

## United States Environmental Protection Agency

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

APR 2 1 2008

Mr. Morris Gaskins Albaugh Inc. P.O. Box 2127 Valdosta, GA 31604

Subject: Picloram + 2,4-D IVM

EPA Registration No. 42750-82

Amended labeling to add Picloram Stewardship Training Statement

submitted January 16, 2008

Dear Mr. Gaskins:

The addition of the following statement concerning picloram stewardship training in the amended labeling referred to above is acceptable:

• Every 2 years starting January 1, 2007, the registrant will offer training to applicators which will cover application techniques and product stewardship particular to their use(s) of this product (Picloram +2,4-D IVM, Registration No 42750-82). Applicators of this product must be able to show certification of such training on demand by the State, Tribal or Federal enforcement agent."

Only the above picloram stewardship training statement on this labeling has been reviewed; all other statements on printed labeling must be in accordance with the previously stamped accepted labeling dated June 1, 2005.

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

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

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Sincerely,

Jim Tompkins

Product Manager (25)

Herbicide Branch

Registration Division (7505C)

## 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.

# PICLORAM + 2,4-D IVM

Picloram + 2,4-D IVM is a weed and brush herbicide for control of unwanted annual and perennial broadleaf weeds, woody plants, and vines on forest planting sites and non-crop areas including industrial, manufacturing and storage sites; rights-of-way, such as railroads, electric power lines, communication lines, pipelines, highways; and wildlife openings in forest and non-crop areas.

## **ACTIVE INGREDIENTS:**

Picloram: 4-amino-3,5,6-trichloropicolinic acid, triisopropanolamine salt	10.2%
2,4-dichlorophenoxyacetic acid, triisopropanolamine salt	39.6%
OTHER INGREDIENTS:	50.2%
TOTAL:	100.0%

Picloram + 2,4-D IVM contains the following acid equivalents: picloram: 4-amino-3,5,6-trichloropicolinic acid – 5.7% (0.54 lb./gal.); 2,4-dichlorophenoxyacetic acid – 21.2% (2 lbs./gal.).

#### KEEP OUT OF REACH OF CHILDREN

#### DANGER/PELIGRO

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

	FIRST AID
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>
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do soy by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</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.	
	NOTE TO PHYSICIAN
Probable mucos	al damage may contraindicate the use of gastric lavage.

See inside booklet for additional PRECAUTIONARY STATEMENTS

EPA Reg. No. 42750-82 NET CONTENTS: Gals. EPA Est. No. 42750-MO-001

MANUFACTURED BY: Albaugh, Inc. Ankeny, IA 50021

FOR CHEMICAL SPILL, LEAK, FIRE, OR EXPOSURE, CALL CHEMTREC (800) 424-9300

ACCEPTED
with COMMENTS
In EPA Letter Dated

APR 2 1 2008

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

#### PRECAUTIONARY STATEMENTS

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### **DANGER**

Corrosive. Causes irreversible eye damage. Harmful if swallowed. Do not get in eyes or on clothing.

#### 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 C on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- Chemical-resistant gloves Category C, such as barrier laminate ≥ 14 mils, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or viton ≥ 14 mils
- · Shoes plus socks
- Protective eyewear
- For containers over 1 gallon, but less than 5 gallons: Mixers and loaders who do not use a mechanical system (such as probe and pump) to transfer the contents of this container must wear coveralls or a chemical-resistant apron in addition to other required PPE.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this products concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be reused until it has been cleaned.

# **ENGINEERING CONTROL STATEMENTS**

For containers of 5 gallons or more: Do not open pour product from this container. A mechanical system (such as probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal. If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)], the handler PPE requirements may be reduced or modified as specified in the WPS.

### USER SAFETY RECOMMENDATIONS

Users should:

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

#### **ENVIRONMENTAL HAZARDS**

This 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.

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.

Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing and transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

# PHYSICAL OR CHEMICAL HAZARDS

Combustible. Do not use or store near heat or open flame.

