

81927-17

08/23/2007

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U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (H7505C)  
401 "M" St., S.W.  
Washington, D.C. 20460

EPA Reg. Number: 81927-17  
Date of Issuance: AUG 23 2007

Term of Issuance: Conditional

Name of Pesticide Product:  
Alligare Picloram K

NOTICE OF PESTICIDE:  
 Registration  
 Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Alligare, LLC  
c/o Michael Kellog  
Pyxis Regulatory Consulting, Inc.  
4110 136<sup>th</sup> St. NW  
Gig Harbor, WA 98332

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/reregistered 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:

1. Submit and/or cite all data required for registration/reregistration of your product when the Agency requires all registrants of similar products to submit such data.
2. Make the following changes to your labeling:
  - a. Change the registration number to "81927-17".

Approving Official:

8-23-07

- b. Make all of the changes detailed in the attached document "Summary of Comments on Alligare 81927-17"
3. Submit final labeling for this product **within 30 days** of the date of this letter.
4. Implement a Picloram Stewardship Program that is acceptable to the Agency, which meets the requirements specified below.
5. Submit revised labeling within 90 days of the date of this notice containing the statement:

- Every 2 years starting January 1, 2008, the registrant will offer training to applicators which will cover application techniques and product stewardship particular to their use(s) of this product (Name of Product., Registration No \_\_\_\_\_-\_\_\_\_). Applicators of this product must be able to provide certification of such training on demand to the State, Tribal or Federal enforcement agent."

A Picloram Stewardship Program is required to maintain registration of all end use products containing picloram notice imposes the minimum requirements of the picloram stewardship program that is a condition of your registration. All picloram end use products, except those containing 5.4 percent picloram for use on cut stems only, must be restricted use products and subject to the requirements for a Picloram Stewardship Program. Your Picloram Stewardship Program must be submitted to the Agency no later than January 1, 2008, and contain at a minimum the elements specified in this notice.

Your Picloram Stewardship Program must at a minimum contain the following elements:

1. Qualified Personnel.

The registrant must employ and upon request demonstrate to the satisfaction of the Agency, that it possesses and continues to possess during the term of its picloram end-use registrations, qualified personnel with appropriate scientific and technical expertise to provide the support and training for the Registrant's picloram end-use products.

Specifically, for so long as the registrant has active end-use picloram registrations, the Registrant shall retain qualified personnel with expertise in appropriate science fields such as field biology, environmental fate, soil science, toxicology, etc for each use pattern for which the registrant's end-use picloram products are labeled. Personnel qualification must be demonstrated by the possession of appropriate college or graduate credits in the appropriate science fields from a school accredited by accrediting agencies recognized by the United States Department of Education. If the personnel received a degree

outside the United States, it must come from an institution with an accreditation equivalent to that of the United States.

## 2. Training

The Registrant shall provide picloram-specific application training at least every two years to all applicators that apply one or more of Registrant's picloram end-use products. Such training shall include (1) how to identify appropriate picloram application locations, (2) appropriate application techniques, (3) techniques for reducing application rates in sensitive areas, (4) using Individual Plant Treatments (IPTs), (5) how to avoid product spills, (6) promoting product knowledge and stewardship, and (7) appropriate container management programs. Following successful completion of training, Registrant shall certify each such commercial applicator to apply Registrant's end-use picloram products as identified by the EPA Registration number. Registrant shall only have to provide four hours of training to a particular applicator once every two years even if such Approved Picloram Applicator applies more than one of Registrant's end-use picloram products.

The Registrant's certification will consist at a minimum of the applicator's name, the name of the Company providing the training, and the registration number(s) of the registrant's picloram products for which the applicator has received training. All picloram end use products, except those containing 5.4 percent picloram for use on cut stems only, will be restricted use products and subject to these conditions of registration.

## 3. Technical Support and Education for Land Managers and Extension Educators.

The Registrant shall maintain and provide adequate resources and technical support in connection with the picloram end-use products to land managers, government officials and extension educators. Upon request, the Registrant must make available and readily accessible to land managers, government officials and extension educators, analysis and data interpretation of picloram in soil, water and other matrices of interest such as compost and plant and animal tissues for a minimum of 100 samples per calendar year.

