Restricted Use Pesticide. Due to acute toxicity. For retail sale to and use only by certified applicators or persons under their direct supervision and only for those uses covered by the certified applicator's certification.

Firestorm®

Department of Agriculture
STATE OF HAWAII

LICENSED

PERIOD 2009-2011 LIC. NO.

Department of Agriculture
STATE OF HAWAII

LICENSED

PERIOD 2012-2014 LIC. NO.

Department of Agriculture
STATE OF HAWAII

LICENSED

PERIOD 2015-2017 LIC. NO. 9433.84

Net Contents:

Defoliant and desiccant herbicide for the control of weeds and grasses and as a harvest aid.

- NEVER PUT INTO FOOD, DRINK OR OTHER CONTAINERS.
- IF SWALLOWED, TAKE IMMEDIATE ACTION AS PRESCRIBED IN FIRST AID.
- SYMPTOMS ARE PROLONGED AND PAINFUL.
- DO NOT USE OR STORE IN OR AROUND THE HOME.
- DO NOT REMOVE CONTENTS EXCEPT FOR IMMEDIATE USE.
- THE ODOR OF THIS PRODUCT IS FROM THE STENCHING AGENT WHICH HAS BEEN ADDED, NOT FROM PARAQUAT.

Active Ingredient:
paraquat dichloride (1,1'-dimethyl-4-4'-bipyridinium dichloride) 43.8%
Other Ingredients: 56.2%
Total:.....100.0%

Contains 3.0 pounds paraquat cation per gallon as 4.143 pounds salt per gallon. Contains stench (odor) and emetic.

KEEP OUT OF REACH OF CHILDREN

DANGER/PELIGRO POISON

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.)

EPA Reg. No. 82557-1-400
EPA Est. No.
004/070810
Product of Taiwan

Manufactured for:
Chemtura Corporation
199 Benson Road
Middlebury, Connecticut 06749

Chemtura AgroSolutions™

www.chemtura.com

FIRST AID

Contains Paraquat, a Bipyridinium Herbicide

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

If swallowed	• **Call a poison control center or doctor IMMEDIATELY for treatment advice.** • SPEED IS ESSENTIAL. Immediate medical attention is required. If available, give an absorbent such as activated charcoal, bentonite or Fuller's Earth. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If inhaled	• Move person to fresh air. • The odor of this product is from the stenching agent, which has been added, not from the paraquat. • If person is not breathing, call 911 or an ambulance. • 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 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.

NOTE TO PHYSICIAN

Administer either activated charcoal (100g for adults or 2g/kg body weight in children) or Fuller's Earth (15% solution; 1 liter for adults or 15ml/kg body weight in children). NOTE: The use of gastric lavage without administration of an absorbent has not shown any clinical benefit. Do not use supplemental oxygen. Eye splashes from concentrated material should be treated by an eye specialist after initial treatment. With the possibility of late onset corneal ulceration, it is advised that patients with paraquat eye injuries are reviewed by an eye specialist the day after first presentation. Use treatment that is appropriate for chemical burns. Intact skin is an effective barrier to paraquat; however, contact with irritated or cut skin or repeated contact with intact skin may result in poisoning.

HOT LINE NUMBERS

For 24-Hour Medical Emergency Assistance (Human or Animal), Call 1-877-800-5553. For Chemical Emergency Assistance (Spill, Leak, Fire, Accident), Call CHEMTREC 1-800-424-9300. For Chemical Safety Data and Information, Call 1-866-430-2775, or check our web site at www.chemtura.com

See back/side panel(s) for additional precautionary statements.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER. May be fatal if swallowed. Fatal if inhaled. Do not breathe spray mist. Wear a dust mist respirator. Causes irreversible eye damage. Wear protective eyewear. Do not get in eyes or on clothing. Harmful if absorbed through skin. Avoid contact with skin. **IMPORTANT**: Inhalation is an unlikely route of exposure due to low vapor pressure and large spray droplet size, but mucosal irritation or nose bleeds may occur. Prolonged contact with this concentrated product can irritate your skin.

Personal Protective Equipment (PPE)

Applicators and other handlers (other than mixers and loaders) must wear:

Long-sleeved shirt and long pants; Chemical resistant gloves – Category A (e.g., barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton); Shoes plus socks; Protective eyewear; A dust mist NIOSH-approved respirator with any N, R, P, or HE filter.

Mixers and loaders must wear:

Long-sleeved shirt and long pants; Chemical resistant gloves – Category A (e.g., barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton); Shoes plus socks; Dust mist NIOSH-approved respirator with any N, R, P, or HE filter; Chemical resistant apron; Face shield.

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

Engineering Controls: 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, and chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is **toxic to wildlife**. 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 cleaning equipment or disposing of equipment wash waters.

Paraquat dichloride is **toxic to nontarget crops and plants** if off-target movement occurs because it desiccates all green plant tissue. Extreme care must be taken to ensure that off-target drift is minimized to the greatest extent possible. Refer to the local state laws, regulations, guidelines, and spray drift information contained in the Directions for Use section for proper application to avoid off-target movement. Do not apply under conditions involving possible drift to food, forage, or other plantings that might be damaged or the crops thereof rendered unfit for sale, use, or consumption. Do not apply when weather conditions favor drift from treated areas. To avoid drift, do not make aerial application during periods of thermal inversion.

PHYSICAL AND CHEMICAL HAZARDS

This product is **mildly corrosive to aluminum** and produces hydrogen gas which may form a highly combustible gas mixture. Do not mix or store in containers, spray tanks, nurse tanks, or such systems made of aluminum or having aluminum fittings. The product is compatible with high density polyethylene and rubber-lined steel containers.

DIRECTIONS FOR USE

Restricted Use Pesticide. 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 use around home gardens, schools, recreational parks, golf courses or playgrounds.

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 use of this product that are covered by the Worker Protection Standard.

For chemical fallow, early postemergence broadcast in peanuts and dormant season applications, and "between cutting" applications in alfalfa: Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI) of 12 hours.**

For preplant or preemergence (broadcast or banded), postemergence directed spray, and harvest aid and desiccation application: Do not enter or allow worker entry into treated areas during the restricted entry interval **(REI) of 24 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
- Shoes plus socks
- Protective eyewear
- Chemical resistant gloves - Category A (e.g., barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton).

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

DO NOT enter or allow others to enter the treated area until sprays have dried.

AVOID working in spray mist.

Keep all unprotected persons out of operating areas or vicinity where there may be danger of drift.

Certain states may require more restrictive reentry intervals; consult your State Department of Agriculture for further information.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in original container and place in a locked storage area. Do not mix or store in containers, spray tanks, nurse tanks, or such systems made of aluminum or having aluminum fittings. Store at temperatures above 32°F. For Emergencies involving a Spill, Leak, Fire, Exposure, or Accident, contact: CHEMTREC at (800) 424-9300.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess, 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:

Do not reuse container as container is not safe for food, feed or drinking water!

[2.5 gal. non-refillable, rigid :]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

[30 gal. non-refillable, rigid:]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

[30 gal and 110 gal. refillable, rigid:]

Refillable container. Refill this container with Paraquat Dichloride only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

[250 gal non-refillable, non-rigid:]

Non-refillable container. Do not reuse or refill this container. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

[250 gal refillable, non-rigid:]

Refillable container. Refill this container with Paraquat Dichloride only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

[Bulk (tank truck), return: No container type statement and instructions for residue removal are required]

GENERAL INSTRUCTIONS AND INFORMATION

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

When FIRESTORM® is applied at less than 10 gallons per acre finished spray volume, a drift control or spray deposition additive SHOULD be used. Always refer to the additive label for rates of applications, directions for use, limitations, and restrictions.

SPRAY DRIFT INFORMATION

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 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 drift 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°.

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

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

AERIAL DRIFT REDUCTION ADVISORY INFORMATION

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best 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 environment conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

Controlling Droplet Size

- **Volume** - Use high flow rate nozzles to apply the highest 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 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 largest plants unless a greater height is required for aircraft safety. Making application 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 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).

GENERAL INFORMATION

APPLICATION

FIRESTORM is a contact herbicide for control or suppression of a broad spectrum of emerged weeds including most small annual broadleaf and grass weeds. It can also be used to suppress perennial weeds by destroying green foliage and as a desiccant/defoliant at harvest.

Complete coverage of target weeds is necessary to get good control because FIRESTORM is a contact-type herbicide. It is also necessary to obtain complete coverage for good crop desiccation and defoliations. Undesirable weed control and undesirable crop desiccation/defoliation will result if improper application technique and/or application to large, stressed, or mown weeds are made. Refer to the following details for specific application instructions.

FIRESTORM™ is a liquid formulation containing 3 lbs. of active ingredient per gallon. It contains a nontoxic odor to help prevent accidental ingestions. It also contains an emetic (an agent which will induce vomiting if the product is swallowed).

Thorough coverage of all green foliage is required for efficacious weed control and crop defoliation and desiccation because FIRESTORM requires actively growing green plant tissue to function. Drought-stressed weeds, weeds with little green foliage (i.e., mowed or cut weeds), or mature woody bark of trees and vines are unaffected by application with FIRESTORM.

There is no residual soil activity to affect later-planted crops or later germinating weeds because clay and organic matter rapidly tie up FIRESTORM.

ROTATIONAL CROPS

After the last application FIRESTORM, all rotational crops may be planted immediately.

RAINFASTNESS

Rain occurring 30 minutes or more after application will have no effect on the activity of FIRESTORM because it is rapidly absorbed by the weed foliage.

USE OF A NONIONIC SURFACTANT OR CROP OIL CONCENTRATE

The following should always be added and be used at the recommended rates or there will be a reduction in efficacy of FIRESTORM.

Nonionic Surfactant: Either add a nonionic surfactant containing 50-74% surface-action agent at 0.25% v/v (2 pts./100 gals.), or add nonionic surfactant containing 75% or more surface-active agent at 0.125% v/v (1 pt./100 gals.), of the finished spray volume for ground applications. Add a nonionic surfactant at 0.25% v/v (2 pts./100 gals.) of the finished spray volume for aerial applications.

Crop Oil Concentrate: For ground applications, add a non-phytotoxic crop oil concentrate that contains 15-20% approved emulsifier, with 1.0% v/v (1 gal./100 gals.) of the finished spray volume. Add 1 pt. of crop oil concentrate per acre for aerial applications. **For cotton harvest aid, do not use crop oil concentrate when using FIRESTORM.**

NOZZLE SELECTION

The use of flat-fan nozzles is the most effective application of FIRESTORM. The use of flood nozzles may result in a reduction of weed control due to inadequate coverage because they produce large uneven droplets.

Use only flat fan nozzles when spraying less than 20 gallons of spray carrier per acre using the following table.

Table 1. Nozzle Type and Spray Pressures and Setup

	Nozzle Type	
	Flat Fan	**Flood**
Maximum Size	8	15
Spray Pressure (at nozzle)	30-50 psi	30-50 psi
Maximum Nozzle Spacing	30″	40″
Direction of Spray Pattern	Down	Down
Maximum Speed	10 mph	10 mph
Spray Overlap (at each edge)	30%	50%

Reduced control will result if nozzles, pressures, or setups differ from the above chart.

