



United States
Environmental Protection Agency
Washington, DC 20460

Registration
 Amendment
 Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number 279 - 3194	2. EPA Product Manager Joanne Miller	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Shark Herbicide	PM# PM-23	
5. Name and Address of Applicant (Include ZIP Code) FMC Corporation 1735 Market Street Philadelphia, PA 19103 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. 279 - 3194 Product Name Aim Herbicide	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input type="checkbox"/> Notification - Explain below.	<input checked="" type="checkbox"/> Other - Explain below.

NOTIFICATION
JUN 18 2003

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

To add the country of origin of where product is Manufactured and to revise the " Conditions of Sale and Limitations of Warranty and Liability" statement. Also to adding the 8 oz. plastic container packaging for California. Additionally, FMC has changed the Shark logo. 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 formular of this product. I understand that it is a violation of U.S.C. 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 product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input checked="" type="checkbox"/> Metal	
				<input type="checkbox"/> Plastic	
				<input type="checkbox"/> Glass	
				<input type="checkbox"/> Paper	
				<input type="checkbox"/> Other (Specify) _____	
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 8oz Container and 2-1/2lbs. Container		5. Location of Label Directions <input checked="" type="checkbox"/> On Label accompanying product	
6. Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled				<input type="checkbox"/> Other _____	

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Don Johnson	Title FMC California/Canada Regulatory Manager	Telephone No. (Include Area Code) (816) 801-5613.
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title FMC California/Canada Regulatory Manager	
4. Typed Name Don Johnson	5. Date June 6, 2003	

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Code 1572



Net Contents

SHARK®

HERBICIDE

NOTIFICATION
JUN 18 2003

For Sale and Use Only in California

For Agricultural or Commercial Use Only

EPA Reg. No. 279-3194

EPA Est. 279-

Active Ingredient:	By Wt.
Carfentrazone-ethyl: Ethyl α ,2-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-4-fluorobenzenepropanoate	40.0%
Inert Ingredients:.....	60.0%
	<hr/> 100.0%

Contains 40% W/W of active ingredient per pound of product
Active ingredient made in China, formulated and packaged in USA
U.S. Patent No. 5,125,958

KEEP OUT OF REACH OF CHILDREN

CAUTION FIRST AID

- If Inhaled:** 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:** 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:** 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.
- If Swallowed:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

HOTLINE 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 1-800-331-3148 for emergency medical treatment information.

Note to Physician: Carfentrazone-ethyl is expected to have low oral and dermal toxicity, and moderate inhalation toxicity. It is expected to be slightly irritating to the skin and minimally irritating to the eyes. This product contains a granular material (sand) that may cause mechanical irritation to the eyes. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care.

See other panels for additional precautionary information.



FMC Corporation
Agricultural Products Group
Philadelphia PA 19103

PRECAUTIONARY STATEMENTS Hazards to Humans (and Domestic Animals)

Caution
Harmful if swallowed, absorbed through the skin or inhaled. Causes moderate eye irritation. Avoid breathing dust. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE)
Applicators and other handlers must wear: long-sleeved shirt and long pants, waterproof gloves, and shoes plus socks.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. 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.

User Safety Recommendations:
Users should:
• Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Environmental Hazards

Carfentrazone-ethyl is very toxic to algae and moderately toxic to fish. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the high water mark, except as specified on this label. Do not contaminate water when disposing of equipment washwaters.

Physical/Chemical Hazards

Do not use or store near heat or open flame.

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 through any type of irrigation system.

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, waterproof gloves, and shoes plus socks.

STORAGE AND DISPOSAL

Pesticide Storage

Not for use or storage in or around the house.

Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly. Do not put granule or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by inappropriate storage or disposal.

In case of spill, avoid contact, isolate area and keep out unprotected persons and animals. Confine spills. Call FMC: (800) 331-3148.

To confine spill: Dike surrounding area, sweep up spillage. Dispose of in accordance with information given under Pesticide Disposal. Wash spill area with water, absorb with sand, cat litter or commercial clay, sweep up and dispose of in an approved manner. Place damaged container in a larger holding container. Identify contents per required hazardous waste labeling regulations.

