

42750-25

10/6/2003

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

OCT 6 2003

Albaugh, Inc.
c/o Michael Kellogg
Pyxis Regulatory Consulting
11324 17th Ave. Ct. N.W.
Gig Harbor, WA 98332

Gentlemen:

Subject: Revised Label
Albaugh Solve MCPA Ester
EPA Registration No. 42750-25 ✓
Your Submission Dated September 15, 2003

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

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

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

Sincerely yours,

A handwritten signature in cursive script that reads "Joanne I. Miller".

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

Enclosure

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ALBAUGH SOLVE™ MCPA Ester

HERBICIDE FOR SELECTIVE CONTROL OF CERTAIN WEEDS IN WHEAT, OATS,
BARLEY, RYE, ~~TRITICALE~~, GRASSLAND AND IN NON-CROP AREAS

CONTAINS NO SOLVENT

ACTIVE INGREDIENT:

2-ethylhexyl ester of 2-methyl-4-chlorophenoxyacetic acid*66.51%

OTHER INGREDIENTS:33.49%

TOTAL:100.00%

* Equivalent to 42.6% of 2-methyl-4-chlorophenoxyacetic acid isomer specific or not less than 3.7 pounds of 2-methyl-4-chlorophenoxyacetic acid isomer specific per gallon at 68°F. Isomer specific by AOAC Method.

EPA Reg. No. 42750-25

EPA Est. No.

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID	
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.	

See inside booklet for additional precautionary statements.

Manufactured By:
Albaugh, Inc.
Ankeny, Iowa 50021

NET CONTENTS
____ Gals.
____ Liters

FOR CHEMICAL SPILL, LEAK, FIRE, OR EXPOSURE
CALL CHEMTREC (800) 424-9300

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

Harmful if swallowed, inhaled, or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. ~~Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.~~

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 A on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear long-sleeved shirt and long pants, chemical-resistant gloves Category A, such as butyl rubber \geq 14 mils, or natural rubber \geq 14 mils, or neoprene rubber \geq 14 mils or nitrile rubber \geq 14 mils, shoes plus socks, protective eyewear, and chemical-resistant headgear for overhead exposure.

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.

When handlers use closed systems, 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 PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. 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 purposes. 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. 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 a 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.

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Most cases of groundwater contamination involving phenoxy herbicides such as MCPA have been associated with mixing/loading and disposal sites. Caution should be exercised when handling MCPA pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing and 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.

PHYSICAL OR CHEMICAL HAZARDS

Do not cut or weld container.

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.

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

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 intervals. 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 Category A, such as butyl rubber \geq 14 mils, or natural rubber \geq 14 mils, or neoprene rubber \geq 14 mils or nitrile rubber \geq 14 mils, shoes plus socks, protective eyewear, and chemical-resistant headgear for overhead exposure.

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 treated areas without protective clothing until sprays have dried.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE

Store in a dry location away from children, animals, foods, feeds, seeds and other agricultural chemicals. Keep container closed when not using. Handle in accordance with information given under "Precautionary Statements." Keep storage area locked when not in use. In the event of spillage or leakage, soak up material with absorbent clay, sand, sawdust or other absorbent material. Scrape up and dispose of in accordance with information given under "Pesticide Disposal." Repackage and relabel usable product in a sound container. In case of fire or other emergency, report at once by toll-free telephone to 800-424-9300.

Note: SOLVE™ MCPA Ester freezes when stored below -5°C. After thawing, all physical properties are restored.

DISPOSAL

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

CONTAINER DISPOSAL

METAL CONTAINERS - Triple rinse (or equivalent), adding rinsate to spray tank. 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 CONTAINERS - Triple rinse (or equivalent), adding rinsate to spray tank. 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.

GENERAL INFORMATION

Local conditions may affect the use of this chemical. Consult State Agricultural Extension or Experiment Station Weed Specialists for specific recommendations for local weed problems, and for information on possible lower dosages. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of seller. Buyer assumes all risks of use, storage or handling of this material not in strict accordance with directions given herewith.

CONTROLS THESE AND OTHER WEEDS

SUSCEPTIBLE WEEDS (MOST AREAS)

Annual Sowthistle	Mustards (annual)
Beggarticks	Poison Hemlock
Cocklebur	Puncturevine

- | | |
|-------------------|-----------------------|
| Dragonhead Mint | Ragweed |
| Field Peppergrass | Shepherdspurse |
| Goatsbeard | Stinkweed |
| | (Pennycress, Fanweed) |
| Hempnettle | Wild Radish |
| Lambsquarters | Yellow Rocket |
| (goosefoot) | or Wintercress |
| Marshelder | |

LESS SUSCEPTIBLE

- | | |
|----------------------|--------------------------|
| Buttercups | Plantains |
| Canada Thistle | Purslane |
| Chervil | Russian Pigweed |
| Dandelions | Sunflower |
| Kochia | Stinging Nettle |
| Miner's Lettuce | Vetch |
| Perennial Sowthistle | White Top or Hoary Cress |

PREPARATION OF THE SPRAY

Fill the spray tank with half the required amount of water, then add the recommended amount of SOLVE™ MCPA Ester and continue filling the spray tank with the balance of water. Keep agitator running when filling spray tank and during spray operation. For crop uses, do not mix with oil, surfactant or other adjuvants as this may reduce selectivity to crops resulting in crop damage or kill. When cleaning equipment, do not pour washwater on the ground; spray or drain over a large area away from wells and other water sources.

