

U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505C) 401 "M" St., S.W.

Washington, D.C. 20460

NOTICE OF PESTICIDE:

\_x\_\_ Registration \_\_\_ Reregistration

(under FIFRA, as amended)

EPA Reg. Number:

81927-5

DEC 28 2006

Date of Issuance:

Term of Issuance:

Unconditional

Name of Pesticide Product:

Alligare SFM Extra

Name and Address of Registrant (include 2IP Code):

Alligare, LLC

c/o Pyxis Regulatory Consulting, Inc. 4110  $136^{th}$  St. N.W.

Gig Harbor, WA

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

- Submit and/or cite all data required for registration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product.
- Make the labeling changes listed below before you release the product for shipment.

Add the phrase "EPA Registration No. 81927-5".

12-28-06

EPA Form 8570-6

- 3. On Page 5, lime "Slash Pine" to 3 ounces/acre.
- 4. On Page 6, add a line between Oak red and \*Suppression causes...not accepted as control.
- 5. On Page 9, add outdoor as follows:

Industrial sites outdoor such as lumberyards....

Submit three (3) copies of your final printed labeling before you release the product for shipment.

Enclosed for your records is a copy of your label stamped "Accepted".

James A. Tompkins

sincerely

Product Manager (25)

Herbicide Branch

Registration Division (7505P)

### Alligare SFM Extra™

ACTIVE INGREDIENTS:	By Weight	
Sulfometuron methyl	, ,	
Methyl 2-[[[[(4,6-dimethyl-2-pyrimidinyl)amino]-carbonyl]amino]sulfonyl]benzoate	56.25%	
Metsulfuron Methyl		
Methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]-carbonyl]amino]sulfonyl]		
benzoate	15.00%	/
OTHER INGREDIENTS:	<u>28.75%</u>	
TOTAL:	100.00%	

# KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCIÓN

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

	FIRST AID
If on skin or clothing:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>
	• Call a poison control center or doctor for treatment advice.
If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
	HOT LINE NUMBER
	uct container or label with you when calling a poison control center or doctor, or ment. You may also contact 1-800-424-9300 for emergency medical treatment

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing.

### **ENVIRONMENTAL HAZARDS**

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters. This herbicide is injurious to plants at extremely low concentrations. Nontarget plants may be adversely affected from drift and run-off.

EPA Reg. No. 81927-

with COMMENTS
In EPA Letter Dated:

DEC 28 2006

ACCEPTED.

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

81927-5

Net Weight:

### **USER SAFETY RECOMMENDATIONS**

**Users Should:** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

### PERSONAL PROTECTIVE EQUIPMENT

### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

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 Control Statement:** When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in 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.

### **GENERAL INFORMATION**

Alligare SFM Extra™ is a dispersible granule that is mixed in water and applied as a spray or impregnated on dry, bulk fertilizer for the following uses:

- In conifer plantations and non-crop sites for control of many annual and perennial grasses and broadleaf weeds.
- For general weed control on terrestrial non-crop sites and for selective weed control
  in certain types of unimproved turf grasses on these same sites.
- For control of certain woody plants, vines and herbaceous weeds in site preparation and release of various conifers.
- Tank mixed with other herbicides registered for use in conifer plantations and noncrop sites: When tank mixing, use the most restrictive limitations from the labeling of both products.

Alligare SFM Extra™ may be applied to non-crop sites and conifer plantations that contain areas of temporary surface water caused by collection of water between planting beds, in equipment ruts, or in other depressions created by management activities. Intermittently flooded low lying sites, seasonally dry flood plains, transitional areas between upland and lowland sites, marshes, swamps, bogs and seasonally dry flood deltas may be treated when no water is present. DO NOT make applications to natural or man-made bodies of water such as lakes, reservoirs, ponds, streams and canals.

Herbaceous weeds are controlled by both preemergence and postemergence activity with best results obtained when the application is made before or during the early stages of weed growth before weeds develop an established root system. For best results on undesirable hardwoods and vines, apply as a foliar spray between full leaf expansion in the spring and normal defoliation in the fall.

For preemergence control, moisture is required to move Alligare SFM Extra™ into the root zone of weeds. For best postemergence results, apply Alligare SFM Extra™ to young, actively growing weeds. Weed species, size at application and soil texture determines the use rate recommended, and the degree and duration of control may depend on the following:

- Weed size at time of application
- Weed infestation intensity and spectrum
- Environmental conditions at and following treatment
- Soil pH, soil moisture, and soil organic matter

Use the higher rates listed on established plants and on fine-textured soils and the lower rates listed on smaller weeds and coarse-textured soils.

A drift control agent may be used at the manufacturer's recommended rate in the application of Alligare SFM Extra™.

Alligare SFM Extra™ is non-corrosive, nonflammable, nonvolatile, and does not freeze.

### **USE PRECAUTIONS**

Do not apply more than a total of 6 ounces of *sulfometuron methyl* per acre per year when applying Alligare SFM Extra™ alone or in combination with other products containing sulfometuron methyl.

Do not apply more than a total of 2.4 ounces of *metsulfuron methyl* per acre per year when applying Alligare SFM Extra™ alone or in combination with other products containing metsulfuron methyl.

Do not apply more than 10 2/3 ounces of Alligare SFM Extra™ per acre per year.