SPRAY CARRIER

FIRESTORM may be inactivated by muddy water, or suspension-type fertilizers containing clay. Therefore, always use clean water (free of mud or clay), clear liquid nitrogen, or complete clear liquid fertilizers as the carrier when spraying this product. Never use suspension-type fertilizers containing clay as the spray carrier. Always use the higher rate of FIRESTORM and surfactant if using a complete clear liquid fertilizer containing high phosphate levels as the spray carrier.

Note: It is important that when using liquid fertilizers such as 28% N as a spray carrier, that nonionic surfactant still be used with FIRESTORM. The use of liquid fertilizer carriers are not substitutes for surfactants.

RATES OF FIRESTORM

With each use, follow rates listed in the following tables. When weeds are larger or are dense, use the higher label rates. For use as a harvest aid, use higher rate when crop vegetation is dense. Do not exceed 0.50 lbs.a.i./A in a minimum of 30 gallons of spray for broadcast applications with backpack sprayers.

SPRAY VOLUME

With each use, follow minimum spray volumes listed in the

following tables. Spray volumes should be increased as necessary to obtain complete coverage of the target weed or plant without runoff from the foliage, because **the volumes listed are minimum volumes only.**

TARGET WEEDS SHOULD NOT EXCEED SIX INCHES IN HEIGHT WHEN SPRAYING LESS THAN 20 GALLONS OF SPRAY CARRIER PER ACRE.

APPLICATION TIMING

Applications should be made to small emerged weeds. Larger weeds more than 6 inches in height may be more difficult to control than weeds 1-6 inches in height. If possible, when green foliage is removed either from grazing or mowing, allow the weeds to grow 2-4 inches in height. Also, during harvesting forage or grain crops before spraying, weeds present in the field are also cut. Therefore, raise cutter bars as high as possible from the ground to cut stubble and weeds at a greater height, allowing sufficient green foliage to remain for applications.

BURNDOWN OF GRASS COVER CROPS OR VOLUNTEER CEREALS

The best results occur for control of grass cover crops or volunteer cereals when FIRESTORM is applied prior to tillering or after boot stage, especially with a wheat cover crop or volunteer wheat. Complete control may not be achieved with treatments made between tillering and boot stage. Complete control of perennial cover crops should not be expected.

ENVIRONMENTAL CONDITIONS

This product is active over a wide range of environmental conditions such as cool (below 55°F), cloudy or overcast weather. However these conditions will slow the activity of FIRESTORM.

SPOT SPRAYING

Refer to the following table if only small areas are to be sprayed with labeled applications.

Mixing Instructions for Small Quantities for Spot Spraying

If the Broadcast Rate Per Acre for FIRESTORM is:	Add the Following Amount of FIRESTORM to 1 Gallon of Water
1 1/2 pts.	1/3 fl. oz.
2 pts.	3/8 fl. oz.
2 1/2 pts.	1/2 fl. oz.
3 pts.	2/3 fl. oz.

Add 1/3 - 1/2 fl. oz. of a nonionic surfactant for each gallon of spray at all times. Thoroughly wet the foliage, but not to the point of runoff when spot spraying in this manner.

TANK MIXING:
ENHANCED BURNDOWN OF DIFFICULT-TO-CONTROL WEEDS AND FOR RESIDUAL WEED CONTROL

Photosynthetic Inhibitor Herbicides

To control difficult weeds, tank mix FIRESTORM with other herbicides. The addition of other photosynthetic inhibitors (PSI) herbicides will slow the activity of FIRESTORM. This allows FIRESTORM to thoroughly distribute throughout a treated leaf, thus achieving better control than if FIRESTORM was applied alone.

FIRESTORM may be applied in tank mixture with the following PSI herbicides:

AAtrex® Herbicide
Atrazine Herbicide
Bicep MAGNUM® Herbicide
Bicep Lite II MAGNUM® Herbicide
Canopy® Herbicide
Lariat® Herbicide
Lexone® Herbicide
Linex® Herbicide
Lorox® Herbicide
Lorox Plus™ Herbicide
Princep® Herbicide
Sencor® Herbicides

Always refer to the respective product label(s) for rates of applications, directions for use, limitations, and restrictions.

Improved Weed Control with PSI's

The addition of a PSI herbicide will help improve the control of difficult weeds listed below. Make a second application for best results.

Barnyardgrass
Broadleaf signalgrass
Cheatgrass
Cocklebur
Fall panicum
Giant ragweed
Knotweed
Kochia
Lambsquarters
Malva (cheeseweed)
Marestail
Morningglory
Pennsylvania smartweed
Perennial weeds (suppression only)
Prickly lettuce
Sedges
Tansymustard
Velvetleaf
Volunteer wheat

Improved Control of Perennial and Annual Broadleaf Weeds

Tank mixing with labeled 2,4-D ester (Low Volatile), 2,4-DB Banvel® or Reflex® Herbicide will help improve control when perennial broadleaf weeds such as Canada thistle, bindweed, dandelion, etc., or difficult to control annual broadleaf weeds such as giant ragweed or morningglory are present. Reduced grass control may be achieved when tank mixing the amine formulation of 2,4-D with FIRESTORM .

Order of Tank Mixing (except for Reflex® Herbicide)

It is advisable to tank mix FIRESTORM and other listed products as follows:

1. Fill spray tank 1/2 full with clean water or other approved carriers such as clear liquid fertilizer.
2. Begin tank agitation and continue throughout mixing and spraying.
3. Add dry formulations (WP, DF, etc.) to tank.
4. Add liquid formulations (SC, EC, L, etc.) to tank.
5. Add FIRESTORM to tank.
6. Add nonionic surfactant to tank.
7. Fill remainder of spray tank.

EXCEPTION: When tank mixing PARAQUAT SL Herbicide with Reflex® Herbicide, the order of mixing must be as follows:

1. Fill spray tank ½ full with clean water or other approved carriers such as clear liquid fertilizer.
2. Begin tank agitation, and continue throughout mixing and spraying.
3. Add Reflex® Herbicide to tank.
4. Add nonionic surfactant or crop oil concentrate to tank.
5. Add PARAQUAT SL Herbicide to tank.
6. Fill remainder of spray tank.

Failure to follow the above tank mixing sequence for PARAQUAT SL HERBICIDE and Reflex® Herbicide may cause physical incompatibility to occur.

Always read other pesticide products labels for weeds controlled, rates of applications, directions for use, limitations, and restrictions.

It is advisable to perform a jar test to check physical compatibility when using different formulation of the herbicides listed on this label.

USE PRECAUTIONS AND RESTRICTIONS

EQUIPMENT

FIRESTORM® is **corrosive to aluminum.** Thoroughly flush all aluminum spray equipment and aluminum aircraft structures that are exposed to spray solution or spray drift with water immediately after use.

The activity of FIRESTORM may be reduced in dry areas where dust stirred up by high winds or equipment tires can coat weed or plant leaves. Therefore, avoid applications in extremely dusty conditions.

LIMITATIONS AND PRECAUTIONS

- **Unless otherwise indicated, FIRESTORM will severely injure or kill crop plants emerged at time of application if they come in contact with sprays.**
- Do not pasture livestock in treated fields or feed treated foliage in cotton when this product is used as a cotton harvest aid.
- **DO NOT USE AROUND HOME GARDENS, SCHOOLS, RECREATIONAL PARKS, OR PLAYGROUNDS.**
- Do not apply to soils lacking clay minerals such as peat, muck, pure sand, artificial planting media for preplant and preemergence (to the crop) uses.
- To enable maximum weed and grass emergence prior to treatment, seedbeds and plantbeds should be formed as far ahead of planting and treatment as possible.
- Avoid disturbing soil when seeding or transplanting.
- Transplanted plants may become damaged when they come in contact with plastic mulch used for preplant weed control and that has been treated with this product. To prevent damage to the crop, sufficient wash-off such as rainfall or sprinkler irrigation prior to planting may be needed.
- FIRESTORM will be ineffective in controlling or suppressing weeds and grasses that have emerged after application.

APPLICATION INSTRUCTIONS

Crop	Weeds	Use Pattern	FIRESTORM™ Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
ALFALFA (California only) New seedlings		Broadcast	0.7-1.3 pts. See Table 2	Ground: 10 gals. Air: 5 gals.	70	• Do not make more than one application per year. • Applications should be made during late winter or early spring. • Do not cut or harvest within 70 days after application. • Alfalfa foliage present at time of application will be burned. • Replanting may be needed due to the reduction of seedling stands. • Do not apply to seedling alfalfa grown for seed.
ALFALFA Preplant or Preemergence (No-till or conventional planting)		Broadcast or Banded Over-Row	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 2 applications per year. • Apply prior to emergence of the crop. Avoid disturbing soil when seeding. • Crop plants emerged at time of application will be killed.
ALFALFA Dormant season Established plantings Region A - See table at end of Alfalfa section	Weeds, including bluegrass, chickweed, henbit, downy brome, ryegrass, cheatgrass, dogfennel, tansymustard, London rocket, sowthistle, rescue brome, wild oats, and other winter annuals; and suppression of perennial weeds.	Broadcast	1.3-2.0 pts.	Ground: 10 gals. Air: 5 gals.	42	• Do not make more than one application per year. • **Fall regrowth:** Do not apply if regrowth after last fall cutting is greater than 6", • **Spring regrowth:** Do not apply if regrowth before first cutting is greater than 2". • After the crop is dormant, apply to well-established stands that are at least 1-year old. • Yield of first cutting may be reduced because alfalfa foliage present at the time of application will be burned. • Do not cut or harvest within 42 days after application. • For improved and longer-lasting weed control, tank mix with metribuzin (Lexone® or Sencor®). Always refer to the metribuzin label for weeds controlled, rates of applications, directions for use, limitations, and restrictions.