Pesticide Disposal

Waste resulting from the use of this product may be disposed of at an approved waste disposal facility.

Container Disposal

Plastic containers: Triple rinse (or equivalent). Then offer for approved pesticide container recycling program, or puncture and dispose of in an approved waste disposal facility. Provided on site incineration is allowed by state and local authorities, stay out of smoke.

GENERAL INFORMATION

Shark™ Herbicide is a water dispersible granule formulation. It is designed to be mixed with water and applied to , corn (field, sweet, seed, popcorn, and silage), cotton, grain sorghum, pearl millet, proso millet, rice, soybeans, wheat, barley, oats, and wild rice for selective postemergence control of broadleaf weeds. Weed control is best when the product is applied to actively growing weeds up to 4 inches in height. Shark is a contact herbicide with little or no residual activity at recommended use rates.

Shark is rapidly absorbed through the foliage of plants. The herbicide is rain fast within one hour after application. Within a few hours following application, the foliage of susceptible weeds show signs of desiccation, and in subsequent days necrosis and death of the plant. Due to environmental conditions and with certain spray tank additives, some herbicidal symptoms may appear on the crop. However, the crop recovers quickly with no loss in yield.

Extremes in environmental conditions e.g. temperature and moisture, soil conditions, and cultural practices may affect the activity of Shark. Under warm moist conditions, herbicide symptoms may be accelerated. While under very dry conditions, the expression of herbicide symptoms is delayed, and weeds hardened off by drought are less susceptible to Shark.

Tank Mixtures

Shark may be tank mixed with other herbicides to control weeds not listed on this label. Read and follow all manufacturer's label recommendations for the companion herbicide except for specific recommendations on this label. Tank mixtures of Shark with EC formulations of other crop protection products, crop oil concentrate, methylated seed oil, silicone based adjuvants, 28% nitrogen or ammonium sulfate may increase leaf injury.

With adjuvants

Use a non-ionic surfactant (NIS) having at least 80% active ingredient strength at 0.25% v/v (2 pints per 100 gallons of spray solution) OR a non-ionic surfactant at 0.25% v/v (2 pints per 100 gallons) plus 28% nitrogen (UAN) at 2 to 4 quarts per 100 gallons or ammonium sulfate (AMS) at 2-4 pounds per acre where recommended by those companion herbicides listed on this label. In the latter case, the level of injury may be higher than with NIS alone. Crop oil or crop oil plus either 28% nitrogen or ammonium sulfate may be used with companion herbicides listed on this label and may be recommended under very dry conditions.

Do not use with tank additives that alter the pH of the spray solution below pH 5 or above pH 8. Buffer spray solution to alter the pH range as appropriate.

Mixing and Loading Instructions:

Fill the spray tank 3/4 full with clean water. Make sure the agitation system is operating. Add the recommended amount of Shark and complete filling the spray tank to the desired level. The spray tank agitation should be sufficient to ensure uniform spray mixture during application. When tank mixing with other products, Shark should be mixed first in the spray tank. After the product is thoroughly mixed, add the other products as specified on their label. Ensure the compatibility of other products with Shark before mixing them together in the spray tank.

SPRAY EQUIPMENT CLEAN-OUT:

After spraying Shark and before using sprayer equipment for any other applications, the sprayer must be thoroughly cleaned using the following procedure. In addition, users must take appropriate steps to ensure proper equipment clean-out for any other products mixed with Shark herbicides as explained on the other product labels.

1. Drain the sprayer tank, hoses and spray boom. Use a high pressure wash to remove physical sediment and residues from the inside of the sprayer tank and thoroughly rinse. Then thoroughly flush sprayer hoses, boom and nozzles with clean water.
2. Fill the tank 1/2 full with clean water, and add appropriate spray tank cleaner (follow manufacturer's directions for use). Fill the tank to capacity and operate the sprayer for 15 minutes to flush hoses, boom and nozzles.
3. Drain the sprayer system. Rinse the tank with clean water and flush through the hoses, boom, and nozzles. Remove and clean spray tips and screens separately.
4. Properly dispose of all cleaning solution and rinsate in accordance with Federal, State, and local regulations and guidelines.

