.031 pound active carfentrazone) per acre per season including fallow, preplant, burndown and labeled crop applications.

Preplant: To control existing broadleaf weed seedlings or burn down susceptible cover crops, prior to planting, apply from 7 to 14 days before planting. To control grasses and certain other problem weeds, it may be desirable to use a tank mixture with other herbicides. Liquid fertilizers and agriculturally approved surfactants may be added. Observe the most restrictive label statements of various tank mix products used.

Application Rates: Do not apply on fine or medium textured soils (silt & clay loams) with less than 1% organic matter or on coarse textured soils (sand, sandy loam, loamy sand) with less than 2% organic matter. For fine or medium textured soils with 1% or more organic matter, apply at a rate of 8-12 ounces per acre. On coarse* textured soils with 2% or more organic matter, apply 5-12 ounces per acre.

Preemergence: To control small broadleaf weeds, apply after planting, but before corn emerges. Liquid fertilizers and agriculturally approved surfactants may be added. Do not apply preemergence if a preplant application of this product was made.

Application Rates: Do not apply on fine or medium textured soils (silt & clay loams) with less than 1% organic matter or on coarse textured soils (sand, sandy loam, loamy sand) with less than 2% organic matter. For fine or medium textured soils with 1% or more organic matter, apply at a rate of 8 – 12 ounces per acre. On coarse* textured soils with 2% or more organic matter, apply 8 -12 ounces per acre.

*Due to the lower rate, partial weed control may result on coarse soils.

Postemergence:

Early Postemergence: To control small broadleaf weeds, apply broadcast from spike to 4-leaf stage of crop or up to 8 inches tall, whichever comes first. Avoid spraying just after corn leaves unfold. Postemergence application should not follow a preplant or preemergence application by less than 3 weeks. Use rates stipulated under "Corn Postemergence Application Rates" below.

Late Postemergence: Typical timing for this application is when most broadleaf weeds are no more than 4 to 6 inches tall and corn is between 8 and 16 inches tall. The timing

can extend until corn is 36 inches tall or to tasseling, whichever comes first, but weeds usually become too large and hard to control. Perennial weeds should be in the bud to bloom stage for best results. Apply as a directed spray using drop nozzles to keep spray off crop foliage. Do not apply from tasseling to hard dough stage. Use the following rates.

General: Spike to 4-leaf or up to 8 inches tall apply by ground or aerially as an early postemergence over-the-top broadcast spray at 5 – 10 oz per acre. When corn is 8 - 36 inches tall, before tasseling, apply by ground only as a late postemergence directed spray using drop nozzles at 8 – 10 oz per acre. Lowest rates may not provide adequate weed antrol unless used in a tank mix with another registered arbicide.

Note: Where an adjuvant is required because of tank mixing with another herbicide, use the lowest recommended concentration of a nonionic surfactant (0.125% vol./vol. or less). Treated crop may be brittle and subject to breaking by wind and/or cultivation, especially in the 2 weeks following application.

Preharvest: After the hard dough (or denting) stage when silks have turned brown, apply 2.0-4.5 pints per acre to suppress perennial weeds such as hemp dogbane or field bindweed, and many tall weeds such as cocklebur, pigweed, and sunflower that interfere with harvest. Weed ed production will also be suppressed if application is rior to the flowering stage of weeds. The high rate is recommended under dry conditions. Do not forage or feed corn fodder for 7 days following application.

Postharvest: Following the harvest of corn, perennial or biennial weeds produce new fall growth. To aid in suppressing these weeds before a hard freeze, product may be applied at the rate of 1 – 2.5 pints per acre either alone or in a combination with other registered herbicides. See "Planting in Treated Areas" section. If products to be tank mixed have more restrictive limitations, these limitations should be followed.

SORGHUM (Grain)

Postemergence: To control small broadleaf weeds, apply when sorghum is 6 to 15 inches tall to top of canopy. If sorghum is taller than 8 inches to top of canopy, use drop nozzles to keep spray off crop foliage. Do not treat during

the boot, flowering or early dough stages. Do not forage or feed fodder for 7 days following application. Use rates that follow.