Do not use on food or feed crops.

### **ENVIRONMENTAL CONDITIONS AND BIOLOGICAL ACTIVITY**

Alligare SFM Extra™ rapidly inhibits the growth of susceptible weeds by being absorbed through both the roots and foliage of plants when applied as a spray. Alligare SFM Extra™ is absorbed primarily via the roots when applied on dry fertilizer. Two to 3 weeks after application to weeds the growing points turn reddish-purple and leaf growth slows. Within 4 to 6 weeks of application, leaf veins and leaves become discolored followed by the growing points dying.

Cold, dry conditions will delay the herbicidal activity of Alligare SFM Extra™ while warm, moist conditions following application will accelerate it. Vines, undesirable hardwoods and weeds hardened-off by drought stress are less susceptible to Alligare SFM Extra™. For preemergence weed control, moisture is necessary to move Alligare SFM Extra™ into the soil.

### RESISTANCE

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominate in that field. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem areas using a product affecting a different site of action.

To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to change cultural practices within and between crop seasons such as using a combination of tillage, retreatment, tank-mix partners and or sequential herbicide applications that have a different site of action. Do not let weed escapes go to seed. If applicable see Weeds Controlled section of label for additional information on managing herbicide resistant weed biotypes.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative cultural practices or herbicide recommendations available in your area.

### INTEGRATED PEST MANAGEMENT

This product may be used as a part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

### **DIRECTIONS FOR USE**

It is violation of federal law to use this product in a manner inconsistent with its labeling. Alligare SFM Extra™ should be used only in accordance with recommendations on this label

or in Alligare SFM Extra<sup>TM</sup> supplemental 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 in your State responsible for pesticide regulation.

Alligare, LLC is not responsible for losses or damages resulting from the use of this product in any manner not specifically recommended by Alligare, LLC. The user assumes all risks associated with any non-recommended uses.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinylchloride
- · Shoes plus socks

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box only 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.

Use on noncrop sites and turf (unimproved) are not within the scope of the Worker Protection Standard.

Do not enter or allow others to enter the treated area until sprays have dried.

### CONIFER PLANTATIONS

### **APPLICATION INFORMATION**

Alligare SFM Extra™ controls certain undesirable woody plants, vines, and many broadleaf weeds and grasses in conifer plantation sites when applied as a spray using ground equipment or a helicopter. Alligare SFM Extra™ controls woody plants and vines by postemergent foliar activity when applied as a spray, with the best results obtained when applied between full leaf expansion in the spring and normal defoliation in the fall.

To control broadleaf weeds and grasses, Alligare SFM Extra™ may be applied in impregnated fertilizer by using ground equipment or by air (helicopter or fixed wing aircraft).

Alligare SFM Extra™ may be tank mixed with other herbicides registered for use in conifer plantations. When tank mixing, always be sure to follow the most restrictive limitations from the labels of the tank mix partners.

### **APPLICATION TIMING**

Apply Alligare SFM Extra™ sprays before herbaceous weeds emerge or shortly thereafter for control broadleaf weeds and grasses. For impregnated fertilizer applications, apply before weeds emerge.

### **APPLICATION RATES**

Apply Alligare SFM Extra™ at the rates indicated by conifer species. Use a lower rate on coarse-textured soils (i.e., loamy sands, sandy loams) and a higher rate on fine textured soils (i.e. sandy clay loams and silty clay loams).

### **WEEDS CONTROLLED**

When applied at the rates specified, Alligare SFM Extra™ effectively controls or suppresses the weeds and vines listed under the "Weeds Controlled" listing in the Non-Crop section of this label.

### **CONIFER SITE PREPARATION**

### APPLICATION BEFORE TRANSPLANTING

To control specified hardwoods, vines, broadleaf weeds and grasses, make all applications before transplanting. To improve control of targeted pests, add a surfactant at the rate specified on the manufacturer's label or in tank mixes as limited by the companion product label.

### TRANSPLANT USE RATES FOR SELECTED SPECIES

USE RATES PRIOR TO TRANSPLANTING CONIFERS			
Species	Rate (ounces/acre)	When to Transplant into Treated Areas	
<b>Loblolly Pine</b>	3 to 4	Planting season following application.	
Slash Pine	3 to 4	Planting season following application.	
Black Spruce	2 2/3 to 5 1/3	Not less than 13 months following application.	
Red Pine  1 1/3 to 2 2/3  The following spring or summer but n months after application. Areas recei oz./acre may be transplanted in a mir		The following spring or summer but not less than 3 months after application. Areas receiving 2/3 to 1 1/3 oz./acre may be transplanted in a minimum of 30 days following application.	
Douglas Fir	2 2/3 to 5 1/3	Planting season following application.	

Other species of conifers may be planted providing the user has experience indicating acceptable tolerance to Alligare SFM Extra<sup>TM</sup>. Without prior experience, before large-scale plantings are made it is recommended that small area plantings be tested for tolerance to Alligare SFM Extra<sup>TM</sup>. The user accepts all responsibility for injury on any conifer species not listed above.

### TANK MIXTURES

To broaden the spectrum of undesirable hardwoods controlled and provide herbaceous weed control in the year following transplanting, site preparation treatments applied in the late summer may be tank mixed with Alligare SFM Extra™.