Crop	Weeds	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
ALFALFA Dormant season Tank Mix with Velpar® L-Herbicide Region A - See table at end of Alfalfa section	Weeds including chickweed, downy brome and tansy-mustard.	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 10 gals.	42	• Do not make more than 2 applications per year. • When weeds are less than 4 inches tall apply at 0.7 pt. rate FIRESTORM • Mix FIRESTORM with 1-2 qts. of Velpar® L per acre. • Use lower rate of Velpar® L on loamy sands or sandy loams. Always refer to the Velpar® L label for weeds controlled, rates of applications, directions for use, limitations, and restrictions. • During the dormant season, make one application to established alfalfa stands . • **Fall regrowth:** Do not apply if regrowth after last fall cutting is greater than 6". • **Spring regrowth:** Do not apply if regrowth before first cutting is greater than 2". • Do not apply to alfalfa during the first season after seeding. • Temporary chlorosis may occur on alfalfa regrowth. • Increased chances of crop injury may occur if stress which may be caused in part by low fertility, disease, insects, winterkill, over cutting, drought or frost. • DO NOT USE on gravelly or rocky soils, exposed subsoils, hardpan, sand or poorly drained alkaline soils as crop injury, including mortality, may result. • Do not cut or harvest within 42 days of application.
ALFALFA Dormant Season On established plantings: Region B - See table at end of Alfalfa section.	Including London rocket, sowthistle, rescue brome, wild oats, chickweed, ryegrass, bluegrass, cheatgrass, dogfennel, tansymustard, henbit, downy brome, and other winter annuals; and suppression of perennial weeds	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	60	• Do not make more than one application per year. • Applications should be made before first spring cutting and during late fall or winter months after the last fall cutting. • **California:** Do not apply if **spring regrowth** after grazing or cutting is more than 2 inches in Orange and Riverside counties, and all counties north of these counties. • **All other areas within Region B:** Do not apply if regrowth after grazing or cutting is more than 2 inches. • Do not harvest within 60 days of application. • Applications to alfalfa that is not dormant, or has broken dormancy, may result in stand and/or yield reductions. Replanting may be necessary. Green alfalfa foliage present at time of application will be burned. • If there is a severe weed infestation, total hay yield of first cutting may be reduced in alfalfa fields and the reduction is typically directly proportionate to the loss of weed weight. • For improved and residual weed control in **dormant established (at least 1-year-old) alfalfa,** tank mix with metribuzin (Lexone® or Sencor®). Do not apply tank mix with metribuzin on alfalfa that is less than 1-year-old. • Always refer to metribuzin label for weeds controlled, rates of applications, directions for use, limitations, and restrictions. **California** • If ryegrass, shepherdspurse, sowthistle or groundsel are present, use high rate.
On fall-seeded newly established stands less than 1-year-old: Region A - See table at end of Alfalfa section	**California:** Desiccation of weeds including bluegrass, ryegrass, shepherd-spurse, chickweed, tansymustard, foxtail, sowthistle and groundsel.	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	60	
On fall-seeded newly established stands less than 1-year-old: Region B - See table at end of Alfalfa section		Broadcast	0.5-0.8 pts.	Ground: 10 gals. Air: 5 gals.	60	

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
ALFALFA (East of the Rocky Mountains) Between-cuttings treatment in established plantings. (Includes first year alfalfa)	Broadcast	0.7 pt.	Ground: 10 gals.	30	• Do not make more than 3 applications per year. • Control of weeds beyond the seedling stage and weed stubble cut off during harvest are less affected by this treatment. • Make applications immediately after alfalfa has been removed for hay or silage. • Do not treat more than 5 days after cutting. • A reduction in first year alfalfa stands and yields may occur if alfalfa is allowed to regrow more than 2 inches. • Burning of alfalfa foliage will occur at time of application. • Weed control may be reduced where moisture is limited such as in arid climates. • Do not cut or harvest within 30 days of application. • Apply as needed up to three times during the growing season in addition to a dormant application. • Do not make more than 2 applications during the first growing season of first-year alfalfa.
ALFALFA (For use only in the following states: AZ, CO, ID, MT, NV, OR, UT, WA, WY) Desiccation of alfalfa to aid harvesting alfalfa seed	Broadcast	1.7-2.7 pts.	Ground: 20-25 gals. Air: 5-10 gals.	See Precautions	• Do not make more than 2 applications per year. • Do not harvest until at least 4 days after application. • Do not apply when weather conditions favor drift from treated areas. • Do not apply by ground equipment within 25 ft., or by air within 75 ft. of lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish farm ponds. • Use only on fields in production of alfalfa seed. Does not use on fields producing alfalfa for livestock feed. Do not use any portion of the treated field for human or animal feed, including seed, seed screenings, hay forage, or stubble. • Do not cut current year's treated alfalfa seed crop for hay or forage. Do not graze current year's treated alfalfa seed crops. • Do not use treated alfalfa seed for sprouting. Tag all alfalfa seed treated with FIRESTORM/Reglone® tank mix at processing plants with, "NOT FOR HUMAN CONSUMPTION". The grower is responsible for notifying the processing plants of any seed crop treated with FIRESTORM/Reglone tank mix. • Remove ALL FIRESTORM/Reglone® treated alfalfa seed screenings from the market because all screening from alfalfa seed processing are prohibited from feed channels.
FIRESTORM/ Reglone® Tank Mix	Broadcast	1.3-2.7 pts. FIRESTORM/ 2 pts. Reglone®	Ground: 20-25 gals. Air: 5-10 gals.	See Precautions	

Table 2. ALFALFA: New Seedlings - Suppression and control of broadleaf weeds and grasses in new alfalfa seedlings grown for hay (California only).

For Control of:	Rate/Acre*	
	For Suppression	For Control
Annual Bluegrass	—	10.7-21.3 fl. oz.
Chickweed	—	10.7-21.3 fl. oz.
Fiddleneck (6 inches tall or less)	5.4-10.7 fl. oz.	21.3 fl. oz.
Red Maids (6 inches tall or less)	—	10.7-21.3 fl. oz.
Shepherdspurse	10.7-21.3 fl. oz.	—
Spikeweed (4 inches tall or less)	5.4 fl. oz.	10.7-16.0 fl. oz.
Volunteer Small Grain (8 inches tall or less)	5.4-10.7 fl. oz.	21.3 fl. oz.

*** Use the 5.4 fl. oz. rate only when alfalfa has at least 3 trifoliate leaves; use the 10.7 fl. oz. rate only when alfalfa has 6 trifoliate leaves; or use rates over 10.7 fl. oz. only when there are 9 trifoliate leaves.**

Alfalfa - Regions

REGION A
Alaska California: Counties of Del Norte, Siskiyou, Modoc, Shasta, Lassen, Plumas, Sierra, Nevada. Colorado, Connecticut, Delaware, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky , Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming

REGION B
Alabama Arizona Arkansas California: All other counties not listed in Region A. Florida Georgia Hawaii Louisiana Mississippi New Mexico North Carolina Oklahoma South Carolina Tennessee Texas

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
ALMONDS	Directed Spray	0.8-2.7 pts.	Ground: 10 gals.	—	• Do not make more than 5 applications per year. • Avoid allowing spray to contact green stems (except suckers) or foliage. • When spraying around young trees, use a shield or wrap plant. • Do not graze treated areas and do not feed cover crops grown in treated areas to livestock. • Do not apply when nuts to be harvested are on the ground. • Retreatment or spot treatments may be necessary for mature woody weeds, perennial weeds, late germinating weeds and green suckers.
ARTICHOKE (GLOBE)	Directed Spray	1.7-2.7 pts.	Ground: 20-100 gals.	1	• Do not make more than 3 applications per year. • Do not exceed 8 pts. per season. • Applications must be made at least 7 days apart. • Do not harvest within 24 hours of last application.
ASPARAGUS	Preplant or Preemergence Broadcast or Banded Over-Row	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • Application should be made prior to emergence of the crop. • Emerged asparagus at time of application will be killed.
ASPARAGUS Preemergence to established plantings at least 2 years old.	Broadcast or Banded Over-Row	1.7-2.7 pts.	Ground: 10 gals.	6	• Do not make more than 3 applications per year. • Application should be made prior to emergence of the crop or after last harvest. • Emerged asparagus at time of application will be killed.

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
BEANS, DRY **Not for use in California** Sweet lupin White sweet lupin White lupin Grain lupin Adzuki beans Asparagus beans Black beans Broad beans Field beans Garbanzo beans Kidney beans Lablab beans Lima Beans Moth beans Mung beans Navy beans Pinto beans Rice beans Tepary beans Urd beans Guar **PEAS, DRY** **Not for use in California** Blackeyed peas Chickpeas Cowpeas Crowder peas Southern peas Catjang	Harvest-Aid	0.8-1.3 pts.	Ground: 20 gals. Air: 5 gals.	7	• Do not make more than 2 applications per year. • Add nonionic spreader at 1 qt./100 gals. of spray mix. • Use a single application of the higher rate for vining type beans or bush type with lush growth. • May also be applied as a split application and may improve vine coverage. However do not make more than 2 applications per year or exceed a total of 1.3 pints per acre. • Apply when at least 80% of the pods are yellowing and mostly ripe and when leaves are no more than 40% of bush type peas or beans or 30% of vine type peas or beans are green . • Do not apply when weather conditions favor spray drift. To reduce drift, a drift control agent may be included. • Not registered for use in dry beans and dry peas in California.
BERRIES Blackberry Blueberry Boysenberry Currant Elderberry Gooseberry Huckleberry Loganberry Raspberry	Postemergence Directed Spray	1.3-2.7 pts.	Ground: 50 gals.	—	• Do not make more than 5 applications per year. • New canes or shoots can be injured. Therefore, apply before their emergence. • To prevent crop injury from spray mist, apply as a coarse spray.
CACAO	Directed Spray	1.3-2.7 pts.	Ground: 50-200 gals.	1	• Do not make more than 5 applications per year. • Apply when weeds are succulent and growth is from 1-6". • Retreatment or spot treatments may be necessary for mature woody weeds, late-germinating weeds and grasses and for perennials. • Use a shield for young trees to prevent sprays from contacting cacao plants, as injury may result. • Do not spray under windy conditions. • Do not graze treated areas or feed treated cover crops to livestock.
CASSAVAS, TANIERS & YAMS (Puerto Rico only)	Shielded Post Directed Spray	1.3 pts.	Ground: 50 gals.	90	• **Cassavas and Taniers:** Do not make more than 3 applications per year. • **Yams:** Do not make more than 2 applications per year. • Make applications when weeds are succulent and growth is 1-6". • Prevent spray from contacting crop to prevent injury to crop. • Do not spray under windy conditions. • Do not graze treated areas or feed treated forage to livestock.

Use Information for Chemical Fallow

- As the density of stubble, crop residue or weeds increases, use higher spray volumes for better coverage.
- To control volunteer wheat or downy brome, fall-applied treatments generally work best with FIRESTORM. If possible, tank mix with atrazine for maximum burndown and residual control.
- Apply from immediately after harvest up to emergence of the newly seeded crop as a broadcast or band treatment.
- Before applying FIRESTORM, cut wheat as high as possible to avoid cutting weeds too short, and allow the weeds to grow at least 2-3" after harvest .
- The addition of dicamba (Banvel®) or 2,4-D ester (Low Volatile) may aid in the suppression of emerged perennial broadleaf weeds and large annual broadleaf weeds. Always refer to the product label(s) for 2,4-D ester (Low Volatile), dicamba (Banvel®), or residual herbicide for rates of applications, directions for use, limitations, and restrictions.
- It is permissible to tank mix with registered residual herbicide combinations other than listed for extended weed control during the fallow period.
- Weeds and grasses emerging after application and weeds taller than 6 inches will not be controlled.
- Crop plants emerged at the time of application will be killed.
- The minimum total spray per acre allowed is 5 gallons for ground and 5 gallons for air applications.
- Apply 5-60 gallons spray mix per acre by ground application. When applying at less than 10 GPA by ground:
  - o Do not apply with floaters or exceed a speed of 10 mph.
  - o Apply with flat fan nozzles at 30-40 psi.
  - o Apply only in a tank mix with atrazine at a minimum of 0.5 lb. a.i./acre.
  - o By air: apply in 5-10 gals. of spray mix per acre.

