

### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Bill Washburn Helena Chemical Company 225 Schilling Blvd Suite 300 Collierville TN 38017

AUG 1 0 2012\_

Subject

WEED RHAP LV 6D

EPA Registration Number 5905 508 Application Dated July 23 2012

Label Notification per PRNs 98 10 and 2007 4

Dear Mr Washburn

The Agency is in receipt of your application for Pesticide Notification under Pesticide Registration Notices (PRNs) 98 10 and 2007 4 for WEED RHAP LV 6D (EPA Reg No 5905 508) dated July 23 2012 The Registration Division (RD) has conducted a review of this request for its applicability under PRNs 98 10 and 2007 4 and finds that the actions requested fall within the scope of PRNs 98 10 and 2007 4 The label submitted with the application has been stamped Notification and will be placed in our records

If you have any questions please contact Emily Hartman of my staff at (703) 347 0189 or hartman emily@epa gov

Sincerely

Machoe Mrezz for Kathryn V Montague Product Manager 23

Herbicide Division Registration Division

Office of Pesticide Programs



## HELENA CHEMICAL COMPANY

225 Schilling Blvd Suite 300 Collierville Tennessee 38017 Telephone 901-761-0050

July 23 2012

Ms Kathryn Montague PM 23
Document Processing Desk (NOTIF)
Office of Pesticide Programs – 7504PC
U S Environmental Protection Agency
One Potomac Yard Room S 4900
2777 South Crystal Drive
Arlington VA 22202

Subject

WEED RHAP® LV 6D EPA Reg No 5905 508

Notification of Label Change per PR Notices 2007 4 and 98-10

Dear Ms Montague

Please find the following enclosed

- Application for Pesticide Registration (Other) dated 7/23/2012 noting notification per PR Notice 2007 4 and 98 10
- One highlighted copy (STK) of subject label showing all changes made per PR Notice 2007-4 and 98 10
- One clean copy (CLN) of the subject label
- One copy of the Certification with Respect to Label Integrity attached to a CD with both strikeout and clean label files

Notification of label change (storage and disposal revisions) per PR Notice 2007 4. This notification is consistent with guidance in PR Notice 2007 4 and the requirements of EPA's regulations at 40 CFR §§ 156.10. 156.140. 156.144. 156.146. and 156.156. No other changes have been made to the labeling or the Confidential Statement or Formula for this product. I understand that it is a violation of 18 USC. Sec. 1001 to willfully make any false statement to EPA. I further understand that if the amendment is not-consistent with the requirements of 40 CFR §§ 156.10. 156.140. 156.144. 156.146. and 156.156 this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Notification of label change (minor label revisions) per PR Notice 98 10 This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152 46 and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 USC Sec 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98 10 and 40 CFR 152 46 this may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Should you have any questions or comments please do not hesitate to contact me at 901 432-5118 or by e mail at bill washburn@arystalifescience.com

Sincerely

See Woshleum Bill Washburn

Registration Specialist

## **WEED RHAP® LV-6D**

## 2,4 D LOW VOLATILE HERBICIDE

**ACTIVE INGREDIENT** 

2 Ethylhexyl Ester of 2 4 Dichlorophenoxyacetic Acid

**INERT INGREDIENTS** 

89 5% 10 5% 100 0%

**TOTAL** 

Equivalent to 59 4% of 2 4 Dichlorophenoxyacetic acid or 5 6 lbs /gal

## KEEP OUT OF REACH OF CHILDREN CAUTION

	FIRST AID
IF ON SKIN OR CLOTHING	Take off contaminated clothing
	Rinse skin immediately with plenty of water for 15 20 minutes
	Call a poison control center or doctor immediately for treatment advice
IF SWALLOWED	Call a poison control center or doctor immediately for treatment advice
	Do not induce vomiting unless told to do so by a poison control center or doctor
	Have a person sip a glass of water if able to swallow
	Do not give anything to an unconscious or convulsing person
IF IN EYES	Hold eyelid 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 immediately for treatment advice
IF INHALED	Move victim to fresh air
	If not breathing call 911 or an ambulance then give artificial respiration
	preferably mouth to mouth if possible
	HOT LINE NUMBER
Have the product container or labe	I with you when calling a poison control center or doctor or going for treatment. In case of

Have the product container or label with you when calling a poison control center or doctor or going for treatment. In case of emergency, call ChemTrec at 1,800,424,9300.

## SEE INSIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

EPA REG NO 5905 508 EPA EST NO NET CONTENTS AD 070108

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

NOTIFICATION AUG 1 0 2012

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Avoid contact with skin eyes or clothing Harmful if swallowed Harmful if absorbed through skin Causes moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid inhaling vapor or spray mist.

### 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.

## All mixers loaders applicators flaggers and other handlers must wear

- long sleeved shirt and long pants
- shoes and socks plus
- chemical resistant gloves such as Barrier Laminate Nitrile Rubber Neoprene Rubber or Viton
- Chemical resistant apron when applying postharvest dips or sprays to citrus mixing or loading cleaning up spills or equipment or otherwise exposed to the concentrate

See Engineering Controls for additional requirements

## **User Safety Requirements**

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

### **Engineering Controls**

Pilots must use an enclosed cockpit that meets the requirements listed in WPS for agricultural pesticides [40 CFR 170 240 (d)(6)]

## **USER SAFETY RECOMMENDATIONS**

Users should wash hands before eating drinking chewing gum using tobacco or using the toilet

Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing

Users should 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**

This product may be toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable particularly where the water table is shallow may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

## **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.

## CHEMIGATION 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.

Use of this product in certain portions of California Oregon and Washington is subject to the January 22 2004 Order for Injunctive relief in Washington Toxics Coalition, et al, v EP, C01 0132C (W D WA) For further information please refer to http://www.epa.gov/espp/wtc/

## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard 40 CFR part 170. This Standard contains requirements for 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 12 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

Waterproof gloves

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. Do not enter or allow people (or pets) to enter the treated areas until sprays have dried.

### STORAGE AND DISPOSAL

**PROHIBITIONS** Do not contaminate water food or feed by storage or disposal. Open dumping is prohibited. Do not store under conditions which might adversely affect the container or its ability to function properly.

**PESTICIDE STORAGE** Do not store below temperature of 0°F If frozen warm to 40°F and redissolve before using by rolling or shaking the 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. Personnel should use clothing and equipment consistent with good pesticide handling.

**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 HANDLING DISPOSAL**

NONREFILLABLE METAL CONTAINER (EQUAL TO OR LESS THAN 5 GALLONS) Non Refillable Container Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows. Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

NONREFILLABLE METAL CONTAINER (GREATER THAN 5 GALLONS) Non Refillable Container Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows. Empty the remaining contents into application equipment or a mix tank. Fill the container ½ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer Offer for recycling, if available or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

NONREFILLABLE PLASTIC CONTAINER (EQUAL TO OR LESS THAN 5 GALLONS) Non Refillable Container Do not reuse or refill this container Triple rinse container (or equivalent) promptly after emptying Triple rinse as follows Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip Fill the container ¼ full with water and recap Shake for 10 seconds Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal Drain for 10 seconds after the flow begins to drip Repeat this procedure two more times Then offer Offer for recycling, if available, 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

NONREFILLABLE PLASTIC CONTAINER (GREATER THAN 5 GALLONS) Non Refillable Container Do not reuse or refill this container Triple rinse container (or equivalent) promptly after emptying Triple rinse as follows. Empty the remaining contents into application equipment or a mix tank. Fill the container ½ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal.