### **Glyphosate**

Tank mix 4 to 8 ounces of Alligare SFM Extra™ with 2 to 10 pounds of active ingredient (isopropylamine salt) of glyphosate per acre. For a list of species controlled, refer to the glyphosate product container.

### **Imazapyr**

Tank mix 4 to 8 ounces of Alligare SFM Extra™ with 5 to 12 ounces of active ingredient (isopropylamine salt) of imazapyr per acre. Slash and loblolly pines may be transplanted the planting season following application.

This tank mixture will control:

Cherry

Oak water



Dogwood

Persimmon

Elms

Sassafrass

Hickory\*

Sweetaum

Oak, red

### Glyphosate + Imazapyr

Mix 2 to 4 ounces of Alligare SFM Extra™ with 8 to 32 ounces of active ingredient (isopropylamine sait) of glyphosate plus 5 to 6 ounces of active ingredient (isopropylamine salt) of imazapyr per acre. Slash and loblolly pines may be transplanted the planting season following application.

This tank mixture will control:

Cherry

Oak water

Dogwood

Persimmon

Elms Hickory\*

Sassafrass

Sweetaum

Oak, red

\*Suppression - causes a visible reduction in plant population and/or plant vigor as compared to an untreated area. Suppression is generally not accepted as control.

### Velpar® DF, Velpar ® L OR Velpar ® ULW

Tank mix 4 to-8 ounces of Alligare SFM Extra™ per acre with the rates recommended on the Velpar® label for various soil textures. Loblolly and slash pines may be transplanted the planting season following application. For a list of species controlled, refer to the Velpar® product label.

### **IMPROVED BRUSH CONTROL**

For improved brush control after making a Velpar®ULW application in the spring, apply a tank mixture of Alligare SFM Extra™ at 4 ounces per acre plus a minimum of 2.5 ounces of active ingredient (isopropylamine salt) of imazapyr per acre.

Brush species controlled include but are not limited to:

American beautyberry

Calicarpa Americana

Southern dewberry

Rubus spp.

Huckleberry

Vaccinium spp.

Following a spring application of Velpar® ULW, Alligare SFM Extra™ application should be made in the summer or fall. This treatment also targets brush species remaining after the spring Velpar® ULW application. For best results, make the application after brush species have completely defoliated twice following the Velpar® ULW application and refoliation of target brush species is evident. Alligare SFM Extra™ applied at this time will provide herbaceous weed control into the early growing season of the year following application.

In the planting season following application, Loblolly, slash and longleaf pine may be

If burning after application, burn only after adequate rainfall has occurred to move Alligare SFM Extra™ into the soil. Soil disturbance from bedding or plowing may reduce spring herbaceous weed control.

### **CONIFER RELEASE**

### APPLICATION AFTER TRANSPLANTING

To control the species of hardwoods, broadleaf weeds and grasses in the "Weeds Controlled" listing in the Non-Crop section of this label, apply Alligare SFM Extra™ after transplanting.

### **USE RATES FOR SELECTED SPECIES**

Use Rates After Transplanting Conifers

Species		(ounces/acre)
Loblolly Pine	2 2/3	to 4

Slash Pine 2 2/3 to 3

### **TANK MIXTURES**

### HERBACEOUS WEED CONTROL

For loblolly pine, apply Alligare SFM Extra<sup>TM</sup> at 2 to 4 ounces per acre plus Arsenal<sup>®</sup> AC (Applicators Concentrate) or Imazapyr 4 SL at 4 to 6 fluid ounces per acre.

For slash pine, apply Alligare SFM Extra™ at 2 ounces per acre plus Arsenal® AC or Imazapyr 4 SL at 4 fluid ounces per acre.

This tank mixture will control:

Common ragweed

Late boneset

Dogfennel

Panicgrass

Firewood

Pokeweed

This tank mixture will aid in the suppression of perennial grasses such as bermudagrasss and johnsongrass in addition to the herbaceous weeds listed above.

### UNDESIRABLE HARDWOOD CONTROL

To control herbaceous weeds, grasses and undesirable hardwoods, apply 4 ounces of Alligare SFM Extra™ with 8 to 16 fluid ounces of Arsenal® AC or Imazapyr 4 SL per acre. Some minor conifer growth inhibition may be observed when release treatments are made during periods of active conifer growth, and broadcast release treatments may be made late in the growing season to minimize the potential inhibition of conifer growth.

For loblolly pine, a registered conifer release surfactant may be added at the rate recommended on the surfactant label.

For slash pine, over the top broadcast release treatments must be made only in stands 2 to 5 years old and after mid-august. Do not add a surfactant for over the top applications to slash pine. Do not exceed 12 fluid ounces of Arsenal® AC or Imazapyr 4 SL per acre when applying on light (sandy) soils.

This tank mixture will control:

Ash

Myrtle dahoon

Black gum

Oak, red

Blackberry\*

Oak, white

Cherry Dogwood\* Oak, water Persimmon\*

Elms\*

Red Maple\*

Hawthorn

Sassafrass

Hickories\*

Sweetgum

Honeysuckle

Vaccinium

Hophornbeam

\*Suppression - causes a visible reduction in plant population and/or plant vigor as compared to an untreated area. Suppression is generally not accepted as control.