## 4. Books and Records, Annual Reporting

Upon the effective date of registration or amended registration, the registrant shall maintain accurate, up-to-date books and records of its required activities under these Conditions of Registration which shall include:

Names of personnel stewarding picloram and their qualifications along with the training material offered.

Picloram Retail Locations, training dates and number of people attending the training and the names of those individuals who were trained and the EPA Registration Number of the products they were trained to use.

Registrant agrees to provide EPA, States and Tribes with said records within 30 days upon request. Records must be kept for three

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years.

On or before January 31 of each year after the Effective Date, starting in 2008 and continuing for five (5) years, registrant shall submit to EPA an annual report for the preceding calendar year describing Registrant's end-use picloram product stewardship activities including:

- a list of all the Registrant's picloram retail locations and any locations where an employee has trained and certified during the preceding calendar year;

- a list of all Registrant's Approved Picloram Applicators including those who were applicator trained and certified during the preceding calendar year;

After the above reporting period, reports will be submitted when requested.

All books, records, and reports maintained and/or furnished in connection with these Conditions of Registration to EPA will be available to the public and cannot be claimed as confidential business information or trade secrets.

5. Labeling

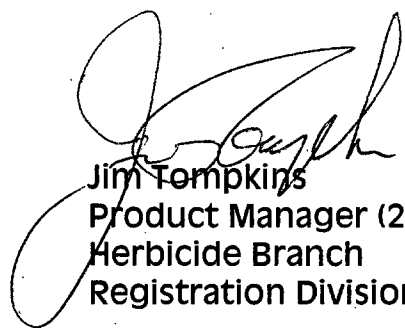
Labeling for all picloram products must state:

- Every 2 years starting January 1, 2008, the registrant will offer training to applicators which will cover application techniques and product stewardship particular to their use(s) of this product (Name of Product., Registration No \_\_\_\_\_-\_\_\_). Applicators of this product must be able to provide certification of such training on demand to the State, Tribal or Federal enforcement agent."

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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

If you have any questions about this letter, please contact Tobi Colvin-Snyder at 703-305-7801.

  
Jim Tompkins  
Product Manager (25)  
Herbicide Branch  
Registration Division (7505C)

# Summary of Comments on ~~Albaugh~~

Alligare 81927-17  
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Page: 4

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Subject: Cross-Out  
Date: 8/21/2007 9:54:12 AM

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Author: tsnyder  
Subject: Inserted Text  
Date: 8/20/2007 3:24:25 PM  
**T** of Alligare Picloram K)

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Subject: Inserted Text  
Date: 8/20/2007 3:23:50 PM  
**T** 1 lb ae picloram (

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Author: tsnyder  
Subject: Inserted Text  
Date: 8/20/2007 3:36:29 PM  
**T** of Alligare Picloram K)

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Subject: Inserted Text  
Date: 8/20/2007 3:36:07 PM  
**T** lb ae picloram (

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Subject: Cross-Out  
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**T** one time every two years to

**T**

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Author: tsnyder

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Date: 8/1/2007 5:50:47 PM

 Data need to be provided before adding this new application method.

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**RESTRICTED USE PESTICIDE**

May injure (phytotoxic) susceptible, non-target plants. 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. Commercial certified applicators must also ensure that all persons involved in these activities are informed of the precautionary statements.

## Alligare Picloram K

For control of annual and perennial broadleaf weeds; woody plants, and vines on non-crop areas including forest planting sites, industrial manufacturing sites, rights-of-way such as electrical power lines, communication lines, pipelines, roadsides, railroads, and wildlife openings in forest and non-crop areas.

**ACTIVE INGREDIENT:**  
 Picloram: 4-amino-3,5,6-trichloropicolinic acid, potassium salt ..... 24.4%  
**OTHER INGREDIENTS:** ..... 75.6%  
**TOTAL:** ..... 100.0%

Alligare Picloram K contains the following acid equivalent:  
 Picloram: 4-amino-3,5,6-trichloropicolinic acid – 21.1% (2 lb./gal.)