Repeat this procedure two more times. Then offer Offer for recycling, if available 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

REFILLABLE CONTAINER Refill this container with pesticide only Do not reuse this container for any other purpose Cleaning the container before final disposal is the responsibility of the person disposing of the container Cleaning before refilling is the responsibility of the refiller. 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 leaking containers. Check for leaks after refilling and before transportation. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. If the container is not being refilled, return to the point of purchase. 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.

**Plastic** 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 WEED RHAP® LV-6D. 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 container is not being refilled, return to the point of purchase.

This product can reach groundwater as a result of mixing and loading. To minimize groundwater contamination from spills during mixing loading and cleaning of equipment take the following steps.

**Mixing and Loading** The mixing and loading of spray mixtures into the spray equipment must be carried out on an impervious pad (i.e. concrete slab plastic sheeting) large enough to catch any spilled material. If spills occur contain the spill by using an absorbent material (e.g. sand earth or synthetic absorbent). Dispose of the contaminated absorbent material by placing in a plastic bag and following disposal instructions on this label.

Triple rinse empty containers as instructed above and add the rinsate to the mixing tank

Cleaning of Equipment When cleaning equipment do not pour the washwater on the ground spray or drain away from wells and other water sources

#### SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g. wind direction wind speed temperature relative humidity) and method of application (e.g. ground aerial airblast chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

## **Droplet Size**

When applying sprays that contain 2 4 D as the sole active ingredient or when applying sprays that contain 2 4 D mixed with active ingredients that require a Coarse or coarser spray apply only as a Coarse or coarser spray (ASAE standard 572) or volume mean diameter of 385 microns or greater for spinning atomizer nozzles

When applying sprays that contain 2.4 D mixed with other active ingredients that require a Medium or more fine spray apply only as a Medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles

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## Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on target disposition and there are not sensitive areas (including but not limited to residential areas bodies of water known habitat for nontarget species nontarget crops) within 250 feet downwind. If applying a Medium spray leave one swath unsprayed at the downwind edge of the treated field

## **Temperature Inversions**

If applying at wind speeds less than 3 mph, the applicator must determine if a) conditions of temperature inversion exist or b) stable atomospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

## Susceptible Plants

Do not apply under circumstances where spray drift may occur to food forage or other plantings that might be damaged or crops thereof rendered unfit for sale use or consumption. Susceptible crops include but are not limited to cotton okra flowers grapes (in growing stage) fruit trees (foliage) soybeans (vegetable stage) ornamentals sunflowers tomatoes beans and other vegetables or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

## Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2.4 D herbicides. Where states have more stringent regulations, they must be observed.

## Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter

Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater heights is required for aircraft safety. This requirements does not apply to forestry or rights of way applications.

When applications are made with a crosswind the swath will be displaced downwind. The applicator must compensate for this by adjusting the path of the aircraft upwind.

Do not apply with a nozzle height greater than 4 feet above the crop canopy

2 4 D esters may volatilize during conditions of low humidity and high temperatures Do not apply during conditions of low humidity and high temperatures

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.

#### **GENERAL INFORMATION**

Performance of this product may be affected by local conditions crop varieties and application method. 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 be satisfactory on susceptible annual weeds. For perennial weeds and conditions such as the very dry area 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 difficult to control and may require repeat applications. Application rates should be 2 to 10 gallons of total spray by air or 5 to 25 gallons by ground equipment unless otherwise directed. In either case use the same amount of 2.4 D recommended per acre. For crop uses, do not mix with oil surfactants or other adjuvants unless specifically recommended on label. To do so may reduce herbicide s selectivity and could result in crop damage.

Aerial application should be used only when there is no danger of drift to susceptible crops. Many states have regulations concerning aerial application of 2.4 D formulations. Consult local regulatory authorities before making applications. Although this product is a low volatile formulation, at temperatures above 95°F vapors may damage susceptible crops growing nearby.

Because coarse sprays are less likely to drift than fine do not use equipment (such as hollow cone small orifice nozzles) or conditions (such as high pressure) that produce such sprays

Product 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 Product should not be used in greenhouses Excessive amounts of this product in the soil may temporarily inhibit seed germination and all plant growth

If stored below freezing it may be necessary to warm product to 40°F and agitate before using. This does not affect the efficiency of the product

Spray equipment used to apply 2 4 D should not be used for any other purpose until thoroughly cleaned with a suitable chemical cleaner

**Spray Preparation** Add the recommended amount of product to approximately one half the volume of water to be used for spraying Agitate well then add the remainder of the water. Continue agitation during application until spray tank is empty

**Use in Liquid Nitrogen Fertilizer** Product may be combined with liquid nitrogen fertilizer suitable for foliage application on corn grass pastures or small grains in one operation. Use product according to directions on this label for those crops. Use liquid fertilizer at rates recommended by supplier or extension service specialist. Mix the product and fertilizer according to the following instructions.

Fill the spray tank approximately 1/2 full with the liquid fertilizer. Add the product while agitating the tank. Add the remainder of the liquid fertilizer while continuing to agitate. Apply immediately maintaining agitation during application until tank is empty. DO NOT APPLY DURING COLD (NEAR FREEZING) WEATHER. Spray mixture must be used immediately and may not be stored.

### WHERE TO USE

This product is used to control broad leaved weeds in cereal crops corn potatoes soybeans sorghum weeds and brush in rangeland pastures rights of way and similar noncrop uses

## **WEEDS CONTROLLED**

Product will kill or control the following in addition to many other noxious plants susceptible to 2.4 D

Alder Fleabane (daisy) Povertyweed Alfalfa Flixweed Prickly lettuce American lotus Florida Pusley Primrose Artichoke Jerusalem Frenchweed Puncturevine Aster Galinsoga Purslane Austrian fieldcress Goatsbeard Rabbitbrush Beggartick Goldenrod Ragweed Biden Goosefoot Rape wild Russian thistle Bindweed hedge Ground IVY Bindweed field Gumweed Sagebrush Bindweed European Halogeton Salsify

Sand shinnery oak Hawkweed Bitter wintercress **Bitterweed** Healall Shepherd s purse Blackeyed susan Hemp Sicklepod Blessed thistle Henbit Smartweed Blue lettuce Hoary cress Sneezeweed Honeysuckle Blueweed Texas Southern wild rose Boxelder Indiana mallow Sowthistle

**Broomweed** Indigo Spanishneedles Buckbrush Ironweed St Johnswort Jewelweed Buckhorn Starthistle Buckwheat wild Jimsonweed Stinging needle Bullthistle Klamathweed Stinkweed Bur ragweed Knotweed Sumac Burdock Kochia Sunflower Burhead Ladysthumb Sweetclover Lambsquarter **Tansymustard** Buttercup Catnip Loco big bend Tansyragwort Locoweed Tanweed Canada thistle Carpetweed Lupine Tarweed Mallow Venice Chamise Thistles Cherokee rose Toadflax Manzanita Chickweed Marijuana Tumbleweed

Chickweed Marijuana Tumbleweed
Chicory Many flowered Aster Velvetleaf
Cinquefoil Marshelder Vervain
Coastal redstem sage Mexicanweed Vetch
Cockle Milkvetch Virginia creeper

Cocklebur Morningglory Wild buckwheat Musk thistle Coffeebean Wild carrot Coffeeweed Mustard Wild garlic Common sowthistle Wild lettuce Nettle Corn flower **Nutarass** Wild mustard Orange hawkweed Wild onion Coyotebrush Creeping jenny Parsnip Wild parsnip Wild radish Pennycress Croton Wild rape Curly indigo Pennywort

Dandelion Peppergrass Wild strawberry Wild sweet potato Devil s claw Pepperweed Dogbane Pigweed (hybrid) Willow Dogfennel **Plantains** Witchweed Wormweed Elderberry Poison hemlock Fanweed Poison ivy Yellow rocket Fiddleneck Poorjoe Yellow star thistle

and many other broadleaf weeds

Some of these species may require repeat applications and/or use of higher rate recommended on this product label even under ideal conditions for application. Control of pigweeds in the High Plains area of Texas and Oklahoma may not be satisfactory with this product.