# SPECIFIC WEED PROBLEMS - SITE PREPARATION OR AFTER PLANTING KUDZU

As part of a kudzu abatement program, Alligare SFM Extra™ is recommended at a rate of 8 ounces per acre. To fully control kudzu, retreatment of any re-sprouting kudzu crowns following the initial treatment is necessary. Make applications to kudzu after leaves are fully mature and the plant has begun to bloom, continuing applications until first frost. For the initial application apply Alligare SFM Extra™ as a broadcast treatment and use spot-spray or broadcast follow-up applications as needed for thorough coverage.

Thoroughly treat foliage and stems (spray-to-wet) without excess runoff. For handgun applications use a minimum of 100 gallons per acre. Use a minimum of 30 gallons per acre per application pass for boom or boom-less sprayer applications made by ground or air (helicopter only). Spray coverage may be improved by making double pass applications from different directions. Prior to planting, use a non-ionic surfactant (90% active ingredient) at the

rate of 1 quart per 100 gallons of spray solution (0.25% v/v). After planting use a crop oil concentrate at the rate of 1 quart per 100 gallons of spray solution.

### **FERTILIZER IMPREGNATION**

Dry bulk fertilizer may be impregnated or coated with Alligare SFM Extra™ and applied when establishing conifer plantations.

### **IMPREGNATION**

Use a system consisting of a conveyor or closed drum used to blend dry bulk fertilizer to impregnate the fertilizer with Alligare SFM Extra™. Diammonium phosphate, potassium chloride, 16-16-16 and 24-4-4 have been used successfully with Alligare SFM Extra™ while some fertilizers such as potassium nitrate, sodium nitrate and triple super phosphate are not compatible with Alligare SFM Extra™. Do not use Alligare SFM Extra™ on limestone.

Because dusty fertilizer may result in poor distribution and excessive risk of drift during application, use a suitable additive to reduce dust prior to impregnation if the fertilizer materials are excessively dusty. To avoid potential tree injury or mortality and poor weed control, the dry fertilizer must be properly impregnated and uniformly applied.

For the appropriate rate of Alligare SFM Extra™ to be used per acre, refer to the Application Rates section of this label. Apply the recommended amount of Alligare SFM Extra™ to the volume of fertilizer to be applied per acre by mixing the Alligare SFM Extra™ in a sufficient quantity of water to uniformly coat the desired amount of fertilizer. Suspensions of Alligare SFM Extra™ will require thorough agitation. Direct the spray nozzles to deliver a fine spray of the mixture toward the fertilizer for uniform coverage. Using a colorant may assist in visually determining the uniformity of impregnation.

Absorption of Alligare SFM Extra™ by the dry bulk fertilizer may vary. If the fertilizer does not adequately absorb the impregnating spray, using an absorptive powder or additive such as Microcel E (Johns Manville Product Company) or HiSil – 233 (Pittsburg Plate Glass) may be required to produce a dry, free-flowing mixture.

For optimum performance, apply the impregnated fertilizer as soon as possible after impregnation. Impregnated fertilizer may become lumpy and difficult to apply if stored prior to application. For satisfactory weed control and to minimize tree injury, uniform and precise application of the fertilizer impregnated with Alligare SFM Extra™ is essential.

To clean the equipment used to impregnate, transport and apply the fertilizer, follow the instructions for spray tank clean out in this label. Do not use the impregnation, transport or application equipment to make subsequent applications to crops.

Because low rates of Alligare SFM Extra<sup>TM</sup> can kill or severely injure most crops, using spray equipment used to apply Alligare SFM Extra<sup>TM</sup> to apply other pesticides to crops on which Alligare SFM Extra<sup>TM</sup> or its active ingredients are not registered may result in damage to those crops. The most effective way to reduce this crop damage potential is to use dedicated mixing and application equipment.

### **BROADCAST APPLICATION**

Applications may be made by ground or by air using either a helicopter or fixed wing aircraft. For uniform distribution, accurate calibration of the application equipment is essential. Overlaps or skips between adjoining swaths or non-uniform distribution of impregnated fertilizer within the swath will deliver poor results and may result in tree injury or mortality.

## IMPORTANT PRECAUTIONS CONIFER PLANTATIONS ONLY

Conifers suffering from loss of vigor caused by insects, disease, drought, winter damage, animal damage, excessive soil moisture, planting shock, previous agricultural practices, or other stresses may be injured or killed if Alligare SFM Extra™ is applied.

Following transplanting, applications of Alligare SFM Extra™ made after transplanting should only be made after adequate rainfall has closed the planting slit and settled the soil around the roots.

Do not apply Alligare SFM Extra™ to conifers grown for Christmas trees or ornamentals.

When making over the top applications for herbaceous weed control in conifer seedlings in the spring after transplanting, do not use a surfactant with Alligare SFM Extra™. When targeting specific weed problems such as undesirable hardwoods, a surfactant specifically registered for conifer release may be used. Refer to the surfactant label for recommended use rates.

Alligare SFM Extra™ applications may result in damage and mortality to other species of trees when they are present on sites with those listed in the preceding recommendations for conifer plantation uses.

