



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

NOV 16 1999

Warren A. Davis
Rhône-Poulenc Ag Company
P.O. Box 12014
2 T.W. Alexander Drive
Research Triangle Park, North Carolina 27709-2014

Subject: Finish Brand 6 Harvest Aid for Cotton
EPA Registration Number 264-585
Your label amendment dated September 14, 1999

Dear Mr. Davis,

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable. However, the preferred language for the part of the "IF SWALLOWED" section is:

"Call a doctor or get medical attention. Do not induce vomiting or give anything by mouth to an unconscious person."

A stamped copy of the accepted label is enclosed for your records. Submit one copy of your final printed labeling before you release the product for shipment.

Sincerely yours,

(S)
Cynthia L. Giles-Parker
Product Manager (22)
Fungicide Branch (7505C)
Registration Division

Attachment: Label copy stamped "Accepted"

FINISH[®] brand 6 HARVEST AID FOR COTTON

ACTIVE INGREDIENTS:

Ethephon * (2-chloroethyl)phosphonic acid	51.4%
Cyclanilide** 1-(2,4-dichlorophenylaminocarbonyl)-cyclopropane carboxylic acid.....	6.4%

INERT INGREDIENTS:

42.2%

TOTAL

100.0%

* This product contains 6.0 pounds ethephon per gallon

** This product contains 0.75 pounds cyclanilide per gallon

EPA Reg. No. 264-585

EPA Est. No. 264-PA-1

KEEP OUT OF REACH OF CHILDREN DANGER PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

For PRODUCT USE Information Call 1-888-4RP-AGRO (1-888-477-2476)

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Get medical attention if symptoms persist, preferably an ophthalmologist.

IF SWALLOWED: Do not induce vomiting. Promptly drink a large quantity of milk, egg whites, gelatin solution or if these are not available, drink large quantities of water. Avoid alcohol. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

IF ON SKIN: Immediately wash with plenty of soap and water.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration. Administer oxygen if necessary. Get medical attention.

NOTE TO PHYSICIAN

Treat symptomatically. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. No specific antidote is available. Probable mucosal damage may contraindicate the use of gastric lavage.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

Corrosive. Causes irreversible eye damage. Harmful if swallowed. Harmful if inhaled or absorbed through the skin. Avoid contact with skin. Causes skin irritation. Do not get in eyes on skin or clothing. Avoid breathing vapor or spray mist. Keep away from domestic animals. Avoid contamination of food.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear long-sleeved shirts and long pants, waterproof gloves, shoes plus socks and goggles or face shield.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this products concentrate. Do not reuse them. 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 clothing immediately if pesticide gets inside. Then wash body thoroughly and put on clean clothing.

User should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Wash the outsides of gloves before removing.

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 contaminate water when disposing of equipment washwater or rinsate. Do not contaminate water used for irrigation or domestic purposes.

This chemical has properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

SPRAY DRIFT

Avoid spray drift. Do not apply when weather conditions may cause drift. Do not allow this product to drift on to non-target areas. Drift may result in illegal residues or injury to adjacent crops and vegetation, in the form of leaf yellowing and defoliation. To avoid spray drift, DO NOT apply aerially when wind speed is greater than 10 mph or during periods of temperature inversions. Use of larger droplet size will also reduce spray drift.

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 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 below:

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 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 should 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).

DIRECTIONS FOR USE

**It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.
Read entire label before using this product.**

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 regulations.

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), notification to workers 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 48 hours. The REI is 72 hours in areas where average rainfall is less than 25 inches per year.

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 over long-sleeved shirt and long pants, socks and chemical resistant footwear, goggles or face shield, and waterproof gloves.

Notify workers of the application by warning them orally and posting warning signs at entrances to treated areas.

STORAGE AND DISPOSAL

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

STORAGE

Store between 0° to 50° C (32° to 122° F) in an area that is away from ignition sources. Avoid freezing. If freezing occurs, thaw and remix before using. Avoid contact with metals due to the corrosive properties of the formulation. If container is broken or contents have spilled, follow all precautions indicated above and clean up immediately. Before cleaning up, put on full length trousers, long sleeved shirt, protective gloves, and goggles or face shield. Soak up spill with absorbent media such as sand, earth or other suitable material and dispose of waste at an approved waste disposal facility.

PESTICIDE DISPOSAL

Pesticide wastes are hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. 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

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

RETURNABLE -- REFILLABLE CONTAINERS

After use, return the container to the point of purchase or designated locations. This container must only be refilled with FINISH® brand 6 Harvest Aid For Cotton. DO NOT REUSE THE 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 device. 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 it to the point of purchase.