Application Rates: When crop is 6 to 8 inches tall use as an over-the-top broadcast spray by ground or air at 5 – 10 oz per acre. When sorghum reaches 8 to 15 inches tall, use as a directed spray using drop nozzles with application by ground only at 8 - 10 oz per acre. The lowest rates may not provide adequate weed control unless used in a tank mixture with another registered herbicide. Highest rates may increase risk of injury.

SMALL GRAINS (Wheat, Oats, Barley) NOT UNDERSEEDED WITH A LEGUME

Apply as directed below.

Livestock Feeding Restrictions: Do not permit dairy animals or meat animals being finished for slaughter to forage or graze treated grain fields within 2 weeks after treatment. Do not feed treated straw to livestock if an emergency and/or preharvest treatment is applied.

Liquid Nitrogen Fertilizers: At full tiller, product may be combined with liquid nitrogen fertilizers suitable for foliar application to small grains. Refer to "Mixing Instructions" section of this label for further information. Fertilizers can increase foliage contact burn of herbicides. Reducing the fertilizer rate and concentration will reduce the hazard of foliage burn.

Tank Mixtures: 2025™ may be tank mixed with other herbicides for control of certain weeds in small grains. Use tank mix directions appearing on the labels of the specific herbicides when tank mixing with this product. Observe all precautions and limitations on labeling of product used in a particular tank mix.

Spring Wheat and Barley

Onset of Tillering Stage: Grains are generally tolerant of these treatments, but risk of crop injury is greater than at full tillering stage. Do not make application if the risk of injury is unacceptable. The onset of tillering stage is defined as grain having 1 or more tillers as well as 3 or more leaves.



Apply 10-16 oz per acre in the spring when grain has 1 or more tillers as well as 3 or more leaves. Do not apply from boot to dough stage.

Full Tillering Stage: For these applications, full tillering stage is defined as grain that has 3 or more tillers and the flag leaf should not be visible.

Apply 10 - 24 oz of product per acre when grain is in the full tiller stage (usually 4 to 8 inches tall). Do not apply after the jointing stage.

Winter Wheat, and Barley

Onset of Tillering Stage: Grains are generally tolerant of these treatments, but risk of crop injury is greater than at "It tillering stage. Do not make application if the risk of ury is unacceptable.

Apply 10-24 oz per acre in the spring when grain has 1 or more tillers as well as 3 or more leaves. Do not apply after the jointing stage.

Full Tillering Stage: For these applications, grain should have 3 or more tillers and the flag should not be visible. Apply 10-24 oz pints per acre when grain is in the full tiller stage (usually 4 to 8 inches tall). Do not apply after the jointing stage.

Spring Seeded Oats

Full Tillering Stage: Grains should have 3 or more tillers d the flag leaf should not be visible. Oats are less plerant to 2025™ than wheat or barley and present a greater risk of crop injury. The severity of the weed problem should be balanced against the possibility of crop injury. Larger weeds and hard-to-kill weeds may be poorly controlled, especially under dry conditions.

Apply 12 - 16 ounces per acre when grain is in the full tiller stage as specified above. Do not apply before the tiller stage nor from boot to dough stage.

Postharvest (Wheat, Oats, Barley)

Following harvest, a flush of new weed growth may occur. For control of many annual broadleaf species, apply at up to 2.5 pints per acre. Certain perennial or biennial weeds may produce new fall growth in stubble grain fields. To aid in suppressing these weeds, product may be applied at the rate of 2.5 pints per acre either alone or in combination with other registered herbicides. See "Planting In Treated"

Areas" section. Follow more restrictive limitations for tank mix products used.

Rice

Apply 2025™ alone or as a tank mixture with other rice herbicides to emerged and rapidly growing weeds. Apply only in the late tillering stage of first joint development (first to second green ring), usually 6-9 weeks after emergence. Do not apply after internode elongation or panicle initiation. Do not apply at early seedling, early panicle boot, flowering, or early heading growth stages. Before making applications of 2025™ to rice, consult local Extension or University specialists for appropriate rates and timing of sprays. Do apply this product when conditions and application practices are favorable for drift.