### NON-AGRICULTURAL USES

# NON-CROP SITES APPLICATION INFORMATION

Alligare SFM Extra™ may applied by ground or helicopter as a preemergence or early postemergence spray before or during the rainy season when weeds are actively germinating or growing for general weed control in the following sites:

- Uncultivated non-agricultural areas such as, airports, highway, railroad and utility rights-of-way, sewage disposal areas;
- Uncultivated agricultural areas such as farmyards, fuel storage areas, fence rows, soil bank land, barrier strips; and,
- Industrial sites such as lumberyards, pipeline and tank farms.
- Alligare SFM Extra™ is not recommended for use on recreation areas or for direct application to paved areas (surfaces).

Combining Alligare SFM Extra™ with other herbicides will broaden the spectrum of weeds controlled. Additionally, total vegetation control can be achieved with higher rates of Alligare SFM Extra™ plus residual-type companion herbicides. For improved weed control, add a surfactant at the rate of 0.25% by volume or at the rate specified on the manufacturer's label.

Apply Alligare SFM Extra™ at the rates indicated by weed type. Alligare SFM Extra™ provides short term control of weeds listed when applied at lower rates and weed control is extended when applied at the higher rates listed.

### **WEEDS CONTROLLED**

Alligare SFM Extra™ effectively controls the following broadleaf weeds and grasses in non-crop sites when applied at the rates shown:

2 2/3 to 3 Ounces Per Acre		
Annual bluegrass	Downy brome (cheat)	Reed Canarygrass
Annual sowthistle	False chamomile	Ripgut brome
Aster	Fescue	Rough fleabane
Bahiagrass	Fiddleneck tarweed	Rye
Barnyardgrass	Field pennycress	Salsify
Beackchervil (bur.	Flixweed	Sandbur (southern, field)
woodland)	Florida pusley	Seashore saltgrass
Bearded sprangletop	Foxtail barley	Seaside heliotrope
Beebalm	Foxtail fescue	Shepherd's purse
Bitter sneezeweed	Goldenrod	Signalgrass
Black mustard	Green foxtail	Silky crazyweed
Blackeyed-susan	Hairy vetch	Smallseed falseflax
Blue mustard	Hop clover	Smooth pigweed
Bouncingbet	Houndstongue	Snowberry, western
Bur buttercup	Italian ryegrass	Spreading orach
Bur clover	Japanese stiltgrass	Sweet clover

2 2/3 to 3 Ounces Per Acre		
Carolina geranium	Johnsongrass	Tansy ragwort
Chicory	Jointed goatgrass	Tansymustard
Clover	Lambsquarters	Treacle mustard
Cocklebur	Little barley	Tumble mustard
Common chickweed	Marestail/horseweed*	Tumble pigweed
Common groundsel	Maximillion sunflower	Western ragweed
Common mallow	Medusahead	Wheat
Common mullein	Miners lettuce	Whitetop
Common pokeweed	Mouseear chickweed	Whitestem Filaree
Common purslane	Oxeye daisy	Wild barley
Common ragweed	Pennsylvania smartweed	Wild carrot
Common speedwell	Pepperweed	Wild garlic
Common tansy	Plains coreopsis	Wild lettuce
Common vetch	Plantain	Wild mustard
Common yarrow	Poison hemlock	Wild oat
Conical catchfly	Prickly coontail	Wood sorrel
Corn cockle	Red brome	Wooly cotton
Cow cockle	Red fescue	Yankeweed
Crown vetch	Redroot pigweed	Yellow foxtail
Dandelion	Redstem filaree	

<sup>\*</sup>Certain biotypes of marestail/horseweed are less sensitive to Alligare SFM Extra™ and may be controlled by tank mixes with herbicides with a different mode of action.

3 to 4 Ounces Per Acre		
Black henbane	Common sunflower	Snowberry
Honeysuckle	Prostate knotweed	Fireweed
Blackberry	Crabgrass	St.Johnswort
Multiflora rose (wild roses)	Rosering gaillardia	Gorse
Broom snakeweed	Curly dock	Teasel
Musk thistle	Scotch thistle	Gumweed
Buckhorn plantain	Dewberry	White snakeroot
Panicums (annual)	Seaside arrowgrass	Halogeton
Bull thistle	Dogfennel	Whitetop, hairy
Plumeless thistle	Sericea lespedeza	Henbit
Common crupina	Dyer's woad	Wild caraway
Poorjoe		

4 to 5 1/3 Ounces Per Acre		
Crimson clover	Giant foxtail	Little mallow
Perennial pepperweed	Rush	Yellow rocket
Dogfennel	Giant ragweed	Palmer pigweed
Purple starthistle	Yellow nutsedge	

Note: Use the higher level of the recommended rate ranges under the following conditions:

- Heavy weed growth
- Soils containing more than 2-1/2% organic matter
- High soil moisture areas such as along road edges or railroad shoulders

# SPECIFIC WEED PROBLEMS KOCHIA, RUSSIAN THISTLE. AND PRICKLY LETTUCE

Because biotypes of kochia, marestail, prickly lettuce and Russian thistle are known to be resistant to Alligare SFM Extra<sup>TM</sup>, a tank mixture combination with herbicides having different modes of action such as Karmex<sup>®</sup> DF or Diuron 80 DF, HYVAR<sup>®</sup> X or KROVAR<sup>®</sup> I DF must be used. These weeds should be treated postemergence with other herbicides registered for their control such as 2,4-D or dicamba in areas where resistance is known to exist. Do not allow kochia, prickly lettuce or Russian thistle to form mature seed.