#### **DIRECTIONS FOR USE**

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

Do not apply this product 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.

Every 2 years starting January 1, 2008, the registrant will offer training to applicators which will cover applications techniques and product stewardship particular to their use(s) of this product (Picloram + 2,4-D IVM, EPA Reg. No. 42750-82). Applicators of this product must be able to provide certification of such training on demand to the State, Tribal or Federal enforcement agent.

# 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 48 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 C, such as barrier laminate ≥14 mils, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥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: For applications on non-crop areas and wildlife openings, do not allow worker entry into areas until sprays have dried, unless applicator and other handler PPE is worn.

## GENERAL INFORMATION

Picloram + 2,4-D IVM is a weed and brush herbicide recommended for control of unwanted annual and perennial broadleaf weeds and woody plants and vines on forest planting sites and non-crop areas including industrial, manufacturing and storage sites; rights-of-way, such as railroads, electric power lines, communication lines, pipelines, highways; and wildlife openings in forest and non-crop areas.

To control broadleaf weeds, use Picloram + 2,4-D IVM at rates of ½ to 2 gallons per acre and at rates of 1 to 2 gallons per acre to control woody plants and vines. Picloram + 2,4-D IVM may be tank mixed with Garlon™ 4 or Garlon™ 3A herbicides, or 4 lbs./gal. 2,4-D low-volatile esters registered for sites listed on this label to control mixed woody plant and vine species. When tank mixing, observe all precautions, directions and limitations on both products' labeling. In all cases, use the amounts specified in enough water to give thorough and uniform coverage of the plants to be controlled.

Note: Picloram + 2,4-D IVM does not readily mix with oil. Use a non-ionic surfactant such as Ortho<sup>®</sup> X-77, Triton<sup>®</sup> AG-98 or Tronic<sup>®</sup> for all applications. Follow the use directions and precautions listed on the surfactant manufacturer's label. When applying lower spray volumes per acre, use the higher recommended concentrations of surfactant in the spray mixture.

Sprayer Clean-Out: To avoid injury to desirable plants, equipment used to apply Picloram + 2,4-D IVM should be thoroughly cleaned before reusing to apply any other chemicals.

- 1. Rinse and flush application equipment thoroughly after use. Dispose of rinse water in non-cropland area away from water supplies.
- 2. Rinse a second time, adding 1 qt. of household ammonia for every 25 gallons of water. Circulate the solution through the entire system so that all internal surfaces are contacted (15 to 20 minutes). 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: Do not exceed 8 quarts per acre of this product per annual growing season on rights-of-way and other non-crop areas. On forest sites, no more than 8 quarts per acre may be applied within a period of 2 annual growing seasons.
- Chemigation: Do not apply this product through any type of irrigation system.
- Use this product only as specified on this label. Observe any special use and application restrictions
  and limitations, including method of application and permissible areas of use as promulgated by state
  authorities.
- 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.
- Do not allow or otherwise permit Picloram + 2,4-D IVM or sprays containing Picloram + 2,4-D IVM 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 run-off 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 Picloram + 2,4-D IVM 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 Picloram + 2,4-D IVM within the root zone of desirable trees unless such injury can be tolerated.
- 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 legumes cannot be tolerated. Picloram + 2,4-D IVM may injure or kill legumes. New legume seedlings may not grow within 2 years following application of this product.
- 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.
- Avoid injury to newly planted conifers. Conifer planting intervals vary. Pines planted sooner than 6 months after treatment with Picloram + 2,4-D IVM 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.

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 the 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.

Drift can be lessened with aircraft by applying a coarse spray; by using spray pressures no greater than are required to obtain adequate plant coverage; by using straight stream nozzles directed straight back; by spraying only when wind velocities are low; or by using an approved drift control system.

Ground Equipment: To aid in reducing spray drift, use Picloram + 2,4-D IVM in thickened (high viscosity) spray mixtures using Nalco-Trol® drift control additive or equivalent as directed by the manufacturer. 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; 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 may be minimized 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<sup>®</sup> thickening agent or equivalent may be used to reduce spray drift. Do not apply this product through a mist blower.