GENERAL INFORMATION

A foliar spray of FINISH® brand 6 Harvest Aid For Cotton will accelerate opening of mature cotton bolls, promote defoliation of both mature and juvenile foliage and reduce terminal regrowth. FINISH® brand 6 Harvest Aid For Cotton treatment promotes earlier harvest and enhances the potential for high quality, high yield, once-over harvest. Rainfall, stress, temperature fluctuations, residual nitrogen and yield potential can affect defoliation and/or regrowth.

SPRAY PREPARATION

Add 1/2 to 3/4 of the required amount of water to the spray tank. Start agitation. Add the required amount of FINISH® brand 6 Harvest Aid For Cotton, and the remaining amount of water. Mix only as much spray solution as can be used on the day of application. Storage and use of previous day's spray mix may result in equipment corrosion and reduced activity.

Do not spill the concentrated product on spray equipment, or any airplane parts. ANY SPILLS SHOULD BE IMMEDIATELY RINSED WITH PLENTY OF WATER AS FINISH® IS CORROSIVE. Use of a nurse tank is highly recommended for avoiding possible spills of concentrated formulation on spray equipment.

TANK MIXTURES WITH OTHER PRODUCTS

FINISH® brand 6 Harvest Aid For Cotton may be applied as a tank mix or in sequential application with other harvest aid and insecticide products.

In some cases, crop conditions, such as rank growth, weed or insect infestations, drought, unutilized nitrogen, low temperature, high moisture, and heavy juvenile growth will require the inclusion of other products for satisfactory defoliation and terminal regrowth suppression. FINISH® brand 6 Harvest Aid For Cotton can be tank mixed or sequentially applied with other products such as DEF® 6, FOLEX® 6EC, DROPP® 50WP, HARVADE® 5F, GINSTAR®, DROPP® ULTRA™, ROUNDUP®, METHYL PARATHION 4E or 4 lb, GUTHION® 2L or 3 and MALATHION™ 57EC for use on cotton in accordance with the most restrictive of the label limitations and precautions. No label dosage rates should be exceeded. Proper mixing sequences should be followed when making a tank mix. This product cannot be mixed with any product containing a label prohibition against such mixing. Follow all applicable use precautions and rate per acre recommendations on labels of products applied as tank mixtures or in sequence with FINISH®. In some cases, slight reduction in boll opening response has been observed when tank mixes with phosphate defoliants were used.

FINISH® tank mixes with DROPP® or DROPP® ULTRA™ on picker cotton and GINSTAR® on stripper cotton will enhance regrowth suppression and removal of juvenile foliage.

Under some conditions such as high temperatures or low soil moisture, tank mixtures with products such as FOLEX®, DEF®, DROPP® ULTRA™, GINSTAR® and METHYL PARATHION may result in leaf stick or leaf burn due to increased desiccation activity. To minimize leaf stick and leaf burn occurrence under these conditions, it is important to follow local recommendations and use the lower labeled rate of the tank mix partner product(s).

Do not tank mix FINISH® brand 6 Harvest Aid For Cotton with a desiccant if the cotton is to be spindle harvested.

Good agitation in the spray tank is essential. A tank mixture should not be allowed to stand without agitation for more than 5 to 10 minutes. Read and observe all appropriate label use directions and precautions for the defoliants used.

FINISH® brand 6 Harvest Aid For Cotton and tank mixtures of FINISH® brand 6 Harvest Aid for Cotton may be mixed with adjuvants which are cleared for application on cotton. FINISH® should be added to the tank prior to the addition of an adjuvant. Read and observe all appropriate label use directions and precautions for the adjuvant used.

NOTE: UNDER CERTAIN CONDITIONS, TANK MIXTURES OF FINISH® BRAND 6 HARVEST AID FOR COTTON WITH DESICCANTS CONTAINING SODIUM CHLORATE COULD RESULT IN THE FORMATION OF A HYPOCHLOROUS ACID WHICH ON HEATING WILL EMIT TOXIC CHLORIDE FUMES.

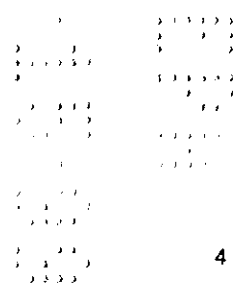
DO NOT MIX FINISH® BRAND 6 HARVEST AID FOR COTTON WITH AMMONIUM THIOSULFATE. SUCH TANK MIXTURES MAY RESULT IN FORMATION OF TOXIC FUMES.

EQUIPMENT CLEANING

Because of the acidic nature of this product, prolonged exposure to spray deposit will damage acrylic plastics, certain paints and metals.

Rinse thoroughly with detergent and water all exposed acrylic plastic-type materials (e.g. aircraft windshields), and painted surfaces within an hour after exposure to spray deposits.

At the end of each day, rinse thoroughly with detergent and water all metal parts of the aircraft and the associated spray equipment exposed to the spray deposits.