#### KUDZU

As part of a kudzu abatement program, Alligare SFM Extra™ is recommended at a rate of 8 ounces per acre. To fully control kudzu, retreatment of any re-sprouting kudzu crowns following the initial treatment is necessary. Make applications to kudzu after leaves are fully mature and the plant has begun to bloom, continuing applications until first frost. For the initial application apply Alligare SFM Extra™ as a broadcast treatment and use spot-spray or broadcast follow-up applications as needed for thorough coverage.

Thoroughly treat foliage and stems (spray-to-wet) without excess runoff. For handgun applications use a minimum of 100 gallons per acre. Use a minimum of 30 gallons per acre per application pass for boom or boom-less sprayer applications made by ground or air (helicopter only). Spray coverage may be improved by making double pass applications from different directions. Prior to planting, use a non-ionic surfactant (90% active ingredient) at the rate of 1 quart per 100 gallons of spray solution (0.25% v/v).

### TANK MIX COMBINATIONS

Add 2-2/3 to 5-1/3 ounces of Alligare SFM Extra™ per acre to the recommended rates of the following herbicides to improve preemergence to early postemergence control of weeds and grasses: HYVAR® X herbicide, Karmex® DF herbicide or Diuron 80 DF, KROVAR® I DF herbicide, VELPAR® L herbicide, VELPAR® DF herbicide, TELAR® herbicide, glyphosate, dicamba, or 2,4-D.

Apply Alligare SFM Extra™ plus a combination herbicide at the rates and timing as shown on package labels for target weeds. For application methods and other instructions, be sure to use the most restrictive directions from the respective labels of the products in the intended combination.

Do not tank mix Alligare SFM Extra™ with HYVAR® X-L herbicide.

### **TURF (UNIMPROVED ONLY)**

### **APPLICATION INFORMATION**

Where the turf is well established as a ground cover, Alligare SFM Extra™ is recommended to control weeds on unimproved turf on roadsides or on other non-crop sites. Applications of Alligare SFM Extra™ may temporarily suppress grass growth and inhibit seedhead formation (chemical mowing).

### **BERMUDAGRASS RELEASE**

### APPLICATION TIMING

After bermudagrass has broken dormancy and is well established (usually 30 days after initial spring flush), apply Alligare SFM Extra™ at ½ to 2 ounces per acre. Apply Alligare SFM Extra™ again during late spring to early summer if additional applications are necessary. For best results on established weeds, apply Alligare SFM Extra™ one to two weeks after mowing.

Alligare SFM Extra™ may also be applied in late fall or early winter using the lower rates on small seedling weeds and higher rates on larger weeds.

### TANK MIX COMBINATIONS-BERMUDAGRASS (SOUTH ONLY)

On well established bermudagrass during summer, apply 1 to 2 ounces Alligare SFM Extra™ per acre as a tank mix with 3 to 4 pounds active ingredient of MSMA per acre. For a list of

additional weeds that may be controlled, refer to the MSMA package label. To maintain weed control, two or more sequential applications of MSMA alone may be required.

#### **CENTIPEDEGRASS RELEASE**

### **APPLICATION TIMING**

Apply ½ to 2 ounces per acre of Alligare SFM Extra™ in the fall or early winter, or following green-up of the centipedegrass in the early summer. For recommended use rates and species controlled by Alligare SFM Extra™, refer to the Weeds Controlled listing in this section.

## SMOOTH BROME AND CRESTED WHEATGRASS RELEASE AND SUPPRESSION APPLICATION TIMING

Apply ½ to 1 ½ ounces of Alligare SFM Extra<sup>™</sup> per acre to turf after green-up and before seedheads emerge (boot stage). Because premature treatment may result in top kill and stand reduction of desirable turf, make sure that desirable grasses are well established at application. Make only one application per year.

### **WEEDS CONTROLLED**

When applied at the use rates shown, Alligare SFM Extra™ may be used to control the following weeds in turf (unimproved only):

1/2 to 1 Ounces Per Acre		
Asters (except heath aster)	Common yarrow	Mousear chickweed
Buttercups	Curly dock	Redroot pigweed
Common broomweed	False chamomile	Sweetclover
Common chickory	Field pennycress	Tansy mustard
Common chickweed	Fleabanes	White clover
Common sunflower	Goldenrod	Wild garlic
Common vetch	Little barley	

1 to 2 Ounces Per Acre		
Bitter sneezeweed	Eveningprimrose	Musk thistle
Buckhorn plantain	Foxtail barley	Prairie coneflower
Carolina geranium	Giant ragweed	Redstem filaree
Cheat (Downy brome)	Hairy vetch	Tumble mustard
Common dandelion	Hopclover	Wild carrot
Common mullein	Japanese stiltgrass	Wild oats
Common ragweed	Jointed goatgrass	Wild parsnip
Crimson clover	Medusahead	

### **IMPORTANT PRECAUTIONS - UNIMPROVED TURF**

If a surfactant is used with Alligare SFM Extra™ applications made to actively growing turf, excessive injury to turf may result. The user assumes all responsibility for turf injury when a surfactant is used with Alligare SFM Extra™ applied to actively growing turf.

Alligare SFM Extra™ may cause top kill or temporarily discolor turf grasses. Green-up in the spring may be delayed if applications are made while the turf is dormant.