**KEEP OUT OF REACH OF CHILDREN**

### WARNING/AVISO

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).

FIRST AID	
<b>If in eyes:</b>	<ul style="list-style-type: none"> <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	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.	

**See inside booklet for additional PRECAUTIONARY STATEMENTS**

**EPA Reg. No. 81927-**

**EPA Est. No.:**

**Manufactured For:**  
 Alligare, LLC  
 13 N. 8<sup>th</sup> Street  
 Opelika, AL 36801

**ACCEPTED  
 with COMMENTS  
 In EPA Letter Dated**

AUG 23 2007

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

**Net Contents:**

81927-17

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

Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Prolonged or frequent repeated skin contact may cause allergic reactions in some individuals.

**PERSONAL PROTECTIVE EQUIPMENT**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves Category A, such as barrier laminate  $\geq$  14 mils, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, neoprene rubber  $\geq$  14 mils, natural rubber  $\geq$  14 mils, polyethylene  $\geq$  14 mils, polyvinyl chloride (PVC)  $\geq$  14 mils, or viton  $\geq$  14 mils
- Shoes plus socks
- Protective eyewear

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.

**USER SAFETY RECOMMENDATIONS**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash 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.

**ENGINEERING CONTROLS**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the WPS (40 CFR 170.240(d)(4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS.

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to some plants at very low concentrations. Non-target plants may be adversely affected if pesticide is allowed to drift from areas of application. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Do not contaminate water used for irrigation or domestic purposes by cleaning of equipment or disposal of wastes or rinsates. Do not allow runoff or spray to contaminate wells, irrigation ditches or any body of water used for irrigation or domestic purposes. Do not make application when circumstances favor movement from treatment site.

Picloram is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

This chemical can contaminate surface water through spray drift. Under some conditions, picloram may also have a high potential for runoff into surface water (primarily via dissolution in runoff water), for



several months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetative filter strips, and areas over-laying tile drainage systems that drain to surface water.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

This product is not intended for manufacturing or formulating.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**AGRICULTURAL USE REQUIREMENTS**

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

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

- Coveralls
- Chemical-resistant gloves Category A, such as barrier laminate ≥ 14 mils, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or viton ≥ 14 mils
- Shoes plus socks
- Protective eyewear

**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.

**Entry Restrictions for Non-WPS Uses:** Do not enter or allow worker entry into treated areas until sprays have dried, unless applicator and other handler PPE is worn.

**GENERAL INFORMATION**

Use Alligare Picloram K for control of unwanted annual and perennial broadleaf weeds, woody plants and vines on non-crop areas including forest planting sites, industrial manufacturing sites; rights-of-way such as electrical power lines, communication lines, pipelines, railroads, roadsides, and wildlife openings in forest and non-crop areas.

**Sprayer Clean-Out:** To avoid injury to desirable plants, equipment used to apply Alligare Picloram K should be thoroughly cleaned before reusing to apply any other chemicals.

1. Rinse and flush application equipment thoroughly after use at least three times with water. Dispose of rinse water in non-cropland area away from water supplies.

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2. Rinse a second time, adding 1 quart of household ammonia for every 25 gallons of water. Circulate the solution through the entire system so that all internal surfaces are contacted (15-20 min.). Let the solution stand for several hours, preferably overnight.
3. Flush the solution out of the spray tank through the boom.
4. Rinse the system twice with clean water, recirculating and draining each time.
5. Nozzles and screens should be removed and cleaned separately.

### PRECAUTIONS AND RESTRICTIONS

Maximum Use Rates: Total use of Alligare Picloram K must not exceed 2 quarts per acre per annual growing season on rights-of-way and other non-crop areas. No more than 2 quarts per acre may be applied ~~within a period of 2 annual growing seasons on forest sites.~~

