



5905-498 01/11/2002 1/10  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JAN 11 2002

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Beverly Neale  
Helena Chemical Co.  
6075 Poplar Avenue - Suite 500  
Memphis, TN 38119-4702

Dear Ms. Neale:

Subject: Delete Aquatic Uses  
Brush-Rhap Low Volatile 4-D  
EPA Registration No. 5905-498  
Your Submission Dated June 13, 1996

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you:

1. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

a. In the Precautionary Statements move the paragraph "Follow manufacturer's instructions....until it has been cleaned" immediately below "Chemical-resistant apron when cleaning equipment, mixing or loading"

b. EPA recently issued PR Notice 2001-1. Update the labeling in accordance with the guidance for the format and content of the First Aid Statements section on pesticide labeling. A copy of the PR Notice is available at the following web site:

[http://www.epa.gov/PR\\_Notices/](http://www.epa.gov/PR_Notices/)

c. Modify the Non-WPS Use Requirement statement to read similar to the following:

Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment area until spray has dried.

2. Submit one (1) copy of your final printed labeling before you release the product for shipment.

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A stamped copy of the labeling is enclosed for your records. The amended labeling supersedes all previously accepted ones.

If you have any questions concerning this letter, please contact Mr. James Stone at 703-305-7391.

Sincerely yours,



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

Enclosure

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Amendment Submitted 6/13/96 Deleting Aquatic Uses

RECD EPA/OPP/DPD1

# BRUSH-RHAP<sup>®</sup> LOW VOLATILE 4-D HERBICIDE

JUN 18 19:20

2,4-D LOW VOLATILE

ACCEPTED  
with COMMENTS  
In EPA Letter Dated:

JAN 11 2002

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

5905-48 65.40%

**ACTIVE INGREDIENT:**

\*2-Ethylhexyl Ester of 2,4-Dichlorophenoxyacetic Acid ..... 65.40%

**INERT INGREDIENTS:** ..... 34.60%

TOTAL ..... 100.00%

\*Equivalent to 43.4% 2,4-D Acid or 3.76 lb./gal.  
Isomer specific by AOAC Method 6.D01-5 (12th Ed.)  
Contains Petroleum Distillates

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See Side Panel for Additional Precautionary Statements.

EPA REG. NO. 5905-498  
EPA EST. NO.

NET CONTENTS:

MANUFACTURED BY  
HELENA CHEMICAL COMPANY  
MEMPHIS, TN 38119

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION**

Avoid contact with skin, eyes, or clothing. Harmful if swallowed. 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.

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as Barrier Laminate, Butyl Rubber, Nitrile Rubber or Viton.
- Shoes plus socks
- Protective Eyewear
- Chemical-resistant apron when cleaning equipment, mixing or loading

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.

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.

**Engineering Controls Statements**

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 170.240 (d) (4) ], the handler PPE requirements may be reduced or modified as specified in the WPS.

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.

**STATEMENT OF PRACTICAL TREATMENT**

**IF ON SKIN:** Wash with plenty of soap and water. Get medical attention if irritation persists.

**IF SWALLOWED:** Call a physician or poison control center. Dilute by giving 1 or 2 glasses of water to drink. Do not induce vomiting.

**IF IN EYES:** Flush with plenty of water. Get medical attention if irritation persists.

**IF INHALED:** Move victim to fresh air. Give artificial respiration if needed. Get medical attention.

**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 will kill or seriously injure many desirable forms of vegetation. Do not apply directly to flowers, fruits, vegetables, grapes, ornamentals, cotton, or other desirable plants. Do not use when there is hazard from drifting mists. (Coarse sprays are less likely to drift.) Vapors from this product may injure susceptible plants in the immediate vicinity. Avoid contamination of water used for domestic purposes and irrigation purposes. Excessive amounts of this product in the soil may temporarily inhibit seed germination and plant growth.

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. Do not contaminate water when disposing of equipment washwaters.

**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.

### 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
- chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile 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. Keep children and pets out of the treated area until sprays have dried.

### STORAGE AND DISPOSAL

**PROHIBITIONS:** Do not contaminate water, food, or feed by storage or disposal. Do not store under conditions which 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 redissolve 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. 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 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.

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**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.

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 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 over a large area away from wells and other water sources.

### WHERE TO USE

BRUSH-RHAP® LOW VOLATILE 4-D is used for the control of broadleaved weeds, undesirable hardwood species, and brush in forest, rangeland, and pasture areas.