On bahiagrass, crested wheatgrass and smooth brome, annual retreatments (particularly at the higher recommended rates) may reduce vigor.

Injury may result if Alligare SFM Extra™ is applied to turf that is under stress from cold temperatures, disease, drought, insects, or late spring frost.

### **GRASS REPLANT INTERVALS**

The following grasses may be replanted following Alligare SFM Extra™ treatments at use rates up to 2 ounces per acre:

Alta fescue Meadow foxtail Smooth brome Sheep fescue

Orchardgrass

Western wheatgrass

The recommended intervals are for soils with a pH less that 7.5; soils having a pH greater than 7.5 require longer intervals. Recommended intervals are for applications made in the spring. Applications made in the fall should consider the intervals as beginning in the spring following treatment because Alligare SFM Extra™ degradation is slowed by cold or frozen soils.

Testing indicates that there is considerable variation in response among species of grasses when seeded into areas treated with Alligare SFM Extra™. If species other than those listed above are to be planted into areas treated with Alligare SFM Extra™, previous experience may be used to determine the feasibility of replanting treated areas or a field bioassay should be preformed.

# ADDITIONAL USE INSTRUCTIONS FOR CONIFER PLANTATIONS, NON-CROP SITES AND TURF

### SPRAY EQUIPMENT

Because low rates of Alligare SFM Extra<sup>TM</sup> can kill or severely injure most crops, using spray equipment used to apply Alligare SFM Extra<sup>TM</sup> to apply other pesticides to crops on which Alligare SFM Extra<sup>TM</sup> or its active ingredients are not registered may result in damage to those crops. The most effective way to reduce this crop damage potential is to use dedicated mixing and application equipment.

## APPLICATION GROUND

When applying Alligare SFM Extra™ as a broadcast or directed spray, use a delivery system and sufficient volume of water that will ensure thorough coverage and a uniform spray pattern. Before applying, be sure to calibrate the sprayer. To avoid injury to desired species, avoid overlapping and shut off spray booms when starting, turning, slowing, or stopping.

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Use a delivery system and sufficient volume of water that will ensure thorough coverage and a uniform spray pattern. Before applying, be sure to calibrate the sprayer. To avoid injury to desired species, avoid overlapping and shut off spray booms when starting, turning, slowing, or stopping.

### **MIXING INSTRUCTIONS**

- 1. Fill spray tank ½ full of water
- 2. Begin agitation and add the recommended amount of Alligare SFM Extra™
- 3. If using a tank-mix partner, add the recommended amount
- 4. For postemergent applications, add the proper amount of spray adjuvant
- 5. Add the remaining water
- 6. Agitate the spray tank thoroughly

Alligare SFM Extra™ spray preparations are stable if they are pH neutral or alkaline and stored at or below 100°F.

### SPRAYER CLEANUP

Following applications of Alligare SFM Extra™, thoroughly clean all mixing and spray equipment as follows:

- 1. Drain the tank and thoroughly rinse spray tanks, boom and hoses with clean water.
- 2. Fill the tank with clean water and for every 100 gallons of water add 1 gallon of household ammonia (contains 3% active). Equivalent amounts of an alternate-strength ammonia solution or a commercial cleaner can be used in the cleanout procedure. If a commercial cleaner is used, carefully read and follow the individual cleaner instructions.

Flush the hoses, boom, and nozzles with the cleaning solution, then add more water to completely fill the tank. Circulate the cleaning solution through the tank and hoses for at least 15 minutes. Flush the hoses, boom and nozzles again with the cleaning solution and then drain the tank.

- 3. Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.
- 4. Repeat step 2.
- 5. Rinse the tank, boom and hoses with clean water.
- 6. Dispose of the rinsate on a labeled site or at an approved waste disposal facility. If a commercial cleaner is used, follow the directions for rinsate disposal on the label.

### Notes:

- 1. When cleaning spray equipment, do not use chlorine bleach in combination with ammonia. Do not clean spray equipment in an enclosed area.
- 2. Before performing the above cleanout procedure, steam-cleaning aerial spray tanks is recommended to facilitate the removal of any caked deposits.
- 3. When Alligare SFM Extra™ is tank mixed with other pesticides, all required cleanout procedures on the respective labels should be examined and the most rigorous procedure followed.

### SPRAY DRIFT MANAGEMENT

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

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

### Importance of Droplet size

The most effective way to reduce drift potential is to apply large droplets (>150-200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See **Wind, Temperature and Humidity, and Surface Temperature Inversions** sections of this label.

### CONTROLLING DROPLET SIZE GENERAL TECHNIQUES

- VOLUME- Use high flow rate nozzles to apply the highest practical spray volume.
   Nozzles with higher rated flows produce larger droplets.
- PRESSURE- Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.
- NOZZLE TYPE-Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

### **CONTROLLING DROPLET SIZE- AIRCRAFT**

- NUMBER OF NOZZLES- Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- NOZZLE ORIENTATION- Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations.

 NOZZLE TYPE- Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.