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
CHEMICAL FALLOW Continuous Wheat (2-3 month recropping interval)	Broadcast	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2.0 pts. Weeds 6": 2-2.7 pts.	Ground: 5 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • Apply at least 45 days before seeding. • For volunteer wheat or downy brome control in spring, use at least 1.3 pts. of FIRESTORM per acre with a Photosynthetic Inhibitor Herbicide. • Refer to the section "Use Information for Chemical Fallow".
CHEMICAL FALLOW Wheat-Fallow-Wheat Rotations (Fall applied after harvest; seeded 12-14 months later)	Broadcast	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 5 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • Spray before weeds produce seeds. • Control of volunteer wheat and downy brome control increases when applications are made late August or early September. • For improved burndown and residual control of weeds, tank mix with Atrazine, Marksman® Herbicide, or Command® Herbicide. • For improved burndown and residual control of grass and broadleaf weed tank mix with metribuzin (Sencor® 75DF). • Always refer to the respective product label(s) for rates of applications, directions for use, limitations, and restrictions. • Refer to the section "Use Information for Chemical Fallow".
CHEMICAL FALLOW Wheat-Fallow-Wheat Rotations (Spring applied: seeded 3-5 months later)	Broadcast	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 5 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • To conserve moisture, application should be made March 1 to April 15, prior to spring rains. • Even though moisture loss is greater when applications are made after the boot stage, volunteer wheat is easier to control after this stage. • For volunteer wheat or downy brome control in spring, use at least 1.3 pts. of FIRESTORM per acre with a Photosynthetic Inhibitor Herbicide. • Refer to the section "Use Information for Chemical Fallow". • For burn down and residual control of grass and broadleaf weeds, tank mix with metribuzin, (Sencor® 75DF/Lexone®). • Always refer to the label for metribuzin (Sencor® 75DF/Lexone®) for rates of applications, directions for use, limitations, and restrictions.
CHEMICAL FALLOW Wheat-Annual Crop[1]-Wheat Rotations (Fall applied in wheat stubble)	Broadcast	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 5 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • For improved burndown and residual weed control, tank mix with Atrazine or Marksman®. Always refer to the respective product label(s) for rates of applications, directions for use, limitations, and restrictions. • Make applications after wheat harvest and before weeds produce seed. • If grasses such as foxtails or barnyardgrass recover, respray before seed production. • Applications made late August to November help control volunteer wheat and downy brome. • Refer to the section "Use Information for Chemical Fallow".
CHEMICAL FALLOW Wheat-Annual Crop-Wheat Rotations (Spring applied prior to planting an annual crop[1])	Broadcast	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 5 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • For enhanced burndown and residual weed control, tank mix with Atrazine. Always refer to the respective product label(s) for Atrazine for rates of applications, directions for use, limitations, and restrictions. • For volunteer wheat or downy brome control in spring, use at least 1.3 pts. of FIRESTORM per acre with a Photosynthetic Inhibitor Herbicide. • Refer to the section "Use Information for Chemical Fallow". • Refer to the Atrazine label for recommendations pertaining to soil pH and recropping intervals.

[1]Approved Annual Crops are grain sorghum, corn, wheat, or proso millet.

Crop	Weeds	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
CLOVER AND OTHER LEGUMES Including velvet-bean, lespedeza, lupine, sainfoin, trefoil, vetch, crown vetch, and milk vetch. **Dormant Season** On established plantings: Region A – See table at end of Alfalfa section.	For desiccation of weeds, including London rocket, sowthistle, rescue brome, wild oats, chickweed, ryegrass, bluegrass, cheatgrass, dogfennel, tansymustard, henbit, downy brome, and other winter annuals, and suppression of perennial weeds. **California** • Use for desiccation of weeds including bluegrass, ryegrass, shepherdspurse, chickweed, tansy mustard, foxtail, sowthistle and groundsel.	Broadcast	1.3-2.1 pts.	Ground: 10 gals. Air: 5 gals.	60	• Do not make more than 1 application per year. • Applications should be made during late fall or winter months after the last cutting and before first spring cutting. • Do not apply if **regrowth** after grazing or cutting is more than 2". • Do not harvest within 60 days of application. • CAUTION: Stand and/or yield reductions may occur when applications are made to clover or other legumes that are not dormant, or have broken dormancy. Therefore, it may be necessary to replant. Burning will occur to green clover or other legumes' foliage present at the time of application. • Discoloration and temporary stunting will occur in clover or other legumes foliage present at the time of application. • If there is severe weed infestation, the total hay yield of first cutting may be reduced in clover or other legumes fields and is usually directly proportionate to the loss of weed weight. **In California:** • If ryegrass, shepherdspurse, sowthistle or groundsel are present, use high rate.
On established plantings: Region B - See table at end of Alfalfa section.		Broadcast	0.7-1.3pts.	Ground: 10 gals. Air: 5 gals.	60	
On fall-seeded, newly established stands less than 1-year-old: Region A - See table at end of Alfalfa section.		Broadcast	0.7-1.3pts.	Ground: 10 gals. Air: 5 gals.	60	
On fall-seeded, newly established stands less than 1-year-old: Region B - See table at end of Alfalfa section.		Broadcast	0.5-0.8 pts.	Ground: 10 gals. Air: 5 gals.	60	

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
CORN **FIELD CORN** **POPCORN** **SWEET CORN** **SEED CORN** (Used alone)	Preplant or Preemergence Broadcast or Banded Over Row	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • Includes field, fresh sweet, forage, fodder and popcorn. • To permit maximum weed and grass emergence, seedbeds should be formed as far ahead of planting and treatment as possible. • Seeding should be done with a minimum amount of soil disturbance. • Control will not occur when applications are made after weeds and grasses have emerged. However, crop plants emerged at time of application will be killed.
CORN Tank mixes for no-till/reduced till	Preplant or Preemergence Broadcast or Banded Over Row	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 10 gals. Air: 5 gals.*	—	• Do not make more than 3 applications per year. • Applications should be made as broadcast sprays before, during or after planting, but before crop emergence. • FIRESTORM may be tank mixed with the following herbicides for improved burndown or residual control: 2,4-D Ester (Low Volatile) AAtrex®/Atrazine Banvel® Bicep MAGNUM® Bicep Lite II MAGNUM® Dual MAGNUM® Frontier® Guardsman® Harmony® Extra Herbicide (Preplant only) Harness® Harness® Xtra Lasso® Herbicide Linex® Lorox® Princep® Prowl® Herbicide Simazine® Surpass® EC Surpass® 100 Topnotch® • FIRESTORM may also be tank mixed with Ambush® insecticide. • Always refer to respective product label(s) for rates of applications, directions for use, limitations, and restrictions. * Always refer to respective product label(s) to confirm if these products can be applied by air.
FIELD CORN, **POPCORN,** **SWEET CORN,** **SEED CORN**	Postemergence Directed Spray (including Hooded or Shielded)	0.7-1.3 pts.	Ground: 10 gals.	—	• Do not make more than 3 applications per year. • Applications should be made when weeds are actively growing. • Use a higher rate on larger or hard to control weeds. Weeds 6" or taller may not be controlled. • Severe damage and/or complete kill can occur if spray contacts corn plants **For Hooded Or Shielded Sprayers:** • Use a hooded or shielded sprayer with skids or wheels on the spray boom to maintain spray height in order to prevent excessive crop phytotoxicity. • Apply by directing spray between the rows and using hooded or shielded sprayers to prevent spray contact with crop plants. **For Directed Spray Without Hooded Or Shielded Sprayers:** *Corn height is measure from soil surface to top of whorl.* • Apply when corn is at least 10" tall with nozzles arranged to spray no higher than the lower 3" of corn stalks. • Corn plants shorter than 10" may be injured and not recover. • For corn more than 20" tall: Arrange the nozzles to spray no higher than the lower 1/3 of the corn stalks. • Injury to corn foliage will occur if sprayed. However, corn will recover and develop normally.

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
FIELD CORN, POPCORN, SEED CORN	Harvest Aid Broadcast	0.8-1.3 pts.	Ground: 20 gals. Air: 5 gals.	7	• Do not make more than one application per year. Make ONE (1) application at least 7 days prior to harvest. • Apply after the corn is mature. This is indicated by a black layer which forms at the base of the kernels. You may consult your local agricultural authority for help in identifying the black layer. • Add nonionic surfactant containing at least 75% surface active ingredient at 0.25% v/v. • To desiccate mature broadleaf weeds and grasses or broadleaf weeds and grasses that are taller than 18", use 1.3 pts. • Drought stressed plants, especially broadleaf weeds, can be difficult to kill, and desiccation may not be complete.
FIELD CORN ONLY (grain, fodder, forage)	Postemergence Directed Spray USDA Witchweed Eradication Program	1.3 pts.	Ground: 10 gals.	—	• Do not make more than 3 applications per year. • If regrowth occurs, initiate sprays in late June to early July and repeat in early August. • Follow application instructions in post-emergence directed spray section above.
FIELD CORN ONLY (grain, fodder, forage) 2,4-D Amine AE Tank Mix	Postemergence Directed Spray USDA Witchweed Eradication Program	5.4 fl. oz. +0.5 lb. 2,4-D Amine AE	Ground: 10 gals.	—	• Do not make more than 3 applications per year. • Apply as directed spray onto grassy weeds and witchweed before witchweed blooms. If regrowth occurs, reapply. • Follow application instructions in post-emergence directed spray section above. • Always refer to respective product label(s) for rates of applications, directions for use, limitations, and restrictions.
COTTON (Used alone)	Preplant or Preemergence	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • Apply prior to, during or after planting, but before crop emergence. • For fallow bed treatment, beds should be preformed to permit maximum weed and grass emergence prior to treatment. • Seeding should be done with a minimum of soil disturbance.
COTTON (California only; Used alone)	Preplant	5.4-10.7 fl. oz.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • For control of volunteer barley in preformed seed-beds.
COTTON Goal® Herbicide Tank Mix	Preplant or Fallow Bed Broadcast	1.7-2.7 pts.	Ground: or Air: 10 gals.	—	• Do not make more than 3 applications per year. • Always refer to the Goal® label for weeds controlled, rates of applications, directions for use, limitations, and restrictions.
COTTON Other Tank Mixes	Preplant or Preemergence	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • Apply as a broadcast spray before, during or after planting, but before crop emergence. • For improved residual control or burndown, FIRESTORM may be tank mixed with the following herbicides: o Caparol® Herbicide o Cotoran® Herbicide o Cotton-Pro® Herbicide o Diuron® o Dual MAGNUM® o Harmony® Extra (Preplant Only) o Meturon® Herbicide o MSMA o Prowl® o Zorial® Herbicide • When tank mixing with Cotoran DF® or Meturon DF®, follow mixing instructions carefully, maintain constant agitation, and see Order of Tank Mixing section in respective labels. • When tank mixing with any of the herbicides listed above, always refer to respective product label(s) for weeds controlled, rates of applications, directions for use, limitations, and restrictions.

COTTON Harvest Aid Use Restrictions

- Do not make more than 4 applications per year.
- Do not pasture livestock in treated fields or feed treated foliage.
- Do not apply to cotton within 3 days before harvest.
- Repeat application if necessary. Do not exceed a total of 1.3 pts./A as a harvest aid.
- May be tank mixed with other cotton harvest aid materials known to be effective by a local expert. Unless otherwise instructed in this label, always refer to the respective product label(s) for rates of applications, directions for use, limitations, and restrictions.
- FIRESTORM can be applied in a tank mix with methyl parathion and/or Karate® insecticide. Always refer to the respective product label(s) for rates of applications, directions for use, limitations, and restrictions.
- Nodes above cracked bolls (NACB) timing is for guidance and is not intended to restrict the local expert in their use of the product.