Post emergent; Pre-flood

Apply 2025™ at the rate of 2-4 pints per Acre. Applications should be made by ground equipment using a minimum of 10 GPA. Aerial applications should apply a minimum of 3 GPA. For optimum results, weeds should be no more than 4 inches tall and rosettes less than 3 inches across.

Post emergent; Flooded

2025™ may be applied to rice and weeds following flood when 80% of the weeds are exposed. Apply at 2-6 pints per Acre in using a minimum of 10 GPA by ground or 3 GPA by air. Follow all local and state restrictions that apply to 2,4D applications.

FALLOW LAND

Fallowland or land idle between crops may be subject to unwanted weed growth. For control of many annual broadleaf species, apply at the rate of 1- 2.5 pints per acre. To aid in suppressing certain perennial or biennial broadleaf weeds (including cotton regrowth), this product may be applied at the rate of 1-2.5 pints per acre either alone or in combination with other registered herbicides. Use the high rate on older plants, drought stressed plants or for hard to kill species. See "Planting In Treated Areas" section. Follow more restrictive limitations for tank mix products used. 2025TM may be used to kill fall alfalfa stands in preparation for spring planting of row crops under conservation tillage. The treated alfalfa crop cannot be grazed, fed to livestock or cut for hay.

GRASS PASTURES

To control many emerged broadleaf weeds, apply 1.0- 2.5 pints 2025™ per acre. Preferred timing is in the early spring when sufficient weeds have emerged, and when weeds are small and actively growing, but before weeds are too mature. Summer applications to older, drought-stressed weeds are less effective. However, weeds are more susceptible again in the fall when cooler, wetter conditions support active growth before a killing frost. For fall treatment of mature weeds or perennial weed regrowth, use 2-3 pints per acre. Several seasons of spring plus fall treatments may be necessary to control certain perennials.

Plant Response: Injury may result to bent grass, other rm season or southern grasses, and alfalfa, clover or mer legumes. Do not use if this risk of injury is unacceptable. Clovers may recover from early spring applications. If grass seed production is desired, do not apply when grass is in boot to milk stage or after heading begins. Do not apply to newly seeded areas until grass is well established. Reseeding is not recommended for at least 30 days following application. Addition of a surfactant may increase the risk of injury to newly seeded grasses.

Livestock Feeding Restrictions: Do not graze dairy animals on treated areas within 7 days after application. Do not graze meat animals on treated areas within 3 days before slaughter. Do not cut treated grass for hay within 30 days of application.

JRASS SEED CROPS

To control many emerged broadleaf weeds, apply 1– 2.5 pints per acre. Use on established stands of cool season grass seed crops, such as bluegrass, fine fescue, tall fescues, orchard grass, annual ryegrass, and perennial ryegrass. Make applications in the spring from the tiller to early boot stage. Do not spray in boot stage. New spring seedings may be treated after the grasses have more than 5 true leaves. On established stands that have had the seed crop removed, perennial weed regrowth may be treated in the fall at up to 3 pints per acre. Refer to "Plant Response" and "Livestock Feeding Restrictions" under GRASS PASTURES section above.

RANGELAND PASTURES AND PERENNIAL GRASSLANDS NOT IN AGRICULTURAL PRODUCTION

2025™ can be used to control or suppress a number of susceptible broadleaf weeds in rangeland or perennial grasslands that are set aside from agricultural use such as in the Conservation Reserve Program (CRP) or similar government programs. Consult program rules to determine whether grass and hay may be used. For best results, apply when broadleaf weeds are small. Adequate moisture is needed for best grass tolerance and weed control.

Plant Response: Injury to legumes, bentgrass, and other warm season grasses is likely to occur. Grasses may be discolored following treatment. If grass seed production is desired, do not apply when grass is in boot to milk stage or after heading begins.

New Stands: Preseeding applications should be made at least 30 days prior to seeding. Newly seeded stands should only be treated after they are well established (more than 5 true leaves) or injury may occur. Apply 1-2 pints per acre when weeds are small and actively growing.