### **BOOM LENGTH AND HEIGHT**

- BOOM LENGTH (aircraft)- The boom length should not exceed ¾ of the wing length, using shorter booms decreases drift potential. For helicopter use a boom length and position that prevents droplets from entering the rotor vortices.
- BOOM HEIGHT (aircraft)- Application more than 10 feet above the canopy increases the potential for spray drift.
- BOOM HEIGHT (ground)- Setting the boom at the lowest height which provides uniform coverage reduces the exposure of droplets to evaporation and wind. The boom should remain level with the crop and have minimal bounce.

### **WIND**

Drift potential increases at wind speeds of less than 3 mph (due to variable direction and inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any give wind speed. AVOID APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS.

NOTE: Local terrain can influence wind patterns. Ever applicator should be familiar with local wind patterns and how they affect spray drift

### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

### SURFACE TEMPERATURE AND INVERSIONS

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

### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

### IMPORTANT PRECAUTIONS FOR CONIFER PLANTATIONS, NON-CROP SITES AND TURE

Failure to observe the following may result in injury to or loss of desirable trees or other plants:

- Do not drain or flush on or near desirable trees or other plants or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- Exposure to Alligare SFM Extra™ may injure or kill most crops. Injury to crops may result if treated soil is washed, blown or moved onto land used to produce crops. Off target movement and possible damage to susceptible crops when soil particles are moved by wind or water may occur when treating powdery, dry soil or light, sandy soil when there is little likelihood of rainfall soon after treatment. Injury may be more severe when the crops are irrigated. Do not apply Alligare SFM Extra™ if these conditions are present and powdery, dry soil or light or sandy soil are known to be prevalent in the area to be treated.

Crop injury may occur if applications are made where runoff water flows onto agricultural land and treated soil should be left undisturbed to reduce the potential for Alligare SFM Extra™ movement by soil erosion caused by wind or water. During periods of rainfall, applications made to soils saturated with water, soils through which rainfall will not readily penetrate, or surfaces paved with materials such as asphalt or concrete may result in runoff and movement of Alligare SFM Extra™. Do not treat frozen soil.

Do not use this product in the following counties of Colorado: Saguache, Rio Grande, Alamosa, Costilla and Conejos.

Do not use this product in California.

Do not apply through any type of irrigation system.

Keep from contact with fertilizers, insecticides, fungicides and seeds.

Do not use on lawns, walks, driveways, tennis courts, or similar areas.

Do not apply in or on irrigation ditches or canals including their outer banks.

Unless specifically directed by supplemental labeling, do not use the equipment used to mix or apply Alligare SFM Extra™ on crops. When applied on fertilizer, do not use the impregnation, transport or application equipment to make subsequent applications to crops; the mixing and application equipment may be used for conifer plantations and non-crop applications only.

Do not plant the treated site with a crop for at least one year after the Alligare SFM Extra<sup>TM</sup> application if non-crop or conifer plantation sites treated with Alligare SFM Extra<sup>TM</sup> are to be converted to a food, feed, or fiber agricultural crop or to a horticultural crop. A field bioassay must then be completed prior to planting to crops. To conduct a field bioassay, grow to maturity test strips of the crop(s) you plan to grow the following year. The test strips should cross the entire field including knolls and low areas. Crop response to the bioassay will indicate whether or not it is safe to plant the crop(s) grown in the test strips. In the case of suspected off-site movement of Alligare SFM Extra<sup>TM</sup> to cropland, in addition to conducting the above-described bioassay, soil samples should be quantitatively analyzed for Alligare SFM Extra<sup>TM</sup> or any other herbicide that may cause an adverse effect on the crop.

### STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store product in original container only. Store in cool, dry place.

**PESTICIDE DISPOSAL:** Waste resulting from the use of this product may be disposed of on site or at and approved waste facility.

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

### CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

Upon purchase or use of this product, purchaser and user agree to the following terms:

Warranty: Alligare, LLC (the Company) warrants that this product conforms to the chemical description on the label in all material respects and is reasonably fit for the purpose referred to in the directions for use, subject to the exceptions noted below, which are beyond the Company's control. To the extent consistent with applicable law, the Company makes no other representation or warranty, express or implied, concerning the product, including no implied warranty of merchantability or fitness for a particular purpose. No such warranty shall be implied by law, and no agent or representative is authorized to make any such warranty on the Company's behalf.

Terms of Sale: The Company's directions for use of this product must be followed carefully. 

It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors

as weather conditions, presence of other materials, and the manner of use or application (including failure to adhere to label directions), all of which are beyond the Company's control. All such risks are assumed by the user.

<u>Limitation of Liability:</u> To the extent consistent with applicable law, the exclusive remedy against the Company for any cause of action relating to the handling or use of this product is a claim for damages, and in no event shall damages or any other recovery of any kind exceed the price of the product which caused the alleged loss, damage, injury or other claim. To the extent consistent with applicable law, under no circumstances shall the Company be liable for any special, indirect, incidental or consequential damages of any kind, including loss of profits or income, and any such claims are hereby waived. Some states do not allow the exclusion or limitation of incidental or consequential damages.

The Company and the seller offer this product, and the purchaser and user accept this product, subject to the foregoing warranty, terms of sale and limitation of liability, which may be varied or modified only by an agreement in writing signed on behalf of the Company by an authorized representative.

Arsenal® is a registered trademark of BASF Specialty Products.

Hyvar®, Karmex®, Telar®, and Velpar® are registered trademarks of E.I. du Pont de Nemours and Company.

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