PRODUCT APPLICATION GUIDELINES:

Thorough weed coverage with the spray mixture is essential for optimum weed control. Do not apply when conditions are conducive to spray drift, poor spray deposition or poor weed coverage.

When Shark is applied as a tank mixture with other herbicides, read and follow the label directions of the other product if they are more restrictive than those of the Shark label.

Utilize a boom and nozzle sprayer equipped with the appropriate nozzles, spray tips and screens and adjusted to provide optimum spray distribution and coverage at the appropriate operating pressures.

GROUND APPLICATION

Each operating nozzle shall produce a droplet size not less than 500 microns volume mean diameter with no more than 10 percent of the diameter by volume less than 200 microns. Apply a minimum of 10 gallons of finished spray per acre. Higher spray volumes are required when there is a dense weed population or crop canopy. Sprayers should be adjusted and operated to avoid the application of excessive herbicide rates directly over the rows and/or into the whorl of treated crop plants. Be aware that overlaps and slower ground speeds while starting, stopping or turning while spraying may result in crop effects.

AERIAL APPLICATION

Each operating nozzle shall produce a droplet size not less than 600 microns volume mean diameter with no more than 10 percent of the diameter by volume less than 200 microns. Aerial applications shall not be made at a boom height greater than 10 feet above the top of the target canopy unless a greater height is required for aircraft safety. Apply a minimum of 10 gallons of finished spray per acre. Higher spray volumes are required when there is a dense weed population or crop canopy.

SPRAY DRIFT MANAGEMENT

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER.

The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

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

For Aerial application

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor. Reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees. Significant deflection from horizontal will reduce droplet size and increase drift potential.

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

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).

SPRAY DRIFT MANAGEMENT (CONTINUED)

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 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. For aerial application, solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

APPLICATION HEIGHT

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 application equipment upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

WIND

Drift potential is lowest between winds speeds of 3-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 3 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 shall 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 wind is blowing away from adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops).

Post Fallow or Preplant Burndown

Timing and Method of Application

Apply Shark™ Herbicide alone or with other herbicides in the post fallow period prior to planting or emergence of labeled crops to control or suppress annual broadleaf weeds. For all products used in tank mixes, refer to the specific product labels for all restrictions on tank mixing and observe all label precautions, instructions and rotational cropping restrictions. Do not apply more than 1 ounce (0.023 pound active ingredient) per acre per season post fallow/preplant burndown and labeled crop applications to soybeans. Do not apply more than 1.24 ounces (0.031 pound active ingredient) per acre per season including post fallow/preplant burndown and labeled crop applications to barley, corn, oats, or wheat. Do not apply more than 0.6 ounce (0.015 pounds active ingredient) per acre per season post fallow/preplant burndown and labeled crop applications to sorghum. Do not apply more than 12 ounces (0.30 pound active ingredient) per acre per season post fallow/preplant burndown and labeled crop applications to rice.

For best performance, make applications to actively growing weeds up to 4 inches high or rosettes less than 3 inches across. Coverage is essential for good control. Optimum broad spectrum control of annual and perennial weeds requires a tank mix of a broad spectrum burndown herbicide such as RoundUp Ultra®, Touchdown® or Gramoxone® Extra.

For ground application do not apply within 100 feet of sensitive crops.

For Aerial Application:

For applications near desirable perennial vegetation or crops before bud break and after total leaf drop, and/or near other desirable vegetation or annual crops:

- Do not apply within 100 feet of all desirable vegetation or crops.
- If wind up to 10 miles per hour is blowing toward desirable vegetation or crops, do not apply within 500 feet of the desirable vegetation or crops.
- Do not apply when winds are in excess of 10 mph or when inversion conditions exist.