Partially controlled

## **CROPS**

## **SPECIFIC USE DIRECTIONS**

## CEREAL GRAINS (Not Underseeded with a Legume) Barley, Rye Wheat

WEEDS IN CROPS	AMOUNT OF WEED RHAP LV 6D PER ACRE (Average Conditions)	AMOUNT OF WEED RHAP LV 6D PER ACRE (Dry Conditions as in Western States )	DIRECTIONS FOR USE
Annual and biennial broadleaf weeds	1/3 to 2/3 pints	2/3 to 1 1/3 pints	Do not apply WEED RHAP LV 6D to grain in the seedling stage Spray when weeds are small after grain begins tillering but before boot stage (usually 4 to 8 inches
Perennial broadleaf weeds	2/3 pints	5/6 to 1 1/3 pints	tall) Do not apply before the tiller stage nor from early boot through milk stage. To control large weeds
Preharvest	2/3 pints		that will interfere with harvest or to suppress perennial weeds preharvest treatment can be applied when the grain is in the dough stage. Best results will be obtained when soil moisture is adequate for plant growth and weeds are growing well.
For Control of Wild Garlic and Wild Onion in Wheat and Barley	2/3 to 1 1/3 pints		Since these rates may injure the crop do not use unless possible crop damage is acceptable. For the higher rates on spring wheat and barley consult your local. State Agricultural Experiment. Station or Extension Service weed specialist for recommendations or suggestions to fit local conditions.
For Control of Wild Garlic in Stubble Grain	1 1/3 quarts		Following the harvest of small grains wild garlic often produces new fall growth. Apply in 20 to 40 gallons of water per acre. This is a useful practice as one part of wild garlic control program. Do not plant any crop for three months after treatment. Do not forage for 14 days following applications.

If band treatment is used base the dosage on the actual area sprayed Arizona Idaho Montana Nevada Oregon Utah Washington Wyoming

## RESTRICTIONS AND LIMITATIONS FOR USE ON CEREAL GRAINS (Not Underseeded With a Legume) (Barley Rye, Wheat)

- The higher rates increase the risk of grain injury and should be used only where the weed control problem justifies the grain damage risk
- Apply WEED RHAP LV 6D in sufficient water for adequate coverage
- Do not permit dairy animals or meat animals being finished for slaughter to forage treated grain fields within 2
  weeks after treatment
- Do not feed treated straw to livestock
- Postemergence

Limited to one application per crop cycle Maximum of 21 ounces per acre per application

Preharvest

Limited to one application per crop cycle Maximum of 11 4 ounces per acre per application

- Preharvest interval (PHI) is 14 days
- Limited to 40 ounces per acre per crop cycle

## CEREAL GRAINS (Not Underseeded with a Legume) Oats

WEEDS IN CROPS	AMOUNT OF WEED RHAP LV 6D PER ACRE (Average Conditions)	DIRECTIONS FOR USE
Spring Planted Oats	1/3 pints	Apply in sufficient water to give good coverage. Apply after the fully tillered stage except during the boot to dough stage. <b>Note</b> . Oats are less tolerant to 2.4 D than wheat or barley and more likely to be injured.
Fall Planted Oats	1/3 to 5/6 pints	Apply after full tilering but before early boot stage. Some difficult weeds may require higher rates of 1/2 to 5/6 pints per acre for maximum control. but injury may result. Do not spray during or immediately following cold weather.  Note: Oats are less tolerant to 2.4 D than wheat or barley and more likely to be injured.
Pre Harvest	2/3 pints	Apply with recommended amount of water per acre when grains are in the hard dough stage to control large weeds that may interfere with harvest. Best results will be obtained when soil moisture is sufficient to cause succulent weed growth.

If band treatment is used base the dosage on the actual area sprayed

## RESTRICTIONS AND LIMITATIONS FOR USE ON CEREAL GRAINS (Not Underseeded With a Legume) (Oats)

- The higher rates increase the risk of grain injury and should be used only where the weed control problem justifies the grain damage risk
- Apply WEED RHAP LV 6D in sufficient water for adequate coverage
- Do not permit dairy animals or meat animals being finished for slaughter to forage treated grain fields within 2
  weeks after treatment
- Do not feed treated straw to livestock
- Postemergence

Limited to one application per crop cycle

Maximum of 21 ounces per acre per application

## Preharvest

Limited to one application per crop cycle Maximum of 11 4 ounces per acre per application

- Preharvest interval (PHI) is 14 days
- Limited to 40 ounces per acre per crop cycle

## CORN (Field and Pop)

WEEDS IN CROPS	AMOUNT OF WEED RHAP LV 6D PER ACRE	DIRECTIONS FOR USE
Preplant or Preemergence	2/3 to 1 1/3 pints	Apply product from 3 to 5 days after planting but before corn emerges Do not use on very light sandy soils. Use the higher rates on heavy soils. Plant corn as deep as practical.
Postemergence	In dry conditions (as in Western States) Use 1/3 to 1/2 pint	Best results are usually obtained when weeds are small and corn is 4 to 18 inches tall. When corn is over 8 inches tall, use drop nozzles. Do not apply from tasseling to dough stage. If corn is growing rapidly and temperature and soil moisture content is high, use 1/3 pint per acre rate to reduce possibility of crop damage. Delay cultivation for 8 to 10 days to prevent stalk breakage due to temporary brittleness caused by 2.4 D. Application rates of up to 2/3 pint per acre may be used to control some hard to control weeds. However, the possibility of injury to the corn is increased. If corn is over 8 inches tall, use drop nozzles to keep spray off corn foliage as much as possible. Do not use with oil, atrazine, or other adjuvants. Since the tolerance to 2.4 D of individual hybrids varies consult your local Extension Service. Agricultural Experiment Station or University Weed Specialist for information.
Preharvest	2/3 to 1 1/3 pints	After the hard dough or denting stage apply 2/3 to 1 1/3 pints per acre by air or ground equipment to suppress perennial weeds decrease weed seed production and control tall weeds such as bindweed cocklebur dogbane jimsonweed ragweed sunflower velvetleaf and vines that interfere with harvesting
Postharvest	1 1/3 quarts	Following the harvest of corn wild garlic often produces new fall growth. This should be sprayed with 1 1/3 quarts of product per acre. This is a useful practice as one part of a wild garlic control program. Do not plant any crop for three months after treatment.