#### **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 ¾ 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 <u>Aerial Drift</u> <u>Reduction Advisory</u>.

#### 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 ¾ 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).

#### PLANTS CONTROLLED BY PICLORAM + 2,4-D IVM

#### Annual and Perennial Broadleaf Weeds

bindweed, field Bouncingbet carrot, wild goldenrod horsenettle knapweed

rush skeleton weed sowthistle spurge, leafy Chicory Clover Dandelion Dock Fleabane milkweed plantain prickly lettuce ragweed ragwort, tansy

starthistle, yellow thistles toadflax vetch

# Woody Plants and Vines

Ailanthus
Alder
Aspen
Birch
Blackberry
bracken fern
Buttonbush
Cherry
Douglas fir
Elm

fir, balsam
Gorse
Gum
Hemlock
Hickory
Honeysuckle
Kudzu
Locust
Maple
Oak

persimmon pine poison oak sassafras sourwood spruce sumac tulip poplar wild rose willow

# SPECIFIC USE DIRECTIONS High Volume Leaf-Stem Treatment

To control broadleaf weeds, vines and other woody plants, use 1 gallon of Picloram + 2,4-D IVM and dilute to make 100 gallons of spray. To control a wider range of plant species, mix ¼-to-½ gallon of Picloram + 2,4-D IVM with 1-to-3 quarts of Garlon™ 4 herbicide or 1-to-4 quarts of Garlon™ 3A herbicide or 4 lbs./gal. 2,4-D low-volatile ester and dilute to make 100 gallons of spray. Provide thorough spray coverage after foliage is well developed. For woody plants, apply the spray mixture in a manner that thoroughly wets all leaves, stems, and root collars. For hard-to-kill species such as ash 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 Picloram + 2,4-D IVM must not exceed 8 quarts per acre.

Note: Do not allow the spray, even as minute amounts of spray drift, to contact desirable broadleaf plants, and do not wet the soil over roots of such plants.

## **Broadcast Ground or Aerial Foliage Treatment**

For ground applications, make applications of Picloram + 2,4-D IVM in 15 or more gallons of total spray mixture per acre. For aerial applications, use 5 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 Picloram + 2,4-D IVM at rates of 2 quarts to 2 gallons per acre in a water spray mixture. Apply to problem weeds and vines any time after growth begins in the spring and late in summer or fall.

Apply 2-to-3 quarts of Picloram + 2,4-D IVM per acre in water spray for season control of vigorously growing stands of field bindweed, Canada thistle or mixtures of these with susceptible annual weeds such as ragweed, dandelion, plantain, clovers and dock.

Use 1-to-2 gallons of Picloram + 2,4-D IVM per acre in arid areas and for control of more resistant perennial weeds. Use 1-to-1 ½ gallons per acre to control species such as Canada thistle, field bindweed and milkweed. The higher rates should be used under drought stress conditions and for the more resistant species such as bouncingbet, leafy spurge, toadflax and woody vines. The spectrum of activity can be improved by tank mixing ½-to-1 gallon of Picloram + 2,4-D IVM with 1/3-to-1 gallon of Garlon™ 3A or 1-to-3 quarts of Garlon™ 4 per acre.

Woody Plant Control: Use Picloram + 2,4-D IVM at the rate of 1-to-2 gallons per acre in a water spray mixture.

Use 1-to-1 ½ gallons of Picloram + 2,4-D IVM per acre in a water spray mixture for susceptible seedling stages of species such as aspen, cherry and sumac.

For more mature and/or less susceptible species such as poison oak, blackberries, Douglas fir, willow, buttonbush, black locust, sassafras, sumac, tulip poplar and cherry, use 2 gallons of Picloram + 2,4-D IVM per acre in a water spray mixture.

For more resistant brush such as maple, pine, sourwood, blackgum, cedar and oak, and to improve the spectrum of species controlled, 1-to-2 gallons of Picloram + 2,4-D IVM per acre can be tank-mixed with 1 ½-to-2 gallons per acre of Garlon™ 3A, Garlon™ 4 or 4 lbs./gal. 2,4-D low volatile ester.