COTTON

HOW TO USE	EXPECTED CONDITIONS	DOSAGE RATE FOR FINISH® BRAND 6 HARVEST AID FOR COTTON	
		PINTS PER ACRE	GALS. WATER PER ACRE
FINISH® brand 6 Harvest Aid for Cotton Alone (Under Normal Conditions): The cotton crop must be in cut-out condition for FINISH® to provide the expected boll opening, defoliation and terminal regrowth suppression. FINISH® may be applied by air or ground equipment. For aerial applications, optimal gallonage should be 5 GPA and applied in a way to prevent drift. Ground applications should optimally use between 15 – 25 GPA and a spray boom with 3 hollow cone nozzles per row and a minimum spray pressure of 40 psi. For best performance, by either air or ground, choose the spray equipment and volumes which will ensure uniform coverage of foliage and bolls.	Hot, dry over 80° F	1 1/3	3 Minimum (aerial)
	Dry 75 to 80° F	2	
	Cool, but over 65° F or	2 2/3	10 Minimum (ground)
	Rank cotton		
FINISH® brand 6 Harvest Aid for Cotton Tank Mix Options for Unusual Situations: Use FINISH® with low rates of DROPP® (warm weather) or FINISH® with low rates of FOLEX®/DEF® (warm or cool weather) on picker cotton. In addition to the above, GINSTAR® may be used on stripper cotton.	When the cotton crop has been under stress conditions such as hot weather, drought, unutilized nitrogen, weed or insect infestations, low temperature, high moisture, heavy juvenile growth or rank cotton, defoliation and terminal regrowth suppression may be enhanced by tank mixing.	1 1/3 - 2	3 Minimum (aerial)
			10 Minimum (ground)

WHEN TO APPLY

Apply FINISH® brand 6 Harvest Aid for Cotton when the cotton crop has cut-out and there are sufficient mature unopened bolls present (40 to 60%) to produce the desired yield. This state of growth may be estimated when the crop has reached 2100 - 2400 DD 60's for the year.

Two additional methods should also be used to estimate the proper crop maturity for applications of FINISH® brand 6 Harvest Aid to Cotton.

SHARP KNIFE TECHNIQUE:

Apply when the number of mature unopened bolls is sufficient to produce the desired crop and bolls have become very hard, can not be sliced easily by a sharp knife, have seed coats that are tan in color, and the seed kernel is completely filled inside the cavity. At this stage, no gelatinous material is present inside the boll or seed.

NODES ABOVE CRACKED BOLL:

The crop is ready to treat when the top-most, first-position harvestable boll is 4 nodes above the uppermost, first-position cracked boll. Delaying treatment past this date is not likely to result in additional recoverable bolls at harvest.

USE PRECAUTION

Do not apply FINISH® brand 6 Harvest Aid For Cotton if rain is expected within 6 hours. Rainfall within 6 hours of application may reduce product performance.

RESTRICTIONS

- Do not harvest cotton sooner than 7 days after a treatment with FINISH® brand 6 Harvest Aid For Cotton.
- Do not apply this product through any kind of irrigation equipment.
- Do not plant small grain or leafy vegetable crops within 1 month after last application. Small grains planted earlier than 1 month or intercropped within the cotton crop to which FINISH® brand 6 Harvest Aid for Cotton will be applied may only be used as cover crops and may not be harvested for food or feed. FINISH® may cause yellowing and growth inhibition of treated small grains.
- Do not plant any crops other than small grain and leafy vegetable crops within 4 months after last application.
- Do not exceed a maximum of 2.0 lb ethephon active ingredient per acre per year through combined or repeated uses of any ethephon products.
- Do not exceed 0.25 lbs cyclanilide active ingredient per acre per year.

LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants that this product conforms to the chemical description on the label; that this product is reasonably fit for the purposes set forth in the directions for use when it is used in accordance with such directions; and that the directions, warnings and other statements on this label are based upon responsible experts' evaluation of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants, and of residues on food crops and upon reports of field experience. Tests have not been made on all varieties or in all states or under all conditions. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE, ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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

BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY 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. IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT WHEN USE OR HANDLING IS NOT IN ACCORDANCE WITH LABEL DIRECTIONS.

NOTICE TO BUYER

Purchase of this material does not confer any rights under patents governing this product or the use thereof in countries outside of the United States.

ACCEPTED
with COMMENTS
In EPA Letter Dated:
NOV 16 1999

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

264-585

NET CONTENTS: 2.5 GALLONS

FINISH® and FOLEX® are registered trademarks of Rhône-Poulenc Ag Company.
DEF and GUTHION are registered trademarks of Bayer AG, Germany.
DROPP, DROPP ULTRA and GINSTAR are registered trademarks of AgrEvo Chemical Company.
HARVADE is a registered trademark of Uniroyal Company.
ROUNDUP is a registered trademark of Monsanto Company.
MALATHION is a trademark of American Cyanamid Company.

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FINISH® brand 6 Harvest Aid for Cotton (PENDING) Submitted 9/14/99