Fallow Systems

Shark may be applied by ground or air. **Coverage is essential for good control.** Applications made by ground equipment shall utilize a minimum finished spray volume of 10 gallons of spray per acre. Applications made by air shall utilize a minimum finished spray volume of 10 gallons per acre.

Use Shark at 0.15 to 1.24 ounces (0.004-0.031 pound active ingredient) per acre in fallow systems. A nonionic surfactant or crop oil concentrate may be used to enhance activity of Shark Herbicide in fallow systems. Use a nonionic surfactant at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient or a petroleum or vegetable seed based oil concentrate at 1.5 to 2.0 pints per acre.

CROP ROTATION GUIDELINES FOLLOWING AN APPLICATION OF SHARK HERBICIDE

Corn (field, sweet, seed, popcorn, and silage), cotton, soybeans, grain sorghum, rice, wheat, barley, oats, buckwheat, pearl millet, proso millet, rye, teosinte, triticale, and wildrice may be planted any time following an application of Shark. Root and tuber vegetables and leafy vegetables crop groups may be planted after 30 days following an application of Shark. All other crops may be planted after 12 months following an application of Shark. Follow rotation statements on tank mix products if they are more restrictive.

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**CORN: FIELD CORN, SEED CORN, POPCORN
CORN SILAGE, SWEET CORN FOR
PROCESSING, AND FRESH MARKET SWEET
CORN:**

TIMING AND METHOD OF APPLICATION

Apply Shark™ Herbicide alone or as a tank mixture with other herbicides to emerged and actively growing weeds. Apply to corn in all tillage systems from 30 days before planting up to 8 leaf collar growth stage. Do not apply when conditions favoring drift exist or wind is above 10 mph. Do not apply more than 1.24 ounces (0.031 pound active ingredient) per acre per season including fallow/preplant burndown and labeled crop applications.

For best performance, make application to actively growing weeds up to 4 inches high and rosettes less than 3 inches across. **Coverage is essential for good control.**

Use a nonionic surfactant at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient. Under dry conditions the use of a crop oil concentrate may improve weed control. The use of a crop oil concentrate may increase leaf speckling on the treated corn leaves.

To control weeds not listed on this label, Shark Herbicide may be tank mixed with other herbicides registered for use in corn. Refer to the other product's label for restrictions on tank mixing, and observe all label precautions, instructions, and rotational cropping restrictions.

Sprayer should be adjusted and operated to avoid the application of excessive herbicide rates directly over the rows and/or into the whorl of the corn plant. Shark herbicide may be applied with drop nozzles. Do not apply within 100 feet of sensitive crops.

Use Rates

Use Shark™ at 1/3 ounce (0.008 pound active ingredient) per acre. Applications shall be made by ground equipment using a minimum finished spray volume of 10 gallons of spray per acre. When applied as directed, Shark will control the following weeds:

Weeds controlled

Common Lambsquarters (up to 3 inches tall)

Morningglories (2-3 true leaves),

Ivyleaf and Pitted

Nightshade, Eastern Black (up to 4 inches tall)

Pigweed, Redroot (up to 4 inches tall)

Velvetleaf (up to 18 inches tall or up to 36 inches with drop nozzles)

In addition to the above weeds listed as controlled, Shark will suppress or partially control the following weeds:

Weeds suppressed (up to 4 inches tall)

Cocklebur

Common Ragweed

Common (annual) Sunflower

Field Bindweed

Jimsonweed

Kochia

Morningglory, Entireleaf

Palmer Amaranth

Pennsylvania Smartweed

Pigweed, Smooth

Prickly Sida

Prostrate Spurge

Smooth Groundcherry

Trumpet Creeper

Waterhemp (tall, common)

Tank Mixtures

Shark may be tank mixed with other herbicides to control weeds not listed on this label. Read and follow all manufacturer's label recommendations for the companion herbicide except for specific recommendations on this label. When tank mixing Shark with other products, be sure the Shark is mixed in the spray tank water first.