Note: Use the higher rates for best results under conditions of drought stress. Even these rates under such conditions may not be as effective as the lower rates under good growing conditions.

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

For broadcast applications, apply the recommended rate of Picloram + 2,4-D IVM in a total spray volume of 5-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. Note: This use is not intended for conifer release (see General Use Precautions).

Southern states including Alabama, Arkansas, Delaware, Georgia, Louisiana, Maryland, Mississippi, North Carolina, Tennessee, Texas and Virginia: Apply Picloram + 2,4-D IVM at a rate of 6-to-8 quarts per acre to control susceptible woody plants and broadleaf weeds. Apply 6-to-8 quarts per acre of Picloram + 2,4-D IVM 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, Picloram + 2,4-D IVM alone, or in combination with Garlon™ 4, 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 6-to-8 quarts per acre of Picloram + 2,4-D IVM 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 Picloram + 2,4-D IVM at a rate of 4-to-8 quarts per acre. Apply 4-to-8 quarts per acre of Picloram + 2,4-D IVM in tank-mix combination with 1 ½-to-3 quarts of Garlon™ 4 to broaden the spectrum of woody plants and broadleaf weeds controlled. Where grass control is also desired, Picloram + 2,4-D IVM alone, or in combination with Garlon™ 4, 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.

Conifer Strip Thinning in the Northeastern United States

To thin stands of naturally regenerated spruce and fir by applying herbicide in treated bands or strips which alternate with untreated bands or strips, apply Picloram + 2,4-D IVM such that the application rate in the treated bands or strips is 2 gallons of herbicide per acre in a total spray mixture volume of 12 to 20 gallons. Make applications during the period of active conifer growth. To obtain the precise placement of spray mixture in the treated bands that is required for this technique, aerial applications should be made

using a helicopter equipped with a Microfoil® or Thru-Valve® boom. Multiple treated bands may be obtained within a single spray swath by establishing alternating series of flowing and blocked spray nozzles.

Note: Injury or death of desired residual conifers may result if spray mixture is permitted to contact their foliage as a result of inaccurate flight guidance during aerial application or as a result of spray drift from treated into untreated strips.

#### **Cut Surface Treatments**

In forest and other non-crop areas to kill unwanted trees such as elm, maple, oak and pine, apply Picloram + 2,4-D IVM either undiluted or diluted in a 1:1 ratio with water as described below.

Tree Injector Method: Make applications by injecting ½ milliliter of undiluted Picloram + 2,4-D IVM or 1 milliliter of the diluted solution through the bark at intervals of 3 inches between edges of the injector wound. The injections should completely surround the tree at any convenient height.

Note: No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is directly injected into agricultural plants.

Frill or Girdle Method: Make a single girdle through the bark completely around the tree at a convenient height. Wet the cut surface with the diluted solution.

Stump Treatment: Paint or spray to wet the cut surfaces of freshly cut stumps or stubs with Picloram + 2,4-D IVM undiluted or diluted 1:1 in water. All of the cambium area next to the bark is the most vital area to wet.

The above methods may be used successfully in any season except during periods of heavy sap flow of certain species, such as maples, or during drought periods. Untreated trees within a few feet of the treated trees or stumps may be injured or killed.

## **Broadcast Cut Stubble Treatment**

Apply Picloram + 2,4-D IVM at the rate of 2 gallons 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.

# STORAGE AND DISPOSAL

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

Pesticide Storage: Keep container tightly closed when not in use. If exposed to subfreezing temperatures, the product should be warmed to at least 40°F and thoroughly mixed before using. Open dumping is prohibited.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

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

## CONDITIONS OF SALE AND WARRANTY

The DIRECTIONS FOR USE of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, 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, or the manner of use or application, all of which are beyond the control of ALBAUGH, INC., its Supplemental Distributors, or the Seller. All such risks shall be assumed by the Buyer.

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