Established Stands: For optimum results, weeds must be actively growing. Apply 2 - 2.5 pints per acre for annual weeds and up to 3 pints per acre for biennial or perennial weeds. Treat biennial weeds when they are in the seedling to rosette stage and before flower stalks become apparent. Treat perennial weeds in the bud to bloom stage. For brush species in rangeland, apply up to 2 quarts per acre in an oil spray (see "Mixing Instructions"). Another option is to add 1 gallon of oil per acre to a 2025™ water spray (see "Mixing Instructions"). Repeat applications in the same or subsequent year may be needed to control brush species.

Livestock Feeding Restrictions: Do not graze dairy animals on treated areas within 7 days of application. Do not graze meat animals within 3 days of slaughter. Treated grass cut for hay should not be cut within 30 days of application. For government program grasslands, follow program grazing restrictions if more restrictive than those stated above.



ORNAMENTAL AND RECREATIONAL TURFGRASSES, LAWNS, GOLF COURSES (Fairways, Aprons, Tees, and Roughs), PARKS AND CEMETERIES

This product is intended for use only by professional applicators and service technicians in established ornamental lawns and turfgrass.

Apply only to established turf areas at times when weeds are actively growing but not flowering and are 1-4" in height. Care must be taken to avoid spray drift on non-targeted susceptible plants such as vegetables, ornamentals, shrubs, trees, flowers, and other desirable plants. Do not apply this product to bentgrass, Bermuda (hybrid), carpet grass, centipede, dichondra, Saint gustine, or turf that contains desirable clovers. The afety of this product for turf applications may vary between grass species.

Under some conditions a temporary discoloration may occur one to three days after application. Applications made with spray adjuvants and and/or liquid fertilizer may increase the potential for this discoloration.

Note: Do not apply this product with adjuvants based on surfactants, wetting agents, or oils unless otherwise directed.

Application Rate

Apply 1 – 2 pint / Acre or 1/3 –1 oz per 1000 square feet imperature and moisture extremes may affect the performance of this product. Warm moist conditions may accelerate the performance of this product while cool conditions may increase the time before herbicide symptoms occur. Weeds hardened off by drought are less susceptible to this product and may require higher rates for control.

The maximum application of this product to turf grass is 2.5 pints per acre per application site.

Application Guidelines

Thorough and uniform coverage are essential for weed control. Do not use flood nozzles, Raindrop®, or nozzle tips larger than 400 microns due to potential coverage problems. Applications should be made with spray volumes of 20-175 gallons per acre (1/2 to 4 gallons per 1000 square feet) Use the higher spray volume range when weed populations are heavy and the grass canopy is

dense. Spray application pressure should be maintained at 20-40 psi. Do not apply this product in a manner or in conditions that favor drift.

FOREST MANAGEMENT (INCLUDING SITE PREP, FOREST ROADSIDES, BRUSH CONTROL)

For the general control of annual, biennial and perennial broadleaf weeds and brush: Apply to emerged weeds and brush. For best results, treat when weeds and brush are young and actively growing. For broadcast applications apply no more than 4.0 lbs, 2,4-D acid equivalent per acre per 12 months.

For specific use-site applications and restrictions see the appropriate site-specific instructions as follows:

Forest Site Preparation

Bud break Spray: For control of alder, susceptible broadleaf weeds, and susceptible woody plants before planting forest seedlings, apply up to 2.0 gallons per acre in a minimum of 10 gallons spray mixture per acre. Apply as an water spray, oil spray, or water spray with oil (see "Mixing Instructions") after alder buds break, but before foliage is 1/4 full size. A water spray including 2 to 4 quarts per acre of diesel oil, fuel oil, stove oil, or crop oil concentrate may also be used.

ANNUAL, BIENNIAL, PERENNIAL BROADLEAF WEEDS AND GENERAL BRUSH CONTROL

Foliage Spray: To control seedlings and susceptible woody plants before planting forest, apply up to 2.0 gallons per acre in a minimum of 10 gallons spray mixture per acre. If desired, apply as a water spray including up to 1 quart of diesel oil, fuel oil, stove oil, or crop oil concentrate per gallon of water (see "Mixing Instructions"). For best results, apply after alder foliage has reached full size.