For control of additional broadleaf weeds and grasses, Shark may be tank mixed with 2,4-D (amine), Accent®, Accent Gold®, Atrazine, Banvel®, Basis®, Basis Gold®, Beacon®, Clarity™, Distinct®, Exceed®, Hornet®, Liberty®, Lightning®, Marksman®, Northstar™, Permit®, Poast, Roundup®, Roundup Ultra®, Scorpion® III, Sencor®, Shotgun®, Spirit™, Sterling®, Touchdown®, and Tough®.

When tank mixing Shark with Accent, Accent Gold, Atrazine, Basis Gold, Liberty, Poast®, Roundup Ultra, and Shotgun use adjuvants recommended on the tank mix partner label. These may include nonionic surfactant, crop oil concentrate, 28% nitrogen, ammonium sulfate or combinations of these.

Leaf injury can occur when Shark is used with certain crop protection products and adjuvants. Refer to the Tank Mixtures and Recommended Adjuvants sections under General Information.

Seed Production

For seed production fields, apply Shark™ Herbicide using drop nozzles only. Avoid directing spray solution into the whorl.

With Atrazine

Shark may be tank mixed at a rate of 1/3 ounce (0.008 pound active ingredient) per acre with Atrazine 4L (16 fluid ounces per acre) or Atrazine 90DF (9 ounces per acre) to control the following weeds:

Weeds (up to 4 inches tall)

Amaranth, Palmer

Amaranth, Spiny

Buffalobur

Carpetweed

Cocklebur, Common

Croton, Wolly

Devilsclaw

Eveningprimrose, Cutleaf

Hophornbean Copperleaf

Jimsonweed

Lambsquarters, Common

Morningglory, Entireleaf

Morningglory, Ivyleaf

Morningglory, Pitted

Morningglory, Scarlet

Morningglory, Tall

*Suppression or partial control

Refer to the Atrazine labels for additional weed listings and for higher use rates.

Nightshade, Eastern Black

Nightshade, Silverleaf

Pigweed, Redroot

Pigweed, Smooth

Pigweed, (Triazine resistant)

Purslane, Common

*Ragweed, Common

Sesbania, Hemp

*Smartweed, annual

Spurred Anoda

Velvetleaf

Venice Mallow

Waterhemp, Common

Waterhemp, Tall

*Ragweed, Giant

*Sunflower, Wild

For control of giant and common ragweeds, annual smartweeds, and wild sunflower:

Shark™ plus Atrazine can be tank mixed with 2,4-D (amine), Banvel® or Clarity herbicides. Add 2,4-D (amine) to the tank mix at 0.125 - 0.25 pound active ingredient per acre or Banvel® or Clarity at 3-4 fluid ounces per acre. Higher rates of Atrazine, Banvel® or Clarity herbicides can be used, but do not exceed the recommended label use rates allowed by these labels. Add a 0.25% v/v nonionic surfactant (2 pints per 100 gallons) to the tank mixture, or under very dry soil moisture conditions, the use of crop oil concentrate (1% v/v or 1 gallon per 100 gallon spray solution) may improve weed control. However, the use of crop oil concentrate may increase leaf injury. Refer to the Tank Mixture section for information on potential leaf injury.

With Banvel® or Clarity

Shark at 1/3 ounce per acre plus 0.25% v/v nonionic surfactant (2 pints per 100 gallons) can be tank mixed with Banvel® or Clarity herbicides (8 fluid ounces per acre) for control of general broadleaf weeds including the following:

Weeds (up to 4 inches tall)

- Cocklebur, common
- Lambsquarters
- Morningglory, Entireleaf
- Morningglory, Ivyleaf
- Morningglory, Pitted
- Morningglory, Scarlet
- Morningglory, Tall
- Nightshade, Black
- Pigweed, Redroot
- Pigweed, Smooth
- Pigweed (triazine resistant)
- Ragweed, Common
- Ragweed, Giant
- Smartweed, Pennsylvania
- Velvetleaf
- Waterhemp, Tall and Common

Refer to the Banvel® or Clarity labels for additional weed listings and for higher use rates.