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
SOUTHERN COTTON Harvest aid for boll opening and defoliation (Tank mix with phosphate and chlorate defoliants).	Broadcast	5.4 fl. oz. + 1 pt. phosphate or 1 gal. chlorate	Ground: 10 gals. Air: 5 gals.	7	• Do not make more than 4 applications per year. • Development of immature bolls will be inhibited. • Apply when 80% or more of the bolls are open and the remaining bolls to be harvested are mature. • Always refer to tank mix product label(s) for rates of applications, directions for use, limitations, and restrictions.
SOUTHERN COTTON Additional tank mixes for boll opening and defoliation	Broadcast	2.1-3.3 fl. oz.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 4 applications per year. • FIRESTORM may be tank mixed with the following products to aid in defoliation and opening of mature bolls. Accelerate® Defoliant Def® Defoliant Dropp® Defoliant Ethephon® Plant Growth Regulator Folex® Defoliant Prep™ PGR • Apply when 60% or more of the bolls are open and the remaining bolls to be harvested are mature. • Development of immature bolls will be inhibited. • Always refer to tank mix product label(s) for rates of applications, directions for use, limitations, and restrictions.
SOUTHERN COTTON Post Defoliation - To aid in opening of mature bolls and to desiccate green weeds.	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	3	• Do not make more than 4 applications per year. • If weed infestation is heavy or dense, use higher rate. • Apply when 75% or more of bolls are open and remaining bolls to be harvested are mature. • Development of immature bolls will be inhibited. • After a defoliation or conditioning application has been made, delay desiccation application of FIRESTORM approximately 3-7 days to minimize leaf sticking.
WESTERN COTTON Harvest aid for boll opening and early defoliation	Broadcast	3.7-5.4 fl. oz. + phosphate or sodium chlorate; and/or other compatible harvest aid products.	Ground: 10 gals. Air: 5 gals.	7	• Do not make more than 4 applications per year. • On rank cotton, use higher rate. • Do not use more than 5.4 fl. oz of FIRESTORM for early defoliation as excessive desiccation may occur. • Early defoliation timing is when 60% or more of the bolls are open and the remaining bolls to be harvested are mature (approximately 4 NACB). • Development of immature bolls will be inhibited. • Do not use more than 4.0 lbs. of actual sodium chlorate defoliant per acre at this early defoliation timing. • Always refer to tank mix product label(s) for rates of applications, directions for use, limitations, and restrictions.

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
WESTERN COTTON Harvest aid for boll opening and mid-to-late defoliation	Broadcast	5.4-10.7 fl. oz. alone or tank mix with sodium chlorate or phosphate defoliation and/or other compatible harvest aid products.		3 (Alone)	• Do not make more than 4 applications per year. • Use the 10.7 fl. oz. rate of FIRESTORM in desert cotton areas or on rank vigorous cotton. • Mid-to-late defoliation timing is when 75% or more of the bolls are open and remaining bolls to be harvested are mature (approximately 3 or fewer NACB). • Development of immature bolls will be inhibited. • Always refer to tank mix product label(s) for rates of applications, directions for use, limitations, and restrictions.
COTTON **Stripper or Spindle Harvested** Harvest aid for defoliation and boll opening.	Broadcast	2.1-7.5 fl. oz.	Ground: 10 gals. Air: 5 gals.	3	• Do not make more than 4 applications per year. • BECAUSE OF EXTREMES IN ENVIRONMENTAL AND PLANT CONDITIONS, IT IS ADVISABLE TO APPLY THE RANGE OF RATES ON A SMALL BLOCK OF COTTON TO DETERMINE THE RATE THAT BEST FITS YOUR NEEDS. • Apply when 75% of the bolls are open and the remaining bolls to be harvested are mature. • DEVELOPMENT OF IMMATURE BOLLS WILL BE INHIBITED, SLICE BOLLS AND INSPECT THE SEED FOR MATURITY. • FIRESTORM may be applied alone or tank mixed with the following cotton harvest aids: Accelerate® Defoliant Def® Defoliant Dropp® Defoliant Ethephon® Plant Growth Regulator Folex® Defoliant Prep™ PGR • May be applied as a split application. Do not exceed a total of 1.3 pts./A. • To avoid leaf sticking, apply FIRESTORM as a desiccant approximately 3-7 days after defoliant or a conditioning application and 7-14 days before harvest. • Cooler temperatures may cause a longer waiting period between application of FIRESTORM as a desiccant and defoliation/conditioner. • South of Interstate-10 in Texas, where temperatures are typically higher during defoliation, lower rates in the range may be necessary. • Always refer to tank mix product label(s) for rates of applications, directions for use, limitations, and restrictions.
COTTON Late season desiccation	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	3	• Do not make more than 4 applications per year. • BECAUSE OF EXTREMES IN ENVIRONMENTAL AND PLANT CONDITIONS, IT IS ADVISABLE TO APPLY THE RANGE OF RATES ON A SMALL BLOCK TO DETERMINE THE RATE THAT BEST FITS YOUR NEEDS. • May be applied as a split application. Do not exceed a total of 1.3 pts./A. • Apply when 85% of the bolls are open and the remaining bolls to be harvested are mature (approximately 0 NACB). • Development of immature bolls will be inhibited. Slice bolls and inspect the seed for maturity. • South of Interstate-10 in Texas, where temperatures are typically higher during defoliation, lower rates in the range may be necessary. • Delay desiccation application of FIRESTORM approximately 3-7 days to minimize leaf sticking if a defoliation or conditioning application has been made. • May be tank mixed with other harvest aid materials known to the local expert to be effective.
COTTON Desiccation of regrowth	Broadcast	0.75-1.25 pts.	Ground: 10 gals. Air: 5 gals.	3	• Do not make more than 4 applications per year. • Use to desiccate regrowth occurring after defoliation or desiccation. • Because regrowth is difficult to control, thorough coverage with the full rate is necessary. • Control is dependent on growing conditions and desiccation of small new regrowth may not always be complete. • If regrowth is excessive, use higher rate.
EASTER LILIES (Field grown)	Preemergence	1.7-2.7 pts.	Ground: 10 gals.	—	• Do not exceed two applications per year.

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
FALLOW LAND Prior to planting of any crops.	Preplant Broadcast to Fallow Land	1.0-2.7 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 2 applications per year, during the fallow period. • Fallow land may be between operations such as disking, ripping, plowing, leveling, irrigating or listing for ground preparation purposes. • Use for the control of weeds such as bluegrass, chickweed, henbit, downy brome, ryegrass, cheatgrass, dog fennel, tansy mustard, London rocket, sowthistle, rescue brome, wild oats, volunteer cereals and other winter annuals and for suppression of perennial weeds or sedges. • For weeds approaching the maximum size of 6", the higher rate may be used. • No more than 2 applications should be made during the fallow period. • Prior to application allow maximum weed emergence to maximize the benefit of this use. • Adhere to the preharvest intervals and other crop specific restrictions for planted crops elsewhere on this label.
GRASSES (For seed) (For use in seedbed preparation)	Preplant, at Planting, or Preemergence	1.3-2.7 pts.	Ground: 10 gals.	—	• Do not make more than 3 applications per year. • Prepare the seedbeds and allow weeds to germinate. • Apply FIRESTORM when weeds are at the 3-5 leaf stage. • Applications may be repeated as necessary (but only up to 3 applications per year) prior to grass emergence. • Do not graze treated areas or use the seed or straw from treated areas for animal feed or bedding.
GUAR (Preharvest desiccation)	Preharvest	1.3 pts.	Ground: 10 gals.	4	• Do not make more than 3 applications per year. • Apply after the pods are fully mature. • Do not graze treated areas or use the treated forage for animal feed.
GUAVA	Directed Spray	2.5 pts.	Ground: 10 gals.	—	• Do not make more than 4 applications per year. • Do not allow spray to contact green stems, fruit or foliage. • Do not graze treated areas. • Do not feed cover crops grown in treated areas to livestock. • Retreatment or spot spraying may be necessary for mature woody weeds, late-germinating weeds and grasses, and perennials.
HOPS (ID, OR, & WA only)	Directed Spray and/or Suckering and Stripping.	1.3 pts.	Ground: 10 gals.	14	• Do not make more than 3 applications per year. • Retreatment of spot treatment may be necessary. • Do not allow spray to contact green stems, foliage, flowers, or cones as injury may result. • Do not allow animals to graze in treated hopyards. • Silage and hop vine refuse may be fed to livestock. • Spray only the basal 2 ft. of the vines for sucking and stripping. Repeat as necessary, but only up to 3 applications per season. • Experience with varieties other than Cascade, Yakima Cluster, and Bullion is limited. If using FIRESTORM on other varieties than these, test the use pattern on a small number of vines of each variety to determine sensitivity to injury. Do not use on unlisted varieties if unacceptable crop injury occurs. • Chemical Pruning: Spray when vines are less than 3 ft. tall to burn back existing vines and obtain even emergence of subsequent vines. • APPLICATION TO HOP VINES LESS THAN 6 FT. TALL MAY CAUSE UNACCEPTABLE INJURY.
LENTILS NOT REGISTERED FOR USE ON LENTILS IN CALIFORNIA.	Harvest Aid	0.8-1.3 pts.	Ground: 20 gals. Air: 7 gals.	7	• Do not make more than 2 applications per year. • Add nonionic surfactant at 0.25% v/v (2 pts./100 gals.) of the finished spray volume. • May also be applied as a split application. **DO NOT** make more than 2 applications or exceed a total of 1.3 pts./A. The split application may improve coverage. • Apply when crop is mature and at least 80% of the pods are yellowing and mostly ripe with no more than 30% of the leaves still green in color. • **DO NOT** apply when weather conditions favor spray drift. To reduce spray drift a drift control agent may be included.

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
MINT (Peppermint, Spearmint)	Dormant Season	1.3-2.0 pts.	Ground: 10 gals. Air 5 gals.	--	• Do not make more than 2 applications per year. • For suppression of weeds such as groundsel, chickweed, downy brome, bluegrass, Italian ryegrass, prickly lettuce. • Apply when crop is dormant before spring growth begins and when weeds are less than 6" tall. • Do not apply more than 2.0 pts./A per dormant season. • May be tank mixed with Sinbar® Herbicide (terbacil) weed killer for improved contact activity and residual control of Italian ryegrass, prickly lettuce and groundsel. Apply this tank mixture no more than once per season. Always refer to Sinbar® (terbacil) label for weeds controlled, rates of applications, directions for use, limitations, and restrictions.
ONIONS (seeded) **AND GARLIC**	Preplant/ Preemergence	1.7-2.7 pts.	Ground: 10 gals.	60 200 (CA only)	• Do not make more than 1 application per year. • For heavy weed infestations or wild oat control use the higher rate. Apply only one application per season at the 2.7 pts./A dosage. • Allow maximum weed and grass emergence prior to treatment but apply prior to crop emergence. • Apply a maximum of 2.7 pts./A per season.
PASSION FRUIT	Directed Spray	2.5 pts.	Ground: 10 gals.	—	• Do not make more than 5 applications per year. • If bark is still green at application time, use a shield or wrap vine. • Pick all fruit off the ground prior to application if application is to be made during harvest season. • Do not allow animals to graze on treated areas. • It may be necessary to retreat or spot treat.
PEANUTS	Broadcast At Ground Crack Postemergence	5.4-10.8 ft. oz.	Ground: 10 gals.	—	• Do not make more than 2 applications per year. • To control or suppress small (1-6") emerged annual grass and broadleaf weeds in peanuts at ground crack. A second application may be made up to 28 days after ground crack. • For at ground crack use, FIRESTORM can be tank mixed with Pursuit® Herbicide or Dual Magnum® for residual weed control. • Always refer to the Pursuit® or Dual Magnum® label for a list of weeds controlled, application rates, necessary precautions, and use limitations. • Make no more than 2 applications per season and do not apply a total of more than 10.8 fl. oz. of product per acre per season. • Crop foliage sprayed will be injured in the form of bronzing and crinkling, but the crop will recover and develop normally. • Do not apply by air.
PEANUTS Basagran® Herbicide Tank Mix	Broadcast At Ground Crack Postemergence	5.4-10.8 ft. oz.	Ground: 10 gals.	—	• Do not make more than 2 applications per year. • Tank mix FIRESTORM with Basagran® at 1 pt./A. for improved control of weeds such as cocklebur, bristly starbur, smartweed and prickly sida. • This tank mix can be applied at the ground crack stage of peanuts. A second application may be made up to 28 days after ground crack. • Make no more than 2 applications per season and do not apply a total of more than 10.8 fl. oz. of product per acre per season. • Crop foliage sprayed will be injured in the form of bronzing and crinkling, but the crop will recover and develop normally. • Always refer to the Basagran® label for weeds controlled, rates of applications, directions for use, limitations, and restrictions. • If peanuts show injury (leaf phytotoxicity and/or plant stunting) produced by any other herbicide treatment, do not apply this tank mix as injury may be enhanced and/or prolonged. • During prolonged periods of drought or unseasonably cold weather do not apply this tank mix as unsatisfactory weed control may result. • Do not apply by air.