- Do not move treated soil to other areas or use it to grow plants if they are not registered for use with picloram until an adequate sensitive bioassay or chemical test shows that no detectable picloram is present in the soil.
- Do not spray if the loss of forage legumes cannot be tolerated. Alligare Picloram K may injure or kill legumes. New legume seedlings may not grow within 2 years following application of this product.
- Be sure that use of this product conforms to all applicable regulations.
- Do not make application when circumstances favor movement from treatment site.
- Do not rotate food or feed crops on treated land if they are not registered for use with picloram until an adequately sensitive bioassay or chemical test shows that no detectable picloram is present in the soil.
- Observe any special use and application restrictions and limitations, including method of application and permissible areas of use as promulgated by state authorities.
- Do not allow or otherwise permit Alligare Picloram K or sprays containing Alligare Picloram K to contact crops or other desirable broadleaf plants including, but not limited to, alfalfa, beans, cotton, grapes, melons, peas, potatoes, safflower, soybeans, sugar beets, sunflower, tobacco, tomatoes and other vegetable crops, flowers, fruit plants, ornamentals or shade trees.
- Do not contaminate water intended for irrigation or domestic purposes. To avoid injury to crops or other desirable plants, do not treat or allow spray drift or runoff to fall onto banks or bottoms of irrigation ditches, either dry or containing water, or other channels that carry water that may be used for irrigation or domestic purposes. Do not apply to snow or frozen ground.
- Do not apply Alligare Picloram K on residential or commercial lawns or near ornamental trees and shrubs. Untreated trees can occasionally be affected by root uptake of herbicide through movement into the topsoil or by excretion of the product from the roots of nearby treated trees. Do not apply Alligare Picloram K within the root zone of desirable trees unless such injury can be tolerated.
- Allow 7 days of grazing on an untreated grass pasture before transferring livestock from treated grazing areas onto sensitive broadleaf crop areas. Otherwise, urine may contain enough picloram to cause injury to sensitive broadleaf plants.
- Do not use manure from animals grazing treated areas on land used for growing broadleaf crops, ornamentals, orchards or other susceptible, desirable plants. Manure may contain enough picloram to cause injury to susceptible plants.
- Do not use plant material from treated areas for composting or mulching of susceptible broadleaf plants.
- Do not apply this product through a mist blower.
- Avoid injury to newly planted conifers. Conifer planting intervals vary. Pines planted sooner than 6 months after treatment with Alligare Picloram K may be injured in the South or west of the Cascade Mountains. Other conifers, west of the Cascade Mountains, may be injured if planted sooner than 8 to 9 months after treatment. For all conifers, the waiting period between treatment and planting should be 11 to 12 months in the area between the Cascade and Rocky Mountains and 8 to 9 months in the lake States and Northeastern U.S.
- Avoid injurious spray drift. Applications should be made only when there is little or no hazard from spray drift. Very small quantities of spray, which may not be visible, may seriously injure susceptible crops or ornamental plants near enough to be injured. Use a continuous smoke column at or near

the spray site or a smoke generator on the spray equipment to detect air movement, lapse conditions or temperature inversions. If the smoke layers or indicates a potential of hazardous spray drift, do not spray.

## AERIAL SPRAY DRIFT MANAGEMENT

### Spray Drift Management

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

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

Where states have more stringent regulations, they should be observed. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory.

### Aerial Drift Reduction Advisory

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

### Information on Droplet Size

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

### Controlling Droplet Size

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

### Boom Length

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

**Application Height**

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

**Swath Adjustment**

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

**Wind**

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

**Temperature and Humidity**

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

**Temperature Inversions**

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

**Sensitive Areas**

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

**For aerial application** on rights-of-way or other areas near susceptible crops, use Nalco-Trol® drift control as recommended by the manufacturer or apply through a Microfoil® or Thru-Valve® boom or use an equivalent drift control system. Thickened sprays prepared by using high viscosity invert systems, or other drift control additives or systems, may be utilized if drift control is comparable to that obtained with Nalco-Trol® or the Microfoil® or Thru-Valve® boom. If a spray-thickening agent is used, follow all use recommendations and precautions on the product label. Do not use a thickening agent with the Microfoil® boom, or other systems that cannot accommodate thick sprays.