Refer to the Tank Mixture Section for information on potential leaf injury.

COTTON

TIMING AND METHOD OF APPLICATION

Post-Directed and Layby Application

Shark herbicide is a contact herbicide for postemergence directed spray or hooded/shielded sprayer control of broadleaf weeds in cotton. Apply Shark herbicide alone or as a tank mixture with other herbicides to emerged and actively growing weeds. Directed spray or hooded spray applications of Shark herbicide or Shark tank mixes shall utilize application equipment that will prevent contact of spray solution with the cotton plant. Do not allow spray solution to contact cotton foliage or green stem tissue. Directed spray equipment shall position nozzles a minimum 3 to 4 inches above the soil, with nozzles directed underneath the crop canopy. Shark or Shark tank mixes shall be made on cotton at a minimum of 6 inches in height. Applications on cotton at 5 to 6 nodes or less must be made with hooded or shielded sprayer equipment to completely avoid contact with cotton plants.

Layby applications of Shark or Shark tank mixtures at later growth stages of cotton may be made when cotton plants have achieved a height of 12 inches or more with sufficient bark development and height differential between crop bottom leaves and the soil. Spray solution shall be directed at the base of cotton plants for minimal contact with green stem tissue or foliage while maintaining maximum contact with broadleaf weeds that are at appropriate treatment size. Do not apply when conditions favoring drift exist or wind is above 10 mph.

For best performance, make application to actively growing weeds up to 4 inches tall and rosettes less than 3 inches across. **Coverage is essential for good control.**

Use a crop oil concentrate at 1% v/v (1 gallon per 100 gallons of spray solution).

Do not apply within 100 feet of all desirable vegetation or crops.

Use Rates and Weeds Controlled

Apply Shark according to the table below early post-directed using a hooded sprayer and/or through layby using a minimum finished spray volume of 10 gallons per acre. Do not apply more than 2.0 ounces total per season by post-directed and layby applications.

Use Rates and Weeds Controlled

Shark Herbicide – Applied Alone

1/2 ounce (0.012 lb.ai)

- Amaranthus spp.
- Annual Nightshade spp.
- Purslane, common
- Spurge, prostrate
- Pennsylvania Smartweed
- Velvetleaf
- Field bindweed (burndown)
- Volunteer cotton (Roundup Ready included)
- Lambsquarter
- Mallow, Common

2/3 ounce (0.016 lb.ai)

- All weeds controlled at 1/2 ounce *plus*:
- Cocklebur, common
- Morningglories: Ivyleaf, Pitted, Entireleaf, & Scarlet
- Kochia
- Groundcherry, Wright

1.0 ounce (0.024 lb ai)

- All weeds controlled at 2/3 ounce *plus*:
- Silverleaf nightshade (suppression)

For control of additional broadleaf weeds and grasses, Shark Herbicide may be tank mixed with other herbicides registered for use in cotton. Shark may be tank mixed with Roundup Ultra, Staple, Buctril, Caparol, Cotoran (or other products containing Fluometuron), Karmex, MSMA, or other herbicides registered for cotton post-directed and/or lay-by applications. Refer to the other product's label for restrictions on tank mixing, and observe all label precautions, instructions and rotational cropping restrictions.

Defoliant Application

Shark herbicide may be used as a harvest aid to defoliate and desiccate cotton. It may be used alone or as a tank mixture with other cotton harvest aids. Do not apply when conditions favoring drift exist or wind is above 10 mph.

Use a crop oil concentrate at 1% v/v (1 gallon per 100 gallons of spray solution).

Make application when 65 percent of the expected harvestable bolls are open, or according to extension service recommendations in the use area.

For Aerial Application:

For applications near desirable vegetation or annual crops:

- Do not apply within 100 feet of all desirable vegetation or crops.
- If wind up to 10 miles per hour is blowing toward desirable vegetation or crops, do not apply within 500 feet of the desirable vegetation or crops.
- Do not apply when winds are in excess of 10 mph or when inversion conditions exist.