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
PEANUTS Butyrac® Herbicide or Butoxone® 200 Herbicide Tank Mix	Broadcast Postemergence	5.4-10.8 fl. oz.	Ground: 10 gals.	—	• Do not make more than 2 applications per year. • For improved control of weeds such as cocklebur, sicklepod and morningglory, tank mix FIRESTORM with 8-16 oz. (0.125-0.25 lbs.) per acre of Butyrac® or Butoxone® 200. • Do not apply a total of more than 10.8 fl. oz. of product per season and make no more than 2 applications per season • Crop foliage sprayed will be injured in the form of bronzing and crinkling but the crop will recover and develop normally. • Always refer to the Butyrac® or Butoxone® 200 labels for weeds controlled, rates of applications, directions for use, limitations, and restrictions. • Do not apply by air.
PIGEON PEAS (Puerto Rico only)	Directed Spray	1.3 pts.	Ground: 10 gals.	60	• Do not make more than 1 application per year. • Avoid contact with pigeon pea foliage. • Do not make more than 1 application per season. • Do not graze treated areas or feed treated forage to livestock. • Cannery waste can be fed to livestock.
PINEAPPLE	Directed Spray	1.3-2.7 pts.	Ground: 10 gals.	20	• Do not exceed 3 applications per season. • More mature weeds may require retreatment.
POTATO	Preplant or Preemergence Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • Apply up to ground cracking stage, before potatoes have emerged.
POTATO (California, Washington, Oregon, Idaho only; used alone)	Preplant Broadcast	0.4-0.7 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • For control of volunteer barley in preformed seedbeds.
POTATO Fresh Market Only Preharvest vine killing and weed desiccation. For Use Only in the states of: Colorado, Delaware, Idaho, Illinois, Indiana, Kansas, Maine, Maryland, Massachusetts, Michigan, Minnesota, Nebraska, Nevada, New Jersey, New York, North Dakota, Ohio, Oregon, Pennsylvania, South Dakota, Utah, Washington, Wisconsin and Wyoming	Broadcast	0.7-1.3 pts.	Ground: 20 gals.	3	**For Fresh Market Potatoes Only.** (Fresh Market Potatoes include potatoes that are sent directly from the field to a consumer, grocery store, or processor for use.) • **DO NOT** make more than 2 applications per year. • **DO NOT** use on potatoes that will be stored as tuber decomposition may result. • Potatoes must be harvested promptly after desiccation and processed or consumed immediately. • **DO NOT** apply to drought stressed potato vines. • **DO NOT** use to desiccate the vines of seed potatoes as seed pieces may fail to germinate and grow normally. • **DO NOT** pasture livestock in treated potato fields. • **DO NOT** exceed 2.6 pts./A per season. • Begin application when leaves begin to turn yellow. • Immature potato foliage is tolerant to FIRESTORM. However, desiccation will not be complete under this condition. • Use 1.3 pts./A rate where quick vine kill is desired. • For dense vine growth, use 2 applications of 0.6 pt/A. Split applications must be applied a minimum of five days apart.

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
RICE	Preplant or Preemergence Broadcast	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2.0 pts. Weeds 6": 2-2.7 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • Apply as a broadcast spray before, during or after planting, but before crop emergence. When vegetation is dense, use higher rates and spray volumes. • Seeding should be done with a minimum amount of soil disturbance. • This product will not control weeds and grasses emerging after application. Crop plants emerged at time of application will be killed. • FIRESTORM may be tank mixed with other herbicides registered for this use for improved or extended weed control. Always refer to the tank mix product label(s) for weeds controlled, rates of applications, directions for use, limitations, and restrictions. • Do not flood/flush within 48 hours of application in order to ensure complete kill of vegetation. If cool, cloudy and/or wet weather delays speed of kill, do not flood/flush until complete kill is evident.
SAFFLOWER	Preplant or Preemergence Broadcast or Banded Over Row	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • Apply before, during and after planting but before crop emergence.
SAFFLOWER (California only)	Preplant Broadcast	0.7 pt.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • For control of volunteer barley in preformed seedbeds.
SMALL GRAINS (Barley, wheat)	Preplant or Preemergence	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 5 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year.
SMALL GRAINS (Wheat Only) Hoelon® 3EC Tank Mix	Preplant or Preemergence	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • A tank mix with Hoelon® 3EC will improve grass control. • Apply when weeds are actively growing and 1-6" in height. Weeds 6 inches or taller may not be controlled. • Do not apply this tank mix to barley as crop injury may result. • Always refer to the Hoelon® 3EC label for weeds controlled, rates of applications, directions for use, limitations, and restrictions.
SORGHUM (Grain)	Preplant/ Preemergence Broadcast or Band	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 10 gals. Air: 5 gals.	48 (grain) 20 (forage)	• Do not make more than 3 applications per year. • To allow maximum weed and grass emergence, seedbeds should be formed as far ahead of planting as possible • Seeding should be done with a minimum amount of soil disturbance.
SORGHUM (Grain) Atrazine & 2,4-D ester [Low Volatile] Tank Mix	Preplant or Preemergence	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.		48 (grain) 20 (forage)	• Do not make more than 3 applications per year. • FIRESTORM may be tank mixed with Atrazine for improved preemergence or residual weed control. The addition of 2,4-D ester (Low Volatile) may assist in the suppression of perennial and annual broadleaf weeds emerged at the time of application. Always refer to the specific product label(s) for weeds controlled, rates of applications, directions for use, limitations, and restrictions.
SORGHUM (Grain) Harmony® Extra Herbicide Tank Mix	Preplant	1.3-2.5 pts.	Ground: 10 gals.	48 (grain) 20 (forage)	• Do not make more than 3 applications per year. • For improved weed control, FIRESTORM may be tank mixed with Harmony® Extra. • Always refer to the Harmony® Extra label for weeds controlled, rates of applications, directions for use, limitations, and restrictions.

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
SORGHUM (Grain)	Postemergence Directed (Including Hooded or Shielded)	0.7-1.3 pts.	Ground: 10 gals.	48 (grain) 20 (forage)	• Do not make more than 2 applications per year. • Apply when weeds are actively growing. • Use higher rate on larger or hard to control weeds. Weeds 6" or taller may not be controlled. • Severe damage and/or complete kill can occur if spray contacts sorghum plants. • Do not exceed 2 postemergence-directed applications or exceed a total of 5.3 pts. FIRESTORM per season. **HOODED OR SHIELDED SPRAYERS** • To avoid excessive crop phytotoxicity, use a hooded or shielded sprayer with skids or wheels on the spray boom to maintain spray height. • Apply by directing spray between the rows and by using hooded or shielded sprayers to prevent spray contact with crop plants. **DIRECTED SPRAY WITHOUT HOODED OR SHIELDED SPRAYERS** • Apply when sorghum is at least 12" tall when naturally standing. • Do not exceed 30 psi nozzle pressure or spray under conditions which may cause excessive drift. • Use precision directed-spray application equipment adjusted so that no more than the lower 3" of the sorghum stalk is contacted by the application spray. • Some crop injury will occur. The degree of injury is related to the precision of application and spraying conditions.
SOYBEANS	Preplant or Preemergence	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • Do not exceed a total of 4.0 pts. of FIRESTORM per season. • Apply as a broadcast spray before, during or after planting, but before crop emergence. • FIRESTORM may be tank mixed with the following herbicides for improved burndown or residual control: 2,4-DB Canopy® Dual MAGNUM® Goal® Harmony® Extra {Preplant Only} Lasso® Lexone® Linex® Lorox® Lorox® Plus Prowl® Pursuit® Herbicide Scepter® Herbicide Sencor® Herbicide Surflan® Herbicide Turbo® Herbicide • The rate of FIRESTORM to be used in these tank mixtures is dependent on weed height and growing conditions. Where weed canopy is dense or under dry conditions, use the highest rate of FIRESTORM. Always refer to the respective product label(s) for a list of weeds controlled, rates of applications, directions for use, limitations, and restrictions. • The lower application rate may be used when weeds are less than 4" tall and a selective postemergence spray or cultivation will be made within 3 weeds after planting. • Seeding should be done with a minimum amount of soil disturbance. • Do not graze or harvest for forage or hay before the R3 stage of soybean development (early pod).
SOYBEANS 2,4-D ester (Low Volatile) Tank Mix	Preplant or Preemergence	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • Apply 2,4-D ester (Low Volatile) at 0.35-0.475 lbs. a.i./A at least 7 days prior to planting. • Apply 2,4-D ester (Low Volatile) at 0.475-0.95 lbs. a.i/A at least 30 days prior to planting. • Do not apply 2,4-D ester (Low Volatile) prior to planting soybeans if you are not able to accept the results of soybean injury including possible loss of stand and yield. • Do not use amine formulation as FIRESTORM activity may be reduced. • May be tank mixed with residual herbicides listed above. • Always refer to the 2,4-D ester (Low Volatile) label for weeds controlled, rates of application, directions for use, limitations, and restrictions.