Arizona Idaho Montana Nevada Oregon Utah Washington Wyoming

## RESTRICTIONS AND LIMITATIONS FOR USE ON CORN (Field and Pop)

- Preharvest interval (PHI) is 7 days
- Do not use treated crop as fodder for 7 days following application
- Maximum Use rate per acre per crop cycle is 69 ounces
- Preplant or Preemergence

Limited to one application per crop cycle Maximum of 23 ounces per acre per application

Postemergence

Limited to one application per crop cycle Maximum of 11 4 ounces per acre per application

Preharvest

Limited to one application per crop cycle Maximum of 34 ounces per acre per application

## **CORN (Sweet)**

WEEDS IN CROPS	AMOUNT OF WEED RHAP LV 6D PER ACRE	DIRECTIONS FOR USE
Preplant or Preemergence	2/3 to 1 1/3 pints	Apply product from 3 to 5 days after planting but before corn emerges Do not use on very light sandy soils. Use the higher rates on heavy soils. Plant corn as deep as practical.
Postemergence	1/3 pints  In dry conditions (as in Western States) Use 1/3 to 1/2 pint	Best results are usually obtained when weeds are small and corn is 4 to 18 inches tall. When corn is over 8 inches tall, use drop nozzles. Do not apply from tasseling to dough stage. If corn is growing rapidly and temperature and soil moisture content is high, use 1/3 pint per acre rate to reduce possibility of crop damage. Delay cultivation for 8 to 10 days to prevent stalk breakage due to temporary brittleness caused by 2.4 D. Application rates of up to 2/3 pint per acre may be used to control some hard to control weeds. However, the possibility of injury to the corn is increased. If corn is over 8 inches tall, use drop nozzles to keep spray off corn foliage as much as possible. Do not use with oil, atrazine, or other adjuvants. Since the tolerance to 2.4 D of individual hybrids varies consult your local Extension. Service. Agricultural Experiment Station or University Weed Specialist for information.
Postharvest	1 1/3 quarts	Following the harvest of corn wild garlic often produces new fall growth. This should be sprayed with 1 1/3 quarts of product per acre. This is a useful practice as one part of a wild garlic control program. Do not plant any crop for three months after treatment.

Arizona Idaho Montana Nevada Oregon Utah Washington Wyoming

## RESTRICTIONS AND LIMITATIONS FOR USE ON CORN (Sweet)

- Preharvest interval (PHI) is 45 days
- Do not use treated crop as fodder for 7 days following application
- Maximum Use rate per acre per crop cycle is 34 ounces
- Preplant or Preemergence

Limited to one application per crop cycle Maximum of 23 ounces per acre per application

Postemergence

Limited to one application per crop cycle Maximum of 11 4 ounces per acre per application

## SORGHUM (Milo)

WEEDS IN CROPS	AMOUNT OF WEED RHAP LV 6D PER ACRE	DIRECTIONS FOR USE
Preplant or Preemergence	1/3 pints  In dry conditions (as in Western States*) Use 1/3 to 1/2 pint	Apply to sorghum when crop is 4 to 12 inches high with secondary roots well established. Use drop nozzles when crop is over 10 inches high. Do not apply from flowering to dough stage. Rates of up to 2/3 pint per acre may be used to control some hard to control weeds. However, the chance of crop injury is increased with the higher rates. Do not use with oil. Use lower rate if conditions of high temperature and high soil moisture exist. Varieties vary in tolerance to 2.4 D and some hybrids are quite sensitive. Spray only varieties known to be tolerant to 2.4 D. Contact seed company or your Agricultural Experiment Station or Extension. Service weed specialists for this information.

Arizona Idaho Montana Nevada Oregon Utah Washington Wyoming

## RESTRICTIONS AND LIMITATIONS FOR USE ON SORGHUM (Milo)

- Preharvest interval (PHI) is 30 days
- Do not permit meat or dairy animals to consume treated crop as fodder or forage for 30 days following application
- Limited to one application per crop cycle
- Maximum of 11 4 ounces per acre per application

## **SOYBEANS (Preplant Only)**

WEEDS IN CROPS	AMOUNT OF WEED RHAP LV 6D PER ACRE	DIRECTIONS FOR USE
Pre plant burndown (Before 7 days of planting)	1/2 to 2/3 pint	For use in crop residue management systems. For best weed control apply to postemergent weeds when small actively growing and free of stress caused by extremes in climatic conditions diseases or insect damage. The response of individual weed species is variable. Consult your local county agent or state Agricultural Extension Service.
Pre plant burndown (Before 15 days of planting)	2/3 to 1 1/3 pints	or crop consultant for advice Use the higher rate on larger weeds when perennials are present  Apply in 2 or more gallons of water per acre in aerial equipment and
		10 or more gallons of water per acre in ground equipment  After applying plant soybean seed as deep as practical or at least 1 1/2 to 2 inches deep Adjust the planter press wheel if necessary to ensure that planted seed is completely covered
		If desired this product may be applied preplant to soybeans in tank mixtures with other herbicides such as Poast® Poast® Plus Roundup® Roundup® D Pak Honcho® Gramoxone® Extra Prowl® Pursuit® Plus Scepter® 70DG Squadron® and others that are registered for preplant soybean use
		Compatible crop oil concentrates nonionic surfactants and fluid fertilizers approved for use on growing crops may increase the herbicidal effectiveness of 2 4 D on certain weeds and may be added to the spray tank. Read and follow all directions and precautions on this label and on all labels of adjuvants or fertilizers mixed with this product.
		NOTE Unacceptable injury to soybeans planted in treated fields may occur. Whether or not soybean injury occurs and the extent of the injury will depend on weather (temperature and rainfall) from herbicide application until soybean emergence and agronomic factors such as the amount of weed vegetation and previous crop residue present Injury is more likely under cool rainy conditions and where there is less weed vegetation and crop residue present.

## RESTRICTIONS AND LIMITATIONS FOR USE IN SOYBEANS (Preplant)

- Preplant
  - Preplant for Two (2) applications per crop cycle
    - Limited to 2 preplant applications per crop cycle
    - Maximum of 11 4 ounces per acre per preplant application
    - Apply not less than 7 days prior to planting soybeans
  - Preplant for Single (1) application per crop cycle
    - Limited to 1 preplant application per crop cycle
    - Maximum of 23 ounces per acre per preplant application
    - Apply not less than 15 days prior to planting soybeans
- Do not apply Weed Rhap LV 6D when weather conditions such as temperature air inversions or wind favor drift from treated areas to susceptible plants
- Do not apply Weed Rhap LV 6D prior to planting soybeans if you are not prepared to accept the results of soybeans injury including possible loss of stand and yield
- Do not replant fields treated with Weed Rhap LV 6D in the same growing season with crops other than those labeled for 2 4 D use
- Do not mow or cultivate weeds prior to treating with Weed Rhap LV 6D as poor control may result
- Do not cut for feed treated hay forage or fodder or graze treated soybeans to livestock
- Do not apply Weed Rhap LV 6D pre plant to soybeans in fields having a coarse textured soil where the percent organic matter is <1 0%)</li>
- Only one application of Weed Rhap LV 6D may be made prior to planting soybeans per growing season
- Do not feed treated hay forage or fodder Livestock should be restricted from feeding/grazing of treated cover crops
- Not registered for use in California

**RED POTATOES (Grown for Fresh Market)** 

TED TOTATOES (STOWN TOT T TEST MATREE)				
WEEDS IN CROPS	AMOUNT OF WEED RHAP LV 6D PER ACRE	DIRECTIONS FOR USE		
Properly timed applications of this product generally enhance red color aid in storage retention of red color improve skin appearance increase tuber set and improve tuber size uniformity (fewer jumbos). Crop response may vary depending on variety stress factors and local conditions. Consult with Agricultural Extension Service and other qualified crop advisors for local treatment.	Apply 1 6 fl oz of this product per acre	Apply in 5 to 25 gallons of water using ground or aerial equipment. The specific spray volume selected should be sufficient for good coverage of plants. Make first application when potatoes are in the pre-bud stage (about 7 to 10 inches high) and make a second application about 10 to 14 days later. Do not exceed two applications per crop. Do not harvest within 45 days of application. Uneven application or mixture with other pesticides and additives may increase the risk of crop injury.		