### PLANTS CONTROLLED

BRUSH-RHAP® LOW VOLATILE 4-D will kill or control the following as well as many other noxious plants susceptible to 2,4-D:

Alder	Elderberry	Plantain
Artichoke	Goldenrod	Poison ivy
Bindweed (hedge, field, and European)	Ground ivy	Polkweed
Bitter wintercress	Hazel brush	Poplar
Boxelder	Hemp	Povertyweed
Buckhorn	Hoary cress	Puncturevine
Bull thistle	Honeysuckle	Sagebrush
Bur ragweed	Indigo	Sassafras
Burdock	Ironweed	Shepherdspurse
Buttercup	Purslane	Smartweed
Canyon live oak	Jimsonweed	Sowthistle
Catnip	Lambsquarters	Stinkweed
Chickweed	Russian thistle	Sumac
Chicory	Locoweed	Sunflower
Cocklebur	Madrone	Tanoak
Coffeeweed	Manzanita	Virginia creeper
Creeping jenny	Mexicanweed	Wild garlic
Curly indigo	Morningglory	Wild lettuce
Dandelion	Mustard	Wild onion
Dock	Nutgrass	Wild radish
Dogwood	Pennywort	Willow
	Pigweed	

## DIRECTIONS FOR USE

Add the recommended amount of product to about one-half the volume of water to be used in spraying. Mix well, then add remaining water and mix until spray mixture is uniform.

**For aerial spraying**, thoroughly mix the required amount of chemical in oil. Add this mixture to a sufficient amount of water to insure adequate coverage. NOTE: This material forms an emulsion in water - not a solution and tends to separate on standing. Provide agitation in order to insure uniform spray mixtures. Best results are obtained when applications are made while the plants are well leafed and actively growing.

**On Rangeland, Pastures, and for General Weed Control** - Use 1 to 4 pints 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.

**DO NOT** graze dairy animals on treated areas within seven days after application. Do not slaughter for meat animals for 3 days after treatment. Do not harvest grass cut for hay for 30 days after treatment.

## USES IN FOREST MANAGEMENT

**CONIFER RELEASE:** For control of alder, apply 1-1/2 to 2 quarts of product per acre in sufficient volume to obtain proper contact and coverage and apply as a foliage spray between mid-May and mid-June.

**For control of madrone, manzanita, oak, tanoak, and similar species to release hemlock, spruce, and firs**, apply 3 quarts of product per acre in sufficient volume to obtain proper contact and coverage just prior to or during budbreak of Douglas fir.

**For control of hazel brush and similar species in the Lake States area**, apply 2 quarts of product per acre in sufficient volume to obtain proper contact and coverage when new shoot growth of hazel is complete.

**SITE PREPARATION: (As Budbreak Spray)** - For control of alder prior to planting seedlings, apply 2 to 4 quarts of product per acre in sufficient volume to obtain proper contact and coverage after alder budbreak but before foliage is 1/4 full size.

**(As Foliage Spray)** - For control of alder prior to planting seedlings, apply 2 quarts of product per acre in sufficient volume to obtain proper contact and coverage after most alder leaves are full size.

## OBSERVE THESE PRECAUTIONS

Avoid application of spray or drift of spray to desirable plants, as this product may injure cotton, tomatoes, beans, peas, most vegetables, ornamentals, grapes, or others. Even minute quantities of the spray may cause severe injury. Accordingly application by airplanes should be made only when there is no hazard from drift. All sprays are likely to drift under certain conditions. The finer the spray, the greater the likelihood of drift effect. Coarse sprays are less likely to drift.

Use only amount needed. **DO NOT OVERDOSE.**

Since vapors of the ester in this product may injure susceptible plants in the vicinity, use only where



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there is no danger from such vaporization.

Be sure that airplane spraying equipment has a quick-acting, effective cutoff valve, and is used from the lowest possible altitude by an aircraft operator experienced in the application of herbicides.

Do not use same equipment for other purposes. If necessary to use sprayer for any other spraying, be sure to thoroughly clean all equipment with a suitable chemical cleaner. (1 qt. household ammonia in 20 to 25 gals. water - let stand overnight, then rinse thoroughly with water.)

Do not store or place near fertilizers, seeds, plants, insecticides, or fungicides. Do not reuse empty container. See Storage and Disposal statement.

Obtain necessary approval and/or permits for use in states or areas where required.

Excessive amounts of this product in the soil may temporarily inhibit seed germination or plant growth.

Users should note that herbicide treatment of public waters requires a permit from appropriate state agencies in most states. Your State Conservation Department or Game and Fish Commission will aid you in securing a permit if required in your state.

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

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, 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 of action relating to the handling or use of this product is a claim for damage and in no event shall damages or any other recovery of any kind against the Company exceed the price of the product which causes the alleged loss, damage, injury, or other claim. 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, liability, and remedies.