**Ground Equipment:** With ground equipment, spray drift can be reduced by keeping the spray boom as low as possible; by applying 20 gallons or more of spray per acre; by using spray pressures no greater than are required to obtain adequate plant coverage; by using large droplet-producing nozzle tips; and by spraying when wind velocity is low. Do not apply with hollow cone-type insecticide or other nozzles that produce a fine droplet spray.

**High Volume Leaf-Stem Treatment:** Spray drift can be reduced by using spray pressures no greater than are required to obtain adequate plant coverage and spraying no higher than brush tops. Avoid excessive pressures that result in formation of fine spray mists. Nalco-Trol® thickening agent or equivalent may be used to reduce spray drift.

## PLANTS CONTROLLED BY ALLIGARE PICLORAM K

### Annual and Perennial Broadleaf Weeds

Artichoke thistle	Larkspurs
Absinth wormwood	Leafy spurge
Bouncingbet	Locoweed
Broom snakeweed	Lupines
Burweed	Milkweeds
Bursage	Musk thistle
Canada thistle	Rush skeletonweed
Chicory	Russian thistle
Clover	Sowthistle
Fleabane	Starthistles
Field bindweed	Tansy ragwort
Goldenrod	Toadflax
Horsenettle	Wild carrot
Knapweeds	Wild parsnip

### Woody Plants and Vines

Aspen	Liveoak
Blackberries	Locust
Buttonbush	Maple
Cactus species	Mesquite
Catclaw acacia	Oak
Cedar	Persimmon
Chaparral species	Pine
Dogwood	Poison oak
Douglas fir	Poplars
Firs	Rabbitbrush
Fringed sagebrush	Salmonberry
Gorse	Sassafras
Guava	Sourwood
Gums	Spruce
Haw	Sumac
Hemlock	Trumpet creeper
Hickory	Willows
Java plum	Juniper
Lantana	

### APPLICATION

To control broadleaf weeds, woody plants, and vines use Alligare Picloram K at rates of ¼ to 2 quarts per acre. Alligare Picloram K may be tank mixed with Garlon® 4 Herbicide, Garlon® 3A Herbicide, 2,4-D amines or low-volatile esters, and Weedone® 2,4-DP to control mixed plant species. When tank mixing, observe all precautions, directions, and limitations on each product label. In all cases, use the amounts specified in enough spray volume to give thorough and uniform coverage of the plants to be controlled.

~~Aerial applications can be applied using aerial electrostatic spray charging systems.~~

### To Prepare Water-Based Sprays Containing Alligare Picloram K

Add the total required amount of water to the spray tank. When using Nalco-Trol® drift control additive, add at rates specified on its container while using continuous agitation. Next, add the required amount of Alligare Picloram K. If a tank mixture of herbicides is to be used, add the required amount of Garlon® 4 Herbicide or Garlon® 3A Herbicide, 2,4-D 3.8 lb./gal. amine or low volatile ester such as Albaugh's 2,4-D Amine 4 or 2,4-D LV4, or Weedone® 2,4-DP. Use a nonionic agricultural surfactant, such as Ortho® X-77, Triton® AG-98, or Tronic® for all applications. When using surfactants, follow the use directions and precautions listed on the surfactant manufacturer's label. Use the higher recommended concentrations of surfactant in the spray mixture when applying lower spray volumes per acre. Continuous agitation should be maintained while mixing the spray.

### High Volume Leaf-Stem Treatment

To control vines and other woody plants, use ½-to-4 quarts of Alligare Picloram K and dilute to make 100 gallons of spray (do not exceed 2 quarts of Alligare Picloram K per acre). To control a wider range of plant species, mix ½-to-1 quart of Alligare Picloram K with 1-to-3 quarts of Garlon® 4 Herbicide or 1-to-4 quarts of Garlon® 3A Herbicide or 4-to-8 quarts of 3.8 lb./gal. 2,4-D amine or low volatile ester such as Albaugh's 2,4-D Amine 4 or 2,4-D LV4, and dilute to make 100 gallons of spray mixture.

Provide thorough spray coverage after foliage is well developed. Apply the spray mixture in a manner that thoroughly wets all leaves, stems, and root collars. For hard-to-kill species such as hickory and oak, also wet the soil around the root collar. The amount of spray mixture applied per acre will vary with plant size and density; however, total use of Alligare Picloram K must not exceed 2 quarts per acre.