Apply as a broadcast spray at a rate of 2/3 to 1.0 ounce per acre (0.016 lb. to 0.024 lb ai per acre) in spray volume sufficient to provide complete coverage of cotton foliage. Use a minimum of 10 gallons of finished spray per acre for ground application and 10 gallons per acre for aerial application. **Coverage is essential for defoliation.** Repeat application if necessary to remove remaining foliage or control regrowth. Do not apply more than 2.0 ounces per acre total as a harvest aid. Dense cotton canopy, large plant size, and environmental conditions not conducive to product absorption or activity will reduce initial application efficacy and increase the need for a second application.

Shark may be applied as a tank mix or in sequential application with other cotton harvest aids. Shark may be tank mixed with Dropp, Def, Finish, Prep, Folex, Harvade, Ginstar, CottonQuik, or other registered cotton defoliation products. Refer to the other product's label for restrictions on tank mixing, and observe all label precautions, instructions and rotational cropping restrictions.

Do not apply within 7 days of harvest.

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RICE

TIMING AND METHOD OF APPLICATION

Apply Shark Herbicide alone or as a tank mixture with other rice herbicides to emerged and actively growing weeds. Applications shall be made by ground equipment using a minimum finished spray volume of 10 gallons of spray per acre. Do not apply by air.

Do not apply within 1/2 mile of sensitive crops. Do not apply when conditions favoring drift exist. Do not apply more than 12 ounces (0.3 pound active ingredient) per acre per season including fallow/preplant, burndown, and labeled crop applications. Do not apply within 60 days of harvest.

Users of Shark Herbicide must hold the water on the rice fields for 30 days.

To control weeds not listed on this label, Shark Herbicide may be tank mixed with other herbicides registered for use on rice. Refer to the other product's label for restrictions on tank mixing, and observe all label precautions, instructions, and rotational cropping restrictions.

Early Postseeding Applications to Submerged Weeds

Apply Shark at 8 oz. per acre (0.2 pounds ai). Evenly distribute the spray solution over the flooded rice. The flood water should be 2-3 inches deep. Apply at the 2-4 leaf stage of rice but not before seven days after seeding. Earlier applications may cause unacceptable crop response. Rice should be well-rooted and actively growing at the time of application. Hold the flood water static for at least five days after application of Shark. Apply Shark to weeds at the 2 leaf stage or less.

The following weeds are controlled:

- Ricefield Bulrush
- California Arrowhead
- Purple Ammannia
- Redstem Ammannia
- Smallflower Umbrellaplant

Tank Mixtures

Shark may be tank mixed with other herbicides to control weeds not listed on this label. Read and follow all manufacturer's label recommendations for the companion herbicide except for specific recommendations on this label. When tank mixing Shark with other products, be sure the Shark is mixed in the spray tank water first.

Shark may be applied before, after, or with an application of Londax®, Ordram® and Bolero® herbicides. Observe all applicable directions, restrictions (including water holding requirements) and precautions on the Londax, Ordram and Bolero labels.

Foliar Applications to Emerged Weeds Above the Water Surface

Apply Shark to weeds at 4 oz product per acre (0.10 pounds ai) to the foliage of exposed weeds. At least 80% of the weed foliage must be exposed before spraying with Shark. For best results, apply to actively growing weeds 20-45 days postseeding or the earliest practical opportunity to spray. Weed control is enhanced with greater weed exposure. If the field was drained at application, reflood twenty four hours after application to the normal flood depth.

The following weeds are controlled or suppressed:

- Ricefield Bulrush
- California Arrowhead
- Purple Ammannia (suppression only)
- Redstem Ammannia (suppression only)
- Smallflower Umbrellaplant (suppression only)

Crop Response

Some minor leaf spotting may occur shortly after application. These symptoms are temporary and are quickly outgrown.