## Restrictions and Limitations for use on Red Potatoes (Grown for fresh market)

- Only for use on potatoes intended for fresh market
- The preharvest interval (PHI) is 45 days
- Postemergence
  - Limited to 2 applications per crop cycle
  - Maximum of 1 6 ounces per acre per application
  - Minimum of 10 days between applications

## **GRASSES IN CONSERVATION RESERVE PROGRAM AREAS**

WEEDS IN CROPS	AMOUNT OF WEED RHAP LV 6D PER ACRE	DIRECTIONS FOR USE
Annual broadleaf weeds	1/3 to 2/3 pint	Apply when weeds are small and actively growing. Use higher rates on older weeds. Excessive injury may result if applied to young grasses with fewer than 6 leaves or prior to grasses being well established.
Biennial and perennial broadleaf weeds in established grasses	1 1/3 to 2 2/3 pints	Apply to actively growing weeds. Treat when biennial weeds are in the seedling to rosette stage and before flower stalks become apparent. Treat perennial weeds in the bud to bloom stage.

## RESTRICTIONS AND LIMITATIONS FOR USE ON GRASSES IN CONSERVATION RESERVE PROGRAM AREAS

- Use at least 2 gallons of water per acre by air and 5 gallons of water per acre by ground
- Do not harvest or graze treated Conservation Reserve Program areas
- Do not apply to grasses in the boot to dough stage if grass seed production is desired
- Postemergence
  - Limited to 2 applications per year
  - Maximum of 1 lb a e /acre per application
  - o Minimum of 30 days between applications
  - If grass is to be cut for hay agricultural use requirements for the worker protection standards are applicable
  - o For program lands such as the Conservation Reserve Program consult the program rules to determine whether grass or hay may be used. The more restrictive requirements of the program rules or this label must be followed.

#### **ESTABLISHED GRASS PASTURES RANGELANDS**

WEEDS IN CROPS	AMOUNT OF WEED RHAP LV 6D PER ACRE	DIRECTIONS FOR USE
For susceptible annual and biennial broadleaf weeds	2/3 pint	Apply in sufficient water to give good coverage to one acre depending on type of weeds and stage of growth Use only on established stands of perennial grasses

## RESTRICTIONS AND LIMITATIONS FOR USE IN PASTURES AND RANGELANDS

- Do not graze dairy cattle in treated areas for 7 days after application
- Do not cut forage for hay within 7 days of application
- Postemergence
  - Limited to 2 applications per year
  - Maximum of 1 lb a e /acre per application
  - Minimum of 30 days between applications
  - If grass is to be cut for hay agricultural use requirements for the worker protection standards are applicable
  - For program lands such as the Conservation Reserve Program consult the program rules to determine whether grass or hay may be used The more restrictive requirements of the program rules or this label must be followed

## FALLOW LAND (CROP STUBBLE ON IDLE LAND OR POST HARVEST TO CROPS OR BETWEEN CROPS)

WEEDS IN CROPS	AMOUNT OF WEED RHAP LV 6D PER ACRE	DIRECTIONS FOR USE
Annual broadleaf weeds	1 1/3 to 2 2/3 pint	Apply in sufficient carrier volume to insure adequate coverage
Perennial broadleaf weeds	Up to 2 2/3 pints	On established perennial species such as Canada Thistle and field bindweed apply higher rates to Canada Thistle and field bindweed

## RESTRICTIONS AND LIMITATIONS FOR USE IN FALLOW LAND (CROP STUBBLE ON IDLE LAND OR POST HARVEST TO CROPS OR BETWEEN CROPS)

- Only labeled crops can be planted within 30 days of application
- Do not plant any crop for 3 months after treatment or until 2 4 D has disappeared from soil
- Limited to 2 applications per year
- Maximum of 46 ounces per acre per application
- Minimum of 30 days between applications

## TURF GROWN FOR SEED OR SOD

WEEDS IN CROPS	AMOUNT OF WEED RHAP LV 6D PER ACRE	DIRECTIONS FOR USE
Annual and perennial broadleaf weeds	2/3 to 2 2/3 pints	Do not apply from early boot to milk stage Spray seedling grass only after the five leaf stage using ½ to 2/3 pint per acre to control small seedling weeds. After the grass is well established higher rates of up to 2 2/3 pints per acre can be used to control hard to kill annual or perennial weeds. For best results, apply when soil moisture is adequate for good growth. Do not use on bent grass unless injury can be tolerated.

## RESTRICTIONS AND LIMITATIONS FOR USE ON TURF GROWN FOR SEED OR SOD

- Do not graze dairy animals or cut forage for hay within 7 days of application
- Limited to 2 applications per year
- Maximum of 46 ounces per application
- Minimum of 21 days between applications

# NON CROPLAND Such as Fencerows, Hedgerows Roadsides, Drainage Ditches Rights of Way Utility Power Lines Railroads and other Non Crop Areas

WEEDS IN CROPS	AMOUNT OF WEED RHAP LV 6D PER ACRE	DIRECTIONS FOR USE
Annual broadleaf weeds	1 1/3 to 3 pint	Apply when most annual broadleaf weeds are still young and growing vigorously
Perennial and biennial broadleaf weeds	1 1/3 to 3 pint	Apply when perennial and biennial weeds are actively growing ad near the bud stage but before flowering
For woody plants	2 2/3 to 5 2/3 pints	For best results on tansy ragwort and musk thistle treat in rosette stage before bolting. A second application is usually needed for best results on thistle nettle and bindweed. Treat wild onion or garlic in early spring and in fall when they are young and growing actively. Mix 2 2/3 to 5 2/3 pints of this product in 2 quarts kerosene or diesel oil then add this mixture to 100 gallons of water. Apply 300 to 500 gallons of spray per acre depending on the stand. The addition of a wetting agent (spray adjuvant) is suggested. Usually 2 2/3 pints per acre will give adequate control. Do not use on herbaceous ground covers or creeping grass such as bent. Legumes will usually be damaged or killed. Deep rooted perennials may require repeat applications. Do not use on freshly seeded turf until grass is well established. Delay reseeding for 30 days or until 2 4 D has disappeared from soil.

## RESTRICTIONS AND LIMITATIONS FOR USE ON NON CROPLAND

- Postemergence (annual and perennial weeds)
  - Limited to 2 applications per year
  - o Maximum of 45 ounces per acre per application
  - Minimum of 30 days between applications
- Postemergence (woody plants)
  - Limited to 1 application per year
  - o Maximum of 91 ounces per acre per year
- Do not graze dairy animals for 7 days following application
- Use sufficient spray volume for thorough and uniform coverage
- Applications to non cropland areas are not applicable to treatment of commercial timber or other plants being grown for sale or other commercial use or for commercial seed production or for research purposes

## SPOT TREATMENT IN NON CROP AREAS

Mix 2 2/3 fluid ounces of Weed Rhap LV 6D per gallon of water. Wet all weeds and stems thoroughly. For best results, treat when weeds are actively growing

## ORNAMENTAL TURF AREAS Golf Courses Cemeteries Parks Sports fields Turfgrass Lawns and Other Grass Areas

WEEDS IN CROPS	AMOUNT OF WEED RHAP LV 6D PER ACRE	DIRECTIONS FOR USE
Broadleaf weeds	2/3 to 2 pints	Apply in 40 to 180 gallons or enough water to give good coverage to one acre on established stands of perennial grasses depending on type of weeds and stage of growth Usually 2 2/3 pints per acre provides good weed control under average conditions. On turf apply a maximum of 2 pints of this product per acre per application per site. Treat when weeds are young and actively growing. Do not apply to newly seeded grasses until well established. Use higher rate for hard to kill weeds. Use higher rate when using higher volume of water per acre. Do not exceed specified application dosages for any area. Deep rooted perennial weeds may require repeated treatments in the same season or in subsequent years. Spray when air temperature is between 50 and 85. F. Avoid applying during excessively dry or hot periods unless irrigation (watering) is used before treatment. Do not apply if rainfall is expected within 48 hours nor should lawns be irrigated for 48 hours following application. For optimum results, turf should not be mowed for 1 to 2 days before and after application. Reseed no sooner than 3 to 4 weeks after application of this product. Adding oil wetting agent or other surfactant to the spray may be used to increase effectiveness on weeds but doing so may reduce selectivity to turf resulting in turf damage. Maximum kill of weeds will be obtained by applying in spring and early fall when weeds are actively growing. Do not use on golf greens nor on dichondra or other broadleaf herbaceous ground covers. Do not use on creeping grasses such as bent grass and St. Augustine except for spot spraying. Newly seeded turf should not be treated until after the second mowing and the lower dosage rate should be used.