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
SOYBEANS	Postemergence Directed Spray (Includes Hooded or Shielded)	3.0-5.3 fl. oz.	Ground: 10 gals.	—	• Do not make more than 3 applications per year. • Apply when weeds are actively growing. • Use the lower rate of FIRESTORM for control of seedling johnsongrass, crabgrass, goosegrass, *Brachiaria*, Texas millet and pigweed less than 2" tall. • For control of 2-4" red rice, *Brachiaria*, barnyard grass, crabgrass, goosegrass, seedling johnsongrass, giant foxtail, and fall panicum, use 5.3 fl. oz. of FIRESTORM. • Use 5.3 fl. oz. of FIRESTORM for control of 2-3" sicklepod, purslane, pigweed, cutleaf ground cherry, and common ragweed, • Apply FIRESTORM at 5.3 fl. oz./A plus 0.2 lb. active ingredient per acre of a 2,4-D formulation for control of 2-4" grasses in mixture with common cocklebur, morningglory, and red rice. • Always refer to the 2,4-D label for weeds controlled, rates of applications, directions for use, limitations, and restrictions • Do not graze or harvest for forage or hay. • If necessary, make a second and final application 7-14 days later. **HOODED OR SHIELDED SPRAYERS** • Apply by directing spray between the rows and using hooded or shielded sprayers to prevent spray contact with crop plants. • Use higher rate on larger (less than 6") or hard to control weeds. Weeds 6" or taller may not be controlled. • Severe damage and/or complete kill can occur if spray intentionally or accidentally (including drift of fine droplets) contacts the plants. **DIRECTED SPRAY WITHOUT HOODED OR SHIELDED SPRAYERS** • Do not treat on soybeans that are less than 8" tall. • Use precision directed spray application equipment adjusted so that no more than the lower 3" of the soybean plant is contacted by the application spray. • Do not exceed 30 psi nozzle pressure or spray under conditions which may cause excessive drift. • Some crop injury will occur. The degree of injury is dependent upon the precision of application and spraying conditions.
SOYBEANS	Harvest Aid	5.4-10.7 fl. oz.	Ground: 20 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • Indeterminant varieties: Applications should be made when at least 65% of the seed pods have reached a mature brown color or when seed moisture is 30% or less. Determinant varieties: Apply when plants are mature, i.e., beans are fully developed, 1/2 of leaves have dropped, and remaining leaves are yellowing. • Injury will occur on immature soybeans. • Mature cocklebur, especially drought-stressed plants, are tolerant to FIRESTORM and desiccation will not be complete. Always use the higher rate when treating cocklebur. • Do not apply within 15 days of harvest. • Do not graze or harvest for forage or hay.
STRAWBERRIES	Postemergence Directed Spray	1.3 pts.	Ground: 20 gals.	21	• Do not make more than 3 applications per year. • Direct spray between the rows, using shields to prevent spray contact with crop plants. • Do not allow spray to contact strawberry plants as injury or excessive residues may result. • Do not apply more than 3 times per season. • Do not graze livestock in treated areas.
SUGAR BEETS	Preplant or Preemergence	1.3-2.7 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • For heavier weed infestations, use the higher label rate. • Seeding or transplanting should be done with a minimum amount of soil disturbance. • Crop plants emerged at time of application will be killed. • Can be used in fallow bed/stale seedbed for weed control. • Seedbeds or plantbeds should be formed as far ahead of treatment as possible to permit maximum weed emergence.

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
SUGARCANE	Postemergence Directed Spray (includes Hooded or Shielded)			—	**General Comments** • Do not make more than 2 applications per year, except applications made by air in Florida and Texas in which the maximum number of applications allowed is 1 per year. • Apply as a hooded, shielded or directed spray to avoid contact with cane foliage to prevent leaf burn and yield reduction. • If necessary, a second and final application can be made when new weed growth is 2-6" high. • Do not graze treated areas or feed treated forage to livestock.
—Florida—		1.3 pts.	Ground: 50 gals.	—	• Do not make more than 2 applications per year. • Optimum results can be obtained by applying in early spring (March-April) when weeds are small. • Do not apply after June 1 as cane growth may be stunted and yields reduced.
—Hawaii—		1.3 pts.	Ground: 20 gals.	—	• Do not make more than 2 applications per year. • Do not apply after cane rows have closed in.
—Louisiana—		0.7-2.0 pts.	Ground: 20 gals.	30	• Do not make more than 2 applications per year. • For tiller control, apply when tillers are less than 18" high. • For heavier weed infestations or tiller growth use the higher rate.
—Florida & Texas—	Harvest Aid	0.4-0.7 pts.	Air: 5 gals.	—	• Do not make more than 1 application per year. • Under cool, cloudy weather conditions use higher rate. • Apply 3-14 days before burning and harvest.
SUNFLOWER	Preplant or Preemergence Broadcast or Banded Over Row	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • Apply before, during, or after planting but before crop emergence.
SUNFLOWER	Preharvest Desiccation Broadcast	0.8-1.3 pts.	Ground: 10 gals. Air: 5 gals.	7	• Do not make more than 2 applications per year. • Apply when sunflower seeds reach physiological maturity (when seed moisture is 35% or lower). For many varieties, this is equivalent to the time when the back of the heads are yellow and the bracts are turning brown. • Do not graze treated areas or feed treated forage to livestock. • When crop stands or weed infestations are heavy, use the higher label rate.
TARO, DRYLAND (Hawaii Only)	Postemergence Directed Spray	1.3-2.1 pts.	Ground: 10 gals.	180	• Do not make more than 2 applications per year. • Do not allow spray to contact the taro plants as injury may result. • Make the first application when weed growth is 1-4" high. • Weeds emerging after the application will not be controlled. • A single re-treatment may be made; however, do not harvest dryland taro within 6 months of the last application.
TREE PLANTATION ESTABLISHMENT Deciduous and Conifers	Preplant Broadcast	1.3-2.7 pts.	Ground: 20 gals.	—	• Do not make more than 3 applications per year. • To allow maximum emergence of weeds prepare ground early. • Apply prior to planting. Plant with minimal soil disturbance. • For heavier weed infestations, use the higher application rate. • For improved burndown or residual control, tank mix FIRESTORM with other herbicides labeled for this use. • Always refer to the specific tank mix herbicide label(s) for weeds controlled, rates of applications, directions for use, limitations, and restrictions. • Do not apply in less than 20 gals./A as weed control will be reduced.

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
TREES AND VINES Orchards, Vineyards, Windbreak, Shade & Ornamental Trees: Acerola Apples Apricots Avocados Bananas Beechnut Brazil nut Butternut Calamondin Cashew Cherries Chestnut Chinquapin Citrus citron Coffee Figs Filberts Grapefruit Grapes Hickory nut Kiwi fruit Kumquat Lemon Lime Macadamia nuts Mandarin Nectarines Olives Orange (sour & sweet) Papayas Peaches Pears Pecans Pistachios Plums Prunes Pummelo Satsuma mandarin Walnuts Other shade and ornamental trees such as arborvitae, ash, elm, fir, oak, pine, etc.	Directed Spray	1.7- 2.7 pts.	Ground: 10 gals.	Apricots 28 Cherries 28 Figs 13 Kiwi Fruit 14 Nectarines 28 Olives 13 Peaches 14 Pistachios 7 Plums 28	• Do not make more than 5 applications per year, except for: Apricots, Cherries, Kiwi Fruit, Nectarines, Peaches, Plums, no more than 3 applications per year; Olives, no more than 4 applications and Pistachios, no more than 5 applications but only 2 applications after shells split. • Do not allow spray to make contact with green stems (except suckers), fruit or foliage. • Use the shield or wrap plant when spraying around young trees or vines. • Do not graze treated areas. • Do not feed covered crops grown in treated areas to livestock. • Do not apply when figs, nuts or olives to be harvested are on the ground. • **For apricots** - Do not harvest within 28 days after application and do not exceed 3 postemergence directed applications per season. • **For cherries** - Do not harvest within 28 days after application and do not exceed 3 postemergence directed applications per season. • **For figs** - Do not harvest within 13 days after application and do not exceed 5 postemergence directed applications per season. • **For grapes** - Treat when sucker growth is no more than 8" long. Late season applications to weeds should be made to avoid contact with desirable foliage. • **For kiwi fruit** - Do not treat more than 3 times per year. • For mature woody weeds, perennial weeds, late germinating weeds and green suckers, retreatment or spot treatment may be necessary. • **For nectarines** - Do not harvest within 28 days after application and do not exceed 3 postemergence directed applications per season. • **For olives** - Do not harvest within 13 days after application and do not exceed 4 postemergence directed applications per season. • **For peaches** - Do not harvest within 14 days after application, and do not exceed 3 postemergence directed applications per season. • **For pistachios** - Do not exceed 2 applications after shells split. • **For plums** - Do not harvest within 28 days after application and do not exceed 3 postemergence directed applications per season.

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
TREES AND VINES Tank Mixes	Directed Spray	1.7-2.7 pts.	Ground: 10 gals.	Always refer to other Tank Mix labels	• Do not make more than 5 applications per year, except for: Apricots, Cherries, Kiwi Fruit, Nectarines, Peaches, Plums, no more than 3 applications per year; Olives, no more than 4 applications and Pistachios, no more than 5 applications but only 2 applications after shells split. • This product may be tank mixed with registered residual herbicides listed below for combined emerged and residual weed control. FIRESTORM may be tank mixed with the following herbicides: Devrinol® Herbicide Goal® Karmex® Krovar® Herbicides Princep® Sinbar® Solicam® Herbicide Surflan® • Always refer to other herbicide labels for weeds controlled, rates of applications, directions for use, limitations, and restrictions.
TYFON (New Hampshire only)	Preplant Preemergence	1.7-2.7 pts.	Ground: 10 gals.	—	• Do not make more than 3 applications per year. • Seeding should be done with a minimum of soil disturbance. • Weeds and grasses emerging after treatment will not be controlled. • Crop plants emerged at time of application will be injured.
VEGETABLES (Seeded or Transplanted) Beans (Lima, Snap) Broccoli Cabbage Cantaloupe Carrots Cauliflower Chayote fruit Chinese cabbage Chinese waxgourd Citron melon Collards Cucumber Eggplant Gherkin Gourd, Edible Groundcherry Lettuce *Momordica* spp. Musk melons Peas Pepino Peppers Pumpkin Squash Sweet Corn Tomatillo Turnips Tomatoes Watermelons	Preplant Preemergence	1.3-2.7 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • Seedbeds or plantbeds should be formed as far ahead of treatment as possible to permit maximum weed emergence. • Banded or broadcast treatment applications can be made before, during or after planting but prior to the crop emergence. • For heavier weed infestations, use the higher rate. • Seeding or transplanting should be done with a minimum amount of soil disturbance. • Crop plants emerged at time of application will be killed. • FIRESTORM can be used in fallow bed/stale seedbed for weed control alone or tank mixed with Goal®. Always refer to the Goal® label for weeds controlled, rates of applications, directions for use, limitations, and restrictions. • Do not harvest tomatoes within 30 days after application.

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
VEGETABLES Eggplant Tomatoes Peppers	Directed Spray	1.3 pts.	Ground: 10 gals.	—	• Do not make more than 3 applications per year. • For control or suppression of emerged weeds between rows after crop establishment. • Use precision directed spray application equipment adjusted to prevent spray contact with crop plants. Do not exceed 30 psi nozzle pressure. Do not spray under conditions which may cause excessive drift. • Apply when weeds are succulent and weed growth is less than 6". • Do not apply more than 3 applications per season. • Do not allow animals to graze in treated areas. • Do not harvest tomatoes within 30 days after application.
VEGETABLES Tomatoes	After Final Harvest	1.6-2.5 pts.	Ground: 40-120 gals.	—	• Do not make more than 2 applications per year. • Apply in 40-120 gallons of water per acre (0.62-0.93 lb. a.i./A). • Add NIS containing 75% or more surface active agent at 0.125 v/v (1 pt./100 gals. spray solution). • To ensure maximum herbicide burndown, tomato vines should be thoroughly covered. • FIRESTORM may be deactivated and less efficacious when dirty or muddy water is used. • To aid in the removal of sweet potato whitefly, burn tomato vines with propane burners as soon as possible after the vines have dried down sufficiently. • DO NOT apply more than a total of 3 lbs. active ingredient (paraquat) per acre per season. • To minimize drift, do not use nozzles or nozzle configurations which produce fine spray droplets (mist).
VEGETABLES (California, Washington, Oregon, Idaho only) Lettuce Melon Sugar Beets Tomatoes	Broadcast	0.4-0.7 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 2 applications per year. • For control of volunteer barley in preformed seedbeds. • Do not harvest tomatoes within 30 days after application.
VEGETABLES Rhubarb	Dormant	1.7-2.7 pts.	Ground: 10 gals.	—	• Do not exceed 2 applications per year. • Apply during dormant season before buds in crown begin to grow.