### Spot Treatment of Broadleaf Weeds

Use ¼-to-4 quarts of Alligare Picloram K in 100 gallons of water and spray weed foliage uniformly. In tank mix combinations, use ¼-to-1 quart Alligare Picloram K with 1-to-2 quarts of Garlon® 4 Herbicide or 1-to-3 quarts of Garlon® 3A Herbicide or with 1-to-2 quarts of 2,4-D 3.8 lb./gal. amine or low volatile ester such as Albaugh's 2,4-D Amine 4 or 2,4-D LV4 or with 2/3-to-1 1/3 quarts of 5.6 lb./gal. 2,4-D low volatile ester. The amount of spray mixture per acre will vary with plant size and density; however, total use of Alligare Picloram K must not exceed 2 quarts per acre.

### Broadcast Ground or Aerial Foliage Treatment

For ground applications, make applications of Alligare Picloram K in 15 or more gallons of total spray mixture per acre. For aerial applications, use 1 to 20 gallons of spray mixture per acre. Use higher spray volumes where plants are tall, where the vegetation to be treated is dense or where difficult to control species are present.

### Broadleaf Annual and Perennial Weed and Woody Vine Control

Apply Alligare Picloram K at rates of ¼-to-2 quarts per acre. Apply to problem weeds and vines any time after growth begins in the spring before full bloom and late in summer or fall. Suggested rates to control several broadleaf weeds are shown in the table below.

Weed Species	Rates of Alligare Picloram K Per Treated Acre
Yellow Starthistle, Scotch Thistle, Musk Thistle, Ox-eye Daisy	¼-to-1/2 quart
Artichoke Thistle, Diffuse Knapweed, Spotted Knapweed, Henbane, Buffalobur, Lupines, Locoweeds, Broom Snakeweed	½-to-1 quart

Weed Species	Rates of Alligare Picloram K Per Treated Acre
Pricklypear and Cholla cactus, Burroweed, Plains Larkspur	1-to-2 quarts
Canada Thistle, Rush Skeletonweed, Russian Knapweed, Dalmatian Toadflax, White Horsenettle	2 quarts
Tall Larkspur, Leafy Spurge, Field Bindweed, Poison Oak	2 quarts

In tank mix combinations, use ¼-to-1 quart Alligare Picloram K per acre with 1-to-3 quarts of Garlon® 4 Herbicide or 1-to-4 quarts of Garlon® 3A Herbicide or with 1-to-2 quarts of 3.8 lb./gal. 2,4-D amine or low volatile ester such as Albaugh's 2,4-D Amine 4 or 2,4-D LV4 or with 2/3-to-1 1/3 quarts of 5.6 lb./gal. 2,4-D low volatile ester.

**Woody Plant Control**

Suggested rates to control several woody plants are shown in the table below.

Plant Species	Rates of Alligare Picloram K Per Treated Acre
Rabbitbrush, Mesquite	½-to-1 quart
Catclaw Acacia	1-to-2 quarts
Pinyon, Juniper, Chaparral, Gorse, Willows, Poplars, Douglas Fir, Cedars	1-to-2 quarts
Gamble Oak, Liveoak, Poison Oak	2 quarts

For difficult-to-control woody species such as balsam fir, black or Sitka spruce, gums, hickory, maple, oaks, and sourwood, use 2 quarts of Alligare Picloram K per acre with 2-to-5 quarts of Garlon® 4 Herbicide or 4-to-8 quarts of Garlon® 3A Herbicide or with 6-to-8 quarts of 3.8 lb./gal. 2,4-D low volatile ester, or with 4-to-5 1/3 quarts of 5.6 lb./gal. 2,4-D low volatile ester. To control maple, conifers and root-suckering species such as sassafras, sumac, black locust, persimmon, salmonberry, blackberry and western dewberry, apply a mixture of 1 ½-to-2 quarts of Alligare Picloram K per acre plus 3-to-5 quarts of Garlon® 4 Herbicide or 4-to-8 quarts of Garlon® 3A Herbicide or plus 4-to-10 quarts of 3.8 lb./gal. 2,4-D low volatile ester or Weedone® 2,4-DP, or plus 2 2/3-to-6 2/3 quarts of 5.6 lb./gal. 2,4-D low volatile ester.