## RESTRICTIONS AND LIMITATIONS FOR ORNAMENTAL TURF AREAS Golf Courses, Cemeteries Parks Sports Fields, Turfgrass, Lawns, and Other Grass Areas

- Postemergence (annual and perennial weeds)
  - o Limited to 2 applications per year
  - o Maximum of 2 pints per acre per application
  - o Maximum seasonal rate is 69 ounces per acre excluding spot treatments
- Use sufficient spray volume for thorough and uniform coverage
- Do not allow people (other than the applicator) or pets on treatment area during application
- Do not enter treatment areas until sprays have dried

## FORESTRY (Tree Injection, Pine Release)

WEEDS IN CROPS	AMOUNT OF WEED RHAP LV 6D PER ACRE	DIRECTIONS FOR USE
Tree Injection (To control hardwoods such as Oaks Hickory Maple Pecan Elm Sumac Sweetgum and Hawthorn)	Apply undiluted product in a concentrate tree injector calibrated to apply 7 ml per injection	Space injections 2 apart edge to edge completely around the tree and close to the base. The injector bit must penetrate the inner bark.
	For dilute injections mix 2/3 gallon of product in 19 gallons of water	
Hard to kill species such as Hickory Dogwood Red maple Blue beech and Ash	Apply undiluted product in a concentrate tree injector calibrated to apply 7 ml per injection  For dilute injections mix 2/3	Make injections 1 to 1 1/2 inches apart edge to edge Treatment may be made at any time of the year. For best results injections should be made during growing season. May 15 October 15
	gallon of product in 19 gallons of water	

## RESTRICTIONS AND LIMITATIONS FORESTRY (Tree Injection Pine Release)

- Injection
  - o Limit to one (1) injection application per year
  - Maximum of 1 4 mls of product per injection site

## **FORESTRY (Conifer Release)**

WEEDS IN CROPS	AMOUNT OF WEED RHAP LV 6D PER ACRE	DIRECTIONS FOR USE
Conifer Release For control of alder—apply of product per acre per	2/3 to 2 quarts	Apply in 8 to 25 gallons of water as a foliage spray Treat when 3/4 of the brush foliage has attained full size leaves and before new conifer growth reaches 2 in length. This is usually between early May and mid June. Adjust treatment date depending on stage of growth and brush species. This may cause leader deformation on exposed firs, but they should overcome this during the second year after spraying.
For control of susceptible brush species such as Ceanothus spp Chinquapin madrone Manzanita oak tanoak and similar species to release	2 quarts	Apply in 8 to 25 gallons of water just prior to or during budbreak of Douglas fir To control Manzanita and Ceanothus in Ponderosa Pine apply up to 2 2/3 quarts per acre before pine growth begins in spring To increase performance add 2 to 4quarts of diesel fuel oil

hemlock spruce and firs		kerosene or a suitable approved nonionic surfactant at recommended label rate
To control hardwood species such as alder aspen birch hazel and willow	1 to 2 quarts	After northern conifers jack pine red pine black spruce and white spruce cease growth and harden off in late summer a spray of 1 to 2 quarts of product in 8 to 25 gallons of water per acre per site may be applied by air to control certain competing hardwood species such as alder aspen birch hazel and willow Since this treatment may cause occasional conifer injury do not use if such injury cannot be tolerated. Consult your regional or extension forester or state herbicide specialist for recommendations to fit local conditions.

## RESTRICTIONS AND LIMITATIONS FORESTRY (Conifer Release)

- Broadcast applications
  - Limited to one broadcast application per yearMaximum of 91 ounces per acre per year

## **WOODY PLANT CONTROL**

WEEDS IN CROP	DIRECTIONS FOR USE
To control woody plants susceptible to 2 4 D such as alder buckbrush elderberry sumac and willow on non crop areas	Use 1 1/3 to 2 quarts of product in 100 gallons of water. Wet all parts of the plants thoroughly including stem and foliage to the point of runoff. Higher volumes of up to 400 gallons per acre are necessary where the brush is very dense and over 6 to 8 feet high. Applications are more effective when made on actively growing plants. Treatment should not be made during time of severe drought or in early fall when leaves lose their green color. Hard to control species may require re treatment next season. In general it is better to cut tall wood plants and spray sucker growth when 2 to 4 feet tall.
Sand Shinnery Oak and Sand Sagebrush	On the oak use 1 1/2 pints of this product in 5 gallons of oil or in 4 gallons of water plus 1 gallon of oil per acre. Apply by aircraft between May 15 and June 15. On the sagebrush, use 1 1/2 pints in 3 gallons of oil per acre and apply by aircraft when foliage is fully expanded and the brush is actively growing.
Big Sagebrush and Rabbitbrush (for pastures and rangelands see note below)	Use 1 1/2 to 4 pints per acre in 2 to 3 gallons of oil or in 3 to 5 gallons of oil water emulsion spray. For rabbitbrush, the 4 pints per acre rate is usually required. Brush should be leafed out and growing actively when treated. Retreatment may be necessary.
Chamise Manzanita buckbrush coastal sage coyotebrush and certain other chaparral species	Use 1 1/2 to 4 pints per acre in 5 to 10 gallons of water. One gallon of fuel oil may be included in the spray mixture for added effectiveness. Make applications by aircraft or ground equipment to obtain uniform spray coverage. For effective control, the brush must be fully leaved out and growing actively when sprayed. Retreatment may be needed. Consult state.

	of local brush control specialists for most effective rate volume and timing of spray application
Dormant Application (other than Pine) For the control of susceptible deciduous brush species such as alder cascara cherry poplar and serviceberry	Apply up to 2 quarts of product per acre in sufficient diesel fuel oil or kerosene for good coverage Application may be made by ground or air and should be made before conifer bud break
Pine Only Make application while pine buds are still dormant	Apply 1 1/3 quarts of product per acre in sufficient water for good coverage by air or ground equipment. Do not use this application unless some pine injury is acceptable. Use of diesel, kerosene, or other oil, or addition of surfactants to spray mix may cause unacceptable pine injury.
Site Preparation	
(As Dormant Spray)	For control of alder prior to planting seedlings apply 1 1/3 to 2 2/3 quarts of product per acre in 8 to 25 gallons of water after alder budbreak but before foliage is 1/4 full size
(As Foliage Spray)	For control of alder prior to planting seedlings apply 1 1/3 2 2/3 quarts of product per acre in 8 to 25 gallons of water after most alder leaves are full size
	To increase penetration 2 to 4 quarts per acre of diesel fuel oil kerosene or a suitable approved nonionic surfactant at recommended label rates may be added to the spray mixture

## RESTRICTIONS AND LIMITATIONS FOR WOODY PLANT CONTROL

- Broadcast applications
  - Limited to one broadcast application per year
  - o Maximum of 91 ounces per acre per year

## **CHRISTMAS TREE PLANTATIONS**

WEEDS IN CROP	DIRECTIONS FOR USE
For control of labeled broadleaf weeds in	Use 2/3 to 1 1/3 pints of this product per acre. Apply over the top of Douglas
Douglas fir Christmas trees	fir by ground or aerial application e.g. only when the trees are dormant prior to bud break. Do not spray over the top of pine or true firs (Abies spp.) Directed sprays may be made to weeds in Christmas tree plantations of all conifer species but the spray must not contact tree foliage as injury may occur. Do not apply to weakened, diseased or stressed seedlings, since unacceptable injury may occur. This product may be mixed with Atrazine for Christmas tree application (see Tank Mix section.)
Herbaceous Weed Control To control over wintering susceptible weeds such as false dandelion Klamathweed plantain and Tansyragwort	Apply 2/3 to 2 quarts of product per acre in sufficient water for good coverage. Make application at rates and timing indicated above if pines are present. For control of hazel brush and similar species in the Lake States area, apply 1 1/3 quarts of product per acre per site in 8 to 25 gallons of water, when new shoot growth of hazel is complete.