RESIN SOAKING

Pines including Loblolly, Shortleaf, Longleaf, Slash, Virginia, Pond, Pitch, and Spruce Pines.

Tree Selection -Trees should be selected from stands on sites not subject to stress from periods of extreme drought stress because the desiccating effect of FIRESTORM is accentuated during drought, causing a reduction in the amount of oleoresin deposited in the xylem. Vigorous, non-stagnated natural or planted stands should be selected. Plan FIRESTORM treatments in stagnated or commercial timber stands, not sooner than three years after a commercial thinning.

Application Directions

To bring the treatment into contact with sapwood (or xylem), apply water-diluted FIRESTORM to an appropriate wound in the tree trunk.

Bark Streaks or Cuts: Use a standard or rotary bark hack or a chainsaw shipping tool (used in naval stores work) to remove a single 1-inch wide streak of bark about 1-2 ft. from ground level. Do not exceed 1/3 of the circumference of the tree. Serious girdling of the trunk and premature death of the tree can result if multiple streaks or cuts are made. Apply a coarse spray (about 1.7-5.0 ml) FIRESTORM solution (1-5% cation, wt./wt. basis) to runoff to the exposed xylem, using a low-pressure sprayer. The amount of spray required per cut depends on tree circumference and the length of cut or streak. For example, for a 9-inch diameter tree, using 3 ml of 2 or 4% FIRESTORM solution will cover the 1-inch wide streak and will result in application of 60 or 120 mg per streak.

Time of Treatment: Less severe pine beetle infestation and longer tree life usually result during cool season treatments under non-drought seasons. However, resin soaking can occur from treatments made any time of the year.

Interval between Treatment and Tree Harvest: There should be at least a 6-month interval between application of FIRESTORM and tree harvest. However it is preferable the interval is from 12-24 months, even though intervals of over 6 months may not be possible under conditions of drought or serious pine beetle attacks possibly making early harvest necessary.

With this treatment, there is a potential for promoting beetle attack or causing premature death of the tree. At high dosage rates, desiccation of the xylem tissue, rather than the desired resin soaking, may occur.

Note: This type of treatment may reduce stem growth during between treatment and tree harvest.

Dilution Table for FIRESTORM (3.0 lbs. cation per gallon)	
Concentration of Cation Desired (wt./wt. basis)	Add the Following No. Gal. of Water to ⅔ Gallon of FIRESTORM
0.2%	118.8
0.5%	46.8
1.0%	22.9
2.0%	10.9
3.0%	6.9
4.0%	4.9
5.0%	3.7

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
CONSERVATION RESERVE, FEDERAL SET-ASIDE, CONSERVATION COMPLIANCE PROGRAMS (For use in compliance with the Federal Conservation Reserve Program or Federal set-aside programs)	Broadcast	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 3 applications per year. • FIRESTORM may be tank mixed with other herbicides registered for this use for improved emerged weed control or extended weed control. Always refer to tank mix herbicide labels for weeds controlled, rates of applications, directions for use, limitations, and restrictions.
NONCROP USES	Broadcast or Spot Treatment	1.7- 2.7 pts.	Ground: 10 gals.	—	• Repeat applications as necessary but do not make more than 10 applications per year. • To be used in noncrop areas including public airports, electric transformer stations, pipeline pumping stations, around commercial buildings, storage yards and other installations, and fence lines . • Avoid spray contact with the foliage of ornamentals or desired plants.
PASTURE RESEEDING For suppression of existing sod and undesirable emerged broadleaf weeds and grasses prior to or at time of planting grasses or forage legumes	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	See specific geographic recommendation	• Do not make more than 3 applications per year. **West of Cascade and Sierra Nevada Mountains** • Apply in October through December after first fall rains and after weeds have emerged and sod has started new growth. • Apply on moderately to heavily grazed areas for best seeding results. • Do not use in heavy sod and weed growth areas. **East of Rocky Mountains** • Use the 1.3 pts rate on vigorous or coarse sod species such as bromegrass. • Apply prior to, or at time of seeding grasses or forage legumes. • Apply only to grazed or mowed pastures not more than 3" in height at time of treatment. **Bermudagrass or Bahiagrass Sods** • Apply in late summer or early fall to sod not exceeding 3" in height. • For control of emerged little barley, apply in February or March before the mid-boot stage of little barley. **Bermudagrass and Coastal Bermudagrass Pastures** • Apply when bermudagrass is dormant. • For control of little barley, apply before the mid-boot stage. • Do not mow for hay until 40 days after treatment.
For control of endophyte-fungus-infected fescue forage legume/grass mixture and other grass pastures	Broadcast (Split Application)	0.7-1.3 pts. followed by 0.7-1.3 pts.	Ground: 10 gals.	—	• Do not make more than 2 applications per year. • Use split applications of 10-21 days apart if necessary. • Do not exceed 2.6 pts./A total in preparation for reseeding. • For spring plantings, the initial application of 0.7-1.3 pts. may be made the previous fall. • Apply when fescue is actively growing and no more than 4" high. • To reduce the infestation of endophyte-infested grass, do not allow fescue to go to seed starting with the preceding year's crop.

Crop	Use Pattern	FIRESTORM Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
*For prickly pear desiccation in pastures **Not for use in California	Spot Sprays	0.8 fl. oz. per gallon of water	Spray to wet weed foliage	—	• Do not make more than 10 applications per year. • Hand-held equipment such as knapsacks backpack sprayers, pump-up pressure sprayers, hand-guns, and hand-wands, can be used to direct the spray onto weed foliage so that the spray thoroughly wets foliage. • Mix 0.8 fl. oz. of FIRESTORM and 1/3 fl. oz. of a nonionic surfactant per gallon of water. • Completely and uniformly cover all green prickly pear foliage with spray. • Apply in May through September for best desiccation results. • Do not use more than 1.6 pts. of FIRESTORM per acre per year. • Apply only to pastures with no more than 3" of height at time of treatment. • Tank mix with Grazon® P+D Specialty® herbicide at a rate of 1-2 fl. oz. per gallon of water for improved desiccation and perennial control of prickly pear. • Always refer to the Grazon® P+D Specialty® herbicide label for weeds controlled, rates of applications, directions for use, limitations, and restrictions.
*For Juniper Species leaf moisture reduction or desiccation prior to Prescribed burning of pastures *Not for use in California	Broadcast	1.3 pts.	Air: 5 gals.	—	• Do not make more than 10 applications per year. • Use only in conjunction with prescribed burning as recommended and monitored by local SCS or University and Extension Range Specialists. • Apply during hot, dry weather conditions (generally July and August). • Use 2% v/v nonionic surfactant in a minimum of 5 gal spray solution. • Monitor juniper leaf moisture content. Maximum leaf moisture reduction generally occurs 3-4 weeks after FIRESTORM application. • Significant soil moisture and/or wet weather conditions prior to or after application will decrease the potential for juniper crown burns. • Reduction in leaf moisture can be adversely affected by cool or humid weather conditions. • Do not graze livestock after application or prior to burning.
*Native Pastures **Not for use in California	Broadcast	1.0-1.25 pts.	Ground: 10 gals. Air: 5 gals.	—	• Do not make more than 2 applications per year. • Apply FIRESTORM for control of downy and Japanese brome. • Apply in spring after 90% node formation of brome species, but before full bloom. • Emerged native perennial grasses will be burned by application, but application after 90% node formation will allow adequate time for native grasses to recover and attain maximum growth in the use season. • Do not apply more than 1.25 pts. FIRESTORM per year. • Apply only to pastures with no more than 3" of height at time of treatment.

Conversion Table FIRESTORM to Be Applied			
Ounces	**Pints**	**Lb. a.i.**	**Acres/Gallon**
2.5	0.16	0.06	51.3
4.8	0.30	0.11	26.7
5.28	0.33	0.12	24.2
5.52	0.35	0.13	23.2
10.00	0.63	0.23	12.8
11.00	0.69	0.26	11.6
11.20	0.70	0.26	11.4
12.00	0.75	0.28	10.7
16.00	1.00	0.38	8.0
20.00	1.25	0.47	6.4
20.80	1.30	0.49	6.2
24.00	1.50	0.56	5.3
28.00	1.75	0.66	4.6
32.00	2.00	0.75	4.0
40.00	2.50	0.94	3.2
43.20	2.70	1.00	3.0

WARRANTY STATEMENT

CHEMTURA CORPORATION warrants that this product conforms to the chemical description on the label and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. To the extent allowed by law:

- All such risks shall be assumed by Buyer and User;
- The exclusive remedy of any buyer or user of this product for any and all losses, injuries, or damages resulting from or in any way arising from the use, handling, or application of this product, whether in contract, warranty, tort, negligence, strict liability, or otherwise, shall not exceed the purchase price paid for this product; and
- CHEMTURA CORPORATION makes no warranties of merchantability or of fitness for a particular purpose nor for any other expressed or implied warranty except as stated above.

FIRESTORM® is a registered trademark of Chemtura Corporation

AAtrex®, Ambush®, Bicep MAGNUM®, Bicep Lite II MAGNUM®, Caparol®, Cyclone®, Devrinol®, Dual MAGNUM®, E-Z Handler®, Karate®, Princep®, Reflex®, Reglone®, Solicam®, Surpass®, TopNotch®, and Zorial® and the Syngenta logo are trademarks of a Syngenta Group Company

Accelerate® is a trademark of Cerexagri, Inc.

Banvel®, Basagran®, Frontier®, Guardsman®, Marksman®, Prowl®, Pursuit®, and Scepter® are trademarks of BASF

Canopy®, Harmony® Extra, Krovar®, Lexone®, Sinbar® and Velpar® are trademarks of E.I. du Pont de Nemours & Co., Inc.

Butoxone® is a trademark of Makhteshim-Agan of North America, Inc.

Butyrac® and Command® are trademarks of FMC Corporation

Cotoran® Cotton-Pro®, Karmex®, Linex®, Lorox®, Lorox Plus™ and Meturon® are trademarks of Griffin, LLC.

Def®, Dropp®, Hoelon®, Prep™, and Sencor® are trademarks of Bayer CropScience

Diuron® and Simazine® are trademarks of Drexel Chemical Company

Ethephon® is a trademark of Micro Flo Company, LLC

Folex® is a trademark of AMVAC Chemical Corporation

Goal®, Grazon® P-D Specialty®, and Surflan® are trademarks of Dow AgroSciences

Harness®, Lariat® and Lasso® are trademarks of Monsanto Agricultural Company

© 2010, Chemtura Corporation