TREE AND BRUSH CONTROL (i.e., alder, ash, aspen, birch, black gum, cherry, elm, oak, sweet gum, tulip poplar, willow, and others)

Basal Spray Treatment: Mix 1 - 2 gallons of 2025™ per 100 gallons of diluent (may contain oil). Apply directly to base and root collar of all stems until the spray begins to accumulate at the ground line. Also wetting stems with this mixture may aid control.



Cut Surface Stumps: Mix 1 - 2 gallons of 2025™ per 100 gallons of diluent (may contain oil). Apply as soon as possible after curing trees. Thoroughly soak the entire stump with 2,4-D mixture. Also treat exposed roots and bark.

Frill: Mix 1 - 2 gallons of 2025™ per 100 gallons of diluent (may contain oil). Make frills with an axe or other tool that can cut overlapping v-shaped notches through the bark in a continuous ring around the base of the tree. Treat freshly cut frills with as much 2025™ mixture as they will hold.

Injection: Make injections as near to the root collar as possible, using one injection per inch of trunk dbh (4 ½ first) for resistant species such as hickory. Injections would overlap. For best results, injections should be anade during the growing season (May 15th through October 15th in many areas). The injection bit must penetrate the bark. Apply 2-4 ml of 2025™ per injection site.

Forest Roadsides: To control susceptible broadleaf weeds and woody plants on forest roadsides, apply 0.5 - 1.5 gallons per acre in a minimum of 10 gallons spray mixture per acre. Apply as a water spray and, if desired, include up to 3 quarts per acre of diesel oil, fuel oil, stove oil, or crop oil concentrate (see "Mixing Instructions"). Apply when sufficient foliage is present for absorption.

(stablished Conifers (including Christmas trees):

Jirected Spray or Spot Spray: To control susceptible broadleaf weeds, mix up to 1.0 gallon per 100 gallons of water and apply to emerged weeds in the spring with ground equipment. Avoid contacting conifer foliage with spray or drift as injury may result. For brush, mix 2.0 gallons per 100 gallons of water. Thoroughly spray brush in full foliage, but avoid contacting conifer foliage with spray or drift. Do not apply more than the equivalent of 2.0 gallons per acre.

ROADSIDES; MEDIANS; HIGHWAY, RAILROAD, UTILITY AND PIPELINE RIGHTS-OF-WAY; VACANT LOTS; AROUND UTILITY INSTALLATIONS, TRANSFORMERS, PUMP HOUSES, AND BUILDINGS; STORAGE AREAS; FENCES; GUARDRAILS; LUMBER YARDS; INDUSTRIAL SITES; AIRPORTS; TANK FARMS; FARMSTEADS; AND SIMILAR NONCROP AREAS

For control of many broadleaf weeds and small woody plants, apply ½ - 3 pints per acre. Use the high rate for woody plants. Applications may be as broadcast sprays, small area sprays, or spot treatments. For small areas or spot spraying, use 0.5 pints per gallon of water and spray weeds to runoff. Regardless of the method of application, use adequate spray volume for full coverage of weeds.

Timing: Preferred application timing is in the early spring when sufficient weeds have emerged, and when weeds are small and actively growing, but before weeds are too mature.

Summer Application: Summer applications to older, drought-stressed weeds are less effective. However, weeds are more susceptible again in the fall when cooler, wetter conditions support active growth before a killing frost.

Fall Treatment: For fall treatment of mature weeds or perennial weed regrowth, use up to 1-3 pints per acre. Several seasons of spring plus fall treatments may be necessary to control certain perennials. Use of oil sprays or the addition of spray adjuvants improves weed control, but also increases the risk of damage to desirable ground covers.

Plant Response: Bent grass, other warm season or southern grasses, alfalfa, clover or other legumes may be killed or injured. Do not apply when grass is in boot to milk stage, or after heading begins, if grass production is desired. Do not apply to newly seeded areas until grass is well established. Reseeding is not recommended for at least 30 days following application.

CONDITIONS OF SALE - LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

Read the Conditions of Sale - Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are

beyond the control of Helena Chemical Company (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause faction relating to the handling or use of this product shall limited to, at Helena Chemical Company's election, one of the following:

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

To the extent allowed by law, the Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of arranty, liability and remedies.

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