### RESTRICTIONS AND LIMITATIONS FOR CHRISTMAS TREE PLANTATIONS

- Broadcast applications
  - Limited to one broadcast application per year
  - o Maximum of 91 ounces per acre per year

**Wild Garlic and Wild Onion Control** Apply 2 2/3 to 2 3/4 pints of product per acre making three applications fall spring fall or spring fall spring staring in the late fall or early spring. Do not graze dairy cattle within 7 days of application. Do not apply this product within 30 days of cutting grass for hay. Remove meat animals from treated areas 3 days prior to slaughter.

**Bitterweed Broomweed Croton Kochia Marshelder Musk Thistle and Other Broadleaf Weeds** Use 2 2/3 to 3 pints of this product in 10 to 30 gallons of water per acre. If weeds are young and growing actively 1 1/3 pints per acre will provide control of some species. Deep rooted perennial weeds may require repeated treatments in the same year or in subsequent years.

**Weed Control in Newly Sprigged Coastal Bermudagrass** Apply 1 1/2 to 2 3/4 pints of this product in 20 to 100 gallons of water per acre pre emergence and/or postemergence

## Restrictions and Limitations for Weed Control in Newly Sprigged Coastal Bermudagrass

- Postemergence (annual and perennial weeds)
  - Limited to 2 applications per year
  - Maximum of 2 pints per acre per application
  - o Maximum seasonal rate is 69 ounces per acre excluding spot treatments
- Use sufficient spray volume for thorough and uniform coverage
- Do not allow people (other than the applicator) or pets on treatment area during application
- Do not enter treatment areas until sprays have dried

**Control of Southern Wild Rose** On roadsides and fencerows use 2/3 gallon of this product plus 4 to 8 oz of a nonionic surfactant such as Induce® per 100 gallons of water and spray thoroughly as soon as foliage is well developed. Two or more treatments may be required. On rangeland, apply a maximum of 2.9 pints of this product per acre pre application per site.

## Restrictions and Limitations for Control of Southern Wild Rose

- Postemergence (annual and perennial weeds)
  - Limited to 2 applications per year
  - o Maximum of 45 ounces per acre per application
  - Minimum of 30 days between applications
- Postemergence (woody plants)
  - Limited to 1 application per year
  - Maximum of 91 ounces per acre per year
- Do not graze dairy animals for 7 days following application
- Use sufficient spray volume for thorough and uniform coverage
- Applications to non cropland areas are not applicable to treatment of commercial timber or other plants being grown for sale or other commercial use or for commercial seed production or for research purposes

#### **TANK MIXES**

Read and follow the label of each tank mix product used for precautionary statements directions for use geographic and other restrictions

#### **CEREAL GRAINS**

WEED RHAP® LV 6D and Buctril® ME4 for weed control on cereal grains (wheat barley and rye) Buctril® ME4 Broadleaf Herbicide will control some annual weeds that are resistant to this product and may be tank mixed with WEED RHAP® LV 6D for broader spectrum weed control on small grains. In cereal areas except Washington. Oregon and Idaho use 1/3 to 2/3 pint of this product plus 1/2 to 3/4 pint of Buctril® ME4 per acre. In Washington. Oregon and Idaho use 1/3 to 2/3 pint of this product plus 3/4 to 1 pint Buctril® ME4 per acre. First mix the WEED RHAP® LV 6D in water, then add the Buctril® ME4. Use the higher rates for larger weeds or where weed growth is slow due to dry or cold weather. Apply before weeds are 6 inches high. Use 10 to 20 gallons total spray volume per acre with ground equipment or 5 to 10 gallons total spray volume with air application. Use higher volume on larger weeds.

The preharvest interval (PHI) is 14 days

## Postemergence

Limited to one postemergence application per crop cycle Maximum of 1 25 lbs ae/acre per application

### Preharvest

Limited to one preharvest application per crop cycle Maximum of 0.5 lbs a e/acre per application

Limited to 1 75 lbs a e/acre per crop cycle

WEED RHAP® LV 6D and Amber® Tank Mix for Control in Wheat Barley Pastures Rangeland and Conservation Reserve Program Areas Use Amber® recommended rates and application guidelines in combination with WEED RHAP® LV 6D in the following applications

To control broadleaf weeds beyond optimum treatment size for Amber

To control broadleaf weeds not listed on the Amber® label

To control sulfonylurea resistant weeds

For henbit control apply with Amber® in early post emergent applications

WEED RHAP® LV 6D with Banvel® (or Banvel® SGF) and Ally® (or Express®) to provide more complete Kochia control. Offers quick burndown. Provides residual activity with Ally to control later weed flushes making harvesting easier and reducing post harvest weed control needs. Controls broader weed spectrum while offering better control of Russian thistle mustards flixweed and wild buckwheat. Allow for early treatment. Apply 5.3 ounces of this product with 0.1 ounce of Ally plus either 2 to 3 ounces of Banvel® or 4 to 6 ounces of Banvel® SGF per acre. The tank mix can be applied to winter wheat from the four leaf stage (tillering) to prior to joint. It can be applied to spring wheat from the four leaf stage through the five leaf stage. Growers who want to rotate to a sensitive crop following wheat and are concerned about carryover from Ally® can substitute Express® in the tank mix which allow crop rotation 60 days after application. The recommended rate of Express® is 1/6 ounce per acre.

WEED RHAP® LV 6D and Peak® for Post emergent Weed Control in Grain Sorghum Use 2 1/2 to 5 ounces per acre of WEED RHAP® LV 6D in combination with Peak® herbicide Application should be made as a directed spray when sorghum reaches 5 8 or 8 24 in height For Applications in Wheat Barley and Rye Use the lower tank mix rate for Peak® in conjunction with 5 to 8 ounces per acre of WEED RHAP® LV 6D to control thistles and field bindweed Application limited to spring after tillering and prior to jointing For Control of Kochia (1 6 ) Lambsquarter (1 6 ) Morningglories (1 6 ) and

Pigweeds (1 8 ) in Wheat and Fall Seeded Barley Apply tank mix rate of Peak in combination with 5 to 8 ounces per acre of **WEED RHAP® LV 6D** after tillering and prior to jointing

WEED RHAP® LV 6D and Finesse® for Post emergent Applications to Control Broadleaf Weeds in Wheat and Barley Combine label recommended use rates of Finesse with 5 to 10 ounces per acre of WEED RHAP® LV 6D Follow all spray application guidelines as outlined on the Finesse label

## **SOYBEANS**

WEED RHAP® LV 6D and Turbo® 8EC in reduced tillage or no till systems WEED RHAP® LV 6D may be applied in combination with Turbo® 8EC for the control of annual grasses and broadleaf weeds and the suppression of emerged perennial weeds when soybeans are directly seeded into a stale seedbed cover crop or in previous crop residues. Special precautions poor weed control and/or crop injury may result if directions are not followed. Do not use a rib type press wheel on your no till planter or crop injury may result. Apply at a rate of 1.1/3 pints WEED RHAP® LV 6D (1 Lb. a i.) per acre with labeled rates of Turbo® 8EC. Application is recommended 30 days prior to planting.