Tank Mixes

Shark may be tank mixed with other herbicides to control weeds not listed on this label. Shark may be tank mixed with Propanil-containing herbicides, Londax®, Bolero®, or Whip® herbicides. Not all combinations of Shark and other formulated herbicides have been tested. In general, the EC formulations, nonionic and silicone based surfactants and crop oil concentrates, when mixed with Shark will increase leaf speckling on the rice leaves. These tank mixtures should be tested on a small portion of the field to ensure crop safety prior to general use. Use adjuvants e.g. surfactants and crop oil concentrates only if specified on this label.

WILD RICE

TIMING AND METHOD OF APPLICATION

Apply Shark Herbicide alone or as a tank mixture with other rice herbicides to emerged and actively growing weeds. Applications shall be made by ground equipment using a minimum finished spray volume of 10 gallons per acre. Do not apply by air.

Do not apply within 1/2 mile of sensitive crops. Do not apply when conditions favoring drift exist. Do not apply more than 12 ounces (0.3 pound active ingredient) per acre per season including fallow/preplant, burndown, and labeled crop applications. Do not apply within 60 days of harvest.

Users of Shark herbicide must hold the water on the rice fields for 30 days.

Apply Shark to weeds at the rate of 4 - 8 ounces of product per acre (0.10 - 0.20 pound active ingredient) to the foliage of exposed weeds above the water surface. Make applications after the floating leaf stage through tillering. The water in paddies may be lowered if practical. Smaller weeds with more leaf area exposed will give better control. If water is lowered for application, it should be reflooded to normal depth 24 hours after the application

The following weeds are controlled or suppressed:

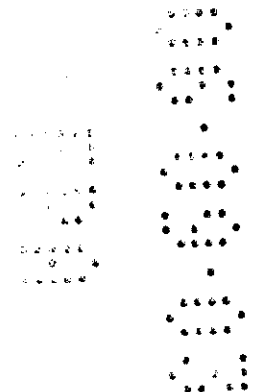
- Ricefield Bulrush
- California Arrowhead
- Common Waterplantain (Suppression only)
- Giant Burweed (Suppression only)
- Purple Ammannia (Suppression only)
- Redstem Ammannia (Suppression only)
- Smallflower Umbrellaplant (Suppression only)

Crop Response

Some leaf spotting may occur following an application. These symptoms are temporary and are quickly outgrown.

Tank Mixes

Shark may be tank mixed with other herbicides to control weeds not listed on this label. Not all combinations of Shark and other formulated herbicides and adjuvants have been tested. In general, EC formulations, nonionic and silicone based surfactants, and crop oil concentrates, will increase leaf speckling on the wild rice leaves. These tank mixes should be tested on a small portion of the field to ensure crop safety prior to general use. Use adjuvants e.g. surfactants and crop oil concentrates only if specified on this label.



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June 6, 2003

Ms. Hobgood
Document Processing Desk (Notification)
U.S. Environmental Protection Agency
Office of Pesticide Programs – (H7504C)
Crystal Mall #2, Room 266
1921 Jefferson Davis Highway
Arlington, VA 22202

Dear Ms. Hobgood:

Subject: Label Notification to add to the label the Country of Origin of Where the Product was Manufactured Statement, a New Warranty Statement and a New Product Logo.

FMC is submitting a label Notification for Shark Herbicide (EPA Reg. No. 279-3194). This Notification is to add the country of origin statement of where the product is manufactured. The warranty statement has been updated which also appears on all FMC products. For the record the US EPA has already approved these same Notification for Aim Herbicide (EPA Reg. No. 279-3194). Additionally the Shark Herbicide logo has been changed.

By transmission of this letter, FMC is requesting approval of this Notification to the Shark Herbicide label. I have enclosed two copies of the proposed label with changes in red.

Should you have additional questions regarding this submission, please contact me at (816) 801-5613 or at don_johnson@fmc.com.

Sincerely yours,


Don Johnson
California/Canada Regulatory Manager

Enclosures: (3)

1. Transmission document (this letter)
2. Application for label Notification (EPA Form 8570-1)
3. 2 copies of the revised label with revisions in red text