AMOUNT OF SPRAY TO APPLY

Apply 5 to 15 gallons of total spray per acre when making applications with ground equipment, and 3 to 10 gallons of total spray per acre when making applications by aircraft unless directed otherwise under specific directions. Do not apply MCPA isooctyl ester by aerial application in the vicinity of sugar beets. Do not apply MCPA isooctyl ester around houses, recreation sites, or similar areas. Carefully read the Environmental Hazards section of the Precautionary Statements for further information on spray volume.

AERIAL SPRAY DRIFT MANAGEMENT

Spray Drift Management

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed $\frac{3}{4}$ the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory.

Aerial Drift Reduction Advisory

[This section is advisory in nature and does not supersede the mandatory label requirements.]

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See Wind, Temperature and Humidity, and Temperature Inversions).

Controlling Droplet Size

- Volume – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure – Do not exceed the nozzle manufacturer’s recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles – Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation – Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length

For some use patterns, reducing the effective boom length to less than $\frac{3}{4}$ of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height

Applications should not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.)

Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

SELECTIVE SPRAYING

WHEAT, OATS, BARLEY, AND RYE-AND TRITICALE: Apply as a water mix spray by ground sprayer or airplane. Use 1/2 to 1 pint per acre for the more susceptible weeds after crop has reached the 3 to 4 leaf stage up to boot stage. Use up to 3 pints per acre for the less susceptible weeds after crop has tillered and up to early boot stage. Do not spray from boot to dough stage. Do not forage or graze meat animals on treated areas within 7 days of slaughter. Do not forage or graze dairy animals on treated areas within 7 days after treatment.

FLAX: Use 1/4 to 1/2 pint per acre. Apply by ground sprayer or by airplane. Apply only when weeds are up and when flax is 4 to 8 inches high and before it comes into bud. Treatment after early bud stage may result in severe damage. If Canada Thistle is present, it may be necessary to go as high as 3/4 pint per acre to prevent seed head production. Some injury to the flax may result. Do not forage or graze meat animals on treated areas within 7 days of slaughter. Do not forage or graze dairy animals on treated areas within 7 days after treatment.

GRASSES

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Established Grassland - Use 1 to 3 pints per acre in sufficient water (10 to 100 gallons) by airplane or ground sprayer application and give thorough coverage. Use higher rate for White Top, Canada Thistle and other less susceptible weeds. Spray perennials in early bud to full bloom stage and regrowth in fall; other weeds in spring or fall, when actively growing. Do not forage or graze meat animals on treated areas within 7 days of slaughter. Do not forage or graze dairy animals on treated areas within 7 days after treatment.

Grasses Grown for Seed - Aerial and surface applications: Use 1 to 2 pints per acre, the higher rate where weed stands are heavy. In established grasses, apply in spring before head comes into boot and on seedling grass after grass has tillered. **Note:** For weed control in grasses, repeated treatment may be needed for less susceptible weeds. In some areas bent, buffalo, carpet and St. Augustine grasses may also be injured by treatment.

NON-CROP SPRAYING ALONG FENCE ROWS AND ROADSIDES: Canada Thistle, White Top and Meadow Buttercup - For spot treatment, use 1/4 pint in 3 to 4 gallons of water, or 3/4 gallon in sufficient water to give coverage for most extensive areas. Spray to wet weeds thoroughly when in bud to early bloom and again on fall regrowth.

USE IN LIQUID NITROGEN FERTILIZER

SOLVE™ MCPA Ester is specially formulated to be combined with liquid nitrogen fertilizer suitable for foliar application in one operation. Use SOLVE™ MCPA Ester according to directions on this label. Use liquid fertilizer at rates recommended by supplier or Extension Service Specialist. Mix the SOLVE™ MCPA Ester concentrate and fertilizer according to the following instructions.

Fill the tank approximately 1/2 full with the liquid fertilizer. Add the SOLVE™ MCPA Ester concentrate while agitating the tank. Add the remainder of the liquid fertilizer while continuing to agitate. Application should be made immediately, maintaining agitation until spray tank is empty. **DO NOT APPLY DURING COLD (NEAR FREEZING) WEATHER.** Spray mixture may not be stored.

CONDITIONS OF SALE AND WARRANTY

The DIRECTIONS FOR USE of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of ALBAUGH, INC., its Supplemental Distributors, or the Seller. All such risks shall be assumed by the Buyer.

ALBAUGH, INC., its Supplemental Distributors and the Seller warrant that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use subject to the inherent risks referred to above. **NEITHER ALBAUGH, INC. NOR ITS SUPPLEMENTAL DISTRIBUTORS MAKE ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED**

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WARRANTY. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS.

BUYER'S EXCLUSIVE REMEDY AND THE EXCLUSIVE LIABILITY OF ALBAUGH, INC., ITS SUPPLEMENTAL DISTRIBUTORS AND THE SELLER FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF OR THE REPAYMENT OF THE PURCHASE PRICE FOR THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. When Buyer suffers losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability, or other legal theories), Buyer must promptly notify Seller in writing of any claims to be eligible to receive either remedy stated above. **IN NO CASE SHALL ALBAUGH, INC., ITS SUPPLEMENTAL DISTRIBUTORS, OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.** ALBAUGH, INC., its Supplemental Distributors, and the Seller offer this product, and the Buyer accepts it, subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of ALBAUGH, INC.

No employee or agent of ALBAUGH, INC., its Supplemental Distributor, or the Seller is authorized to vary or exceed the terms of this Warranty in any other manner.

SOLVE™ is a trademark of Albaugh, Inc.

ACCEPTED
OCT - 6 2003
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 48750-25