WEED RHAP® LV 6D and Poast® as a burndown prior to planting soybeans. For broad spectrum post emergence weed control a tank mix application of WEED RHAP® LV 6D with Poast® may be made for control of emerged broadleaf and grass weeds before planting soybeans. Apply at a rate of 2/3 pints this product (1/2 Lb a i) per acre with labeled rates of Poast® up to 30 days prior to planting.

WEED RHAP® LV 6D with Scepter® Scepter 70DG or Squadron® in preplant applications on no till soybeans For broad spectrum post emergence weed control a tank mix application of WEED RHAP® LV 6D with Scepter® Scepter® 70 DG or Squadron® herbicides may be made for the control of emerged broadleaf and grass weeds before planting soybeans Apply at a rate of 1/2 lb a i of this product (Approximately 2/3 pint) per acre up to 7 days prior to planting or 1 lb a i (approximately 1 1/3 pints) per acre up to 30 days prior to planting with labeled rates of Scepter® Scepter® 70DG or Squadron® herbicides

WEED RHAP® LV 6D and Sencor® as knockdown herbicides for no till WEED RHAP® LV 6D with Sencor® DF alone or in combination with Dual® Lasso® Surflan® or Prowl® may be applied as an early preplant surface application for the control of certain broadleaf weeds and grasses in soybeans in minimum or no till products. Application is recommended 30 days prior to planting. Apply at a rate of 1 1/3 pints this product (1 Lb a i) per acre with labeled rates of Sencor®. Where grass herbicide is used in tank mix. Apply at the rates specified on that products label.

## **CHRISTMAS TREES**

WEED RHAP® LV 6D and Atrazine for weed control in forest and Christmas tree plantings. A tank mix of these two products can be used to control weeds and thus aid in establishment of young transplants of Douglas fir grand fir nobel fir white fir Austrian pine bishop pine. Jeffrey pine. Knobcone pine. loblolly pine. lodgepole pine. Monterey pine. ponderosa pine. scotch pine. slash pine. blue spruce and Sitka spruce.

The mix should be applied between fall and early spring preferably in February or March while trees are still dormant or soon after transplanting. Weeds should not be more than 1.1/2 inches high. It can be applied with either ground or air equipment. Helicopters have been highly effective for reforestation applications or steep terrain. Uniform application is the key to good weed control. Use 20 to 40 gallons of water per acre for ground application. When applying by air use a minimum of 5 gallons of water. Be sure equipment is properly calibrated. All screens in the spray system. nozzles and in line and suction strainers—should be 15 mesh or coarser. Use a pump with capacity to maintain a nozzle pressure of 35 to 40 psi, and sufficient agitation to keep the mixture in suspension in the spray tank. If a nurse tank is used, keep the mixture agitated while awaiting transfer to the spray tank. Mix 2 to 4 quarts atrazine 4L or 2.1/2 to 5 pounds atrazine. 80W with 2/3 to 2 quarts per acre of WEED RHAP® LV 6D. The actual rate of atrazine used should depend on soil type. Soils high in organic matter require higher rates than light to medium soils. Band application to Christmas Trees. Calculate the amount to be applied per acre. The band width in inches. divided by the rows spacing in inches.

broadcast treatment will equal the amount needed per acre for band treatment. For example, when treating a 4 foot band over trees planted in rows of 8 feet apart, apply 1 1/4 to 2 1/2 pounds of atrazine per acre. Please read atrazine label(s) for additional instructions.

#### NON CROP & WOODY PLANT CONTROL

WEED RHAP® LV 6D and Garlon® 4 or Garlon® 3A Tank Mixtures for Non Crop Area Broadleaf Weed Control Use 1 1/3 to 2 2/3 pints WEED RHAP® LV 6D plus 2 to 6 pints Garlon® 4 or 3 to 8 pints Garlon® 3A per acre For wider spectrum control of broadleaf weeds and woody plants apply as a broadcast spray in enough water to deliver 20 to 100 gallons total spray per acre Apply when broadleaf weeds are actively growing Woody Plant Control Broadcast Foliar Spray Use 2/3 to 1 1/3 gallons WEED RHAP® LV 6D plus 1 1/2 to 3 quarts Garlon® 4 or 2 to 4 quarts Garlon® 3A per acre Apply as a broadcast spray in enough water to deliver 20 to 100 gallons total spray per acre Apply when woody plants are actively growing Woody Plant Control High Volume Leaf Stem Treatment with Ground Equipment Use 2/3 to 5 1/3 quarts WEED RHAP® LV 6D plus 1 1/2 to 12 pints Garlon® 4 or 2 to 16 pints Garlon® 3A per acre Mix 1/2 to 1 1/3 quarts product plus 1 1/2 to 3 pints Garlon® 4 or 2 to 4 pints Garlon® 3A in enough water to make 100 gallons of spray Apply at a volume of 100 to 400 gallons of total spray per acre depending on size and density of woody plants Thoroughly wet all leaves stems and root collars of plants to be controlled Woody Plant Control Aerial Application (Helicopter only) Use 2/3 to 1 1/3 gallons WEED RHAP® LV 6D plus 3 to 4 quarts Garlon® 4 or 4 to 6 quarts Garlon® 3A per acre Apply in a total spray volume of 10 to 30 gallons per acre using drift control equipment or an effective drift control agent such as Sta Put® or Strike Zone® Use the higher rates and volumes when plants are dense or under drought conditions

WEED RHAP® LV 6D and Banvel® Herbicide tank mix for Non Crop Areas Annual Broadleaf Weeds Use 1 1/3 to 2 2/3 pints this product per acre plus 1/2 to 1 1/2 pints Banvel® For wider spectrum control of broadleaf weeds and woody plants apply as a broadcast spray in enough water to deliver 20 to 100 gallons total spray per acre. Apply when broadleaf weeds are actively growing. Use the higher rates when treating dense or tall vegetative growth. Perennial and Biennial Broadleaf Weeds. Use 2 to 4 pints this product per acre. Apply when broadleaf weeds are actively growing but prior to flowering. Use the lower rates for biennials less than 3 inches rosette diameter. Use the higher rate for perennial weeds or for biennial weeds past the 3 inch rosette stage. Woody Plant Control Broadcast. High Volume. Stem Foliage or Aerial Application. Use 2/3 to 1 1/3 gallons this product per acre. plus 2 to 8 quarts Banvel®. Apply as a broadcast spray in enough water to deliver 20 to 100 gallons total spray per acre or apply as a high volume stem foliage spray in enough volume to thoroughly wet leaves. stems. and root collars (100 to 400 gallons per acre.) or apply aerially in enough water to deliver total spray volume of 10 to 30 gallons per acre using drift control equipment or an effective drift control agent such as Sta Put or Strike Zone. Use the higher rates and volumes when plants are dense or under drought conditions.

Tank Mixes of **WEED RHAP® LV 6D** and Escort® Oust® or Telar® herbicides improve control of some target species and may also be tank mixed with these products for post emergent weed control. Tank mixes have shown improved control where resistant bio types are present.

**NOTE** All intended tank mix combinations should be used only in recommended areas on the same broadleaf weed species found on both labels. For application methods and other use specifications, use the most restricted limitations from labeling of both products.

## 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. To the extent consistent with applicable law, 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.

To the extent consistent with applicable law, The exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be 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 warranty. Inability and remedies

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