**Broadcast Cut Stubble Treatment**

Apply Alligare Picloram K at the rate of 2 quarts per acre in 25 or more gallons of a water spray mixture to prevent resprouting of susceptible woody species after mowing or hand-cutting on non-crop areas and rights-of-way. For best results, make applications before or during periods of active root growth. Do not apply when the soil surface is frozen or covered by snow or standing water. Make applications soon after cutting, before sprouting of woody species has occurred.

**Invert Emulsions**

Alligare Picloram K can be applied as an invert emulsion tank mix combination spray with an approved invert agent. Consult the invert agent label directions to determine recommended use.

Use of Alligare Picloram K with an invert agent results in a thick invert water-in-oil spray emulsion designed to minimize spray drift. Such an emulsion may be formed in a single tank (Batch Mixing) or flash inverted (Flash Mixing). For specific instructions, refer to the invert agent label.

**Broadcast Treatments for Forest Site Preparation  
(Not for Conifer Release)**

For broadcast applications, apply the recommended rate of Alligare Picloram K in a total spray volume of 1-to-25 gallons per acre by air or 10-to-100 gallons per acre by ground. Use spray volumes sufficient to

provide thorough coverage of treated foliage. Use application systems designed to prevent spray drift to off-target sites. Nozzles or additives that produce larger droplets may require higher spray volumes to provide adequate coverage.

Southern States including Alabama, Arkansas, Delaware, Georgia, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas and Virginia: Apply Alligare Picloram K at a rate of 2 quarts per acre to control susceptible woody plants and broadleaf weeds. Apply 2 quarts per acre of Alligare Picloram K in tank-mix combination with 2-to-4 quarts per acre of Garlon® 4 Herbicide to broaden the spectrum of woody plants and broadleaf weeds controlled. Where grass control is also desired, Alligare Picloram K alone, or in combination with Garlon® 4 Herbicide, may be tank-mixed with 1-to-4 quarts per acre of Accord®, Gly Star™ Original or Roundup® herbicides, or 8-to-16 fluid ounces per acre of Arsenal® Applicator's Concentrate. Susceptible woody plants, broadleaf weeds and grasses may also be controlled using a tank-mix of 2 quarts per acre of Alligare Picloram K and 3-to-5 quarts of Accord®, Gly Star™ Original or Roundup® herbicide, or 16-to-24 fluid ounces of Arsenal® Applicator's Concentrate. When applying tank mixes, follow the directions for use and precautions on each product label.

In Western, Northeastern, North Central and Lake States (States not listed above as Southern States): To control susceptible woody plants and broadleaf weeds, apply Alligare Picloram K at a rate of 1-to-2 quarts per acre. Apply 1-to-2 quarts per acre of Alligare Picloram K in tank-mix combination with 1 ½-to-3 quarts of Garlon® 4 Herbicide to broaden the spectrum of woody plants and broadleaf weeds controlled. Where grass control is also desired, Alligare Picloram K alone, or in combination with Garlon® 4 Herbicide, may be tank-mixed with 1-to-3 quarts per acre of Accord®, Gly Star™ Original or Roundup®, or 2-to-4 fluid ounces of Oust®, or a combination of Accord®, Gly Star™ Original or Roundup®, plus Oust® at the rates listed, or 8-to-16 fluid ounces of Arsenal® Applicator's Concentrate. When applying tank mixes, follow the directions for use and precautions on each product label.

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** The active ingredient in this product may crystallize and settle out of solution if product is exposed to subfreezing temperatures. Under these conditions, warm product to at least 40°F and agitate well to dissolve any crystallized material prior to use. Open dumping is prohibited.

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

**CONTAINER DISPOSAL:** 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**

To the extent consistent with applicable law, 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. To the extent consistent with applicable law, all such risks are assumed by the user.



**Limitation of Liability:** 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.

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