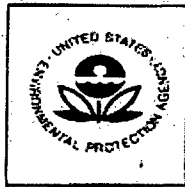


70506-81

4/6/2006

10220



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (47505C)  
401 "M" St., S.W.  
Washington, D.C. 20460

EPA Reg. Number:  
70506-81

Date of Issuance:  
APR 6 2005

NOTICE OF PESTICIDE:  
  x   Registration  
       Reregistration

Term of Issuance:  
Conditional

Name of Pesticide Product:  
Picloram 2 Herbicide

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

United Phosphorus Inc.  
c/o Mandava Associates  
7130 M Street, N.W., Suite 906  
Washington, DC 20036

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 "70506-81"
  - b. Make all of the changes detailed in the document "Summary of Comments on Picloram 22".
3. A picloram stewardship program must be developed and submitted to EPA for review. The picloram stewardship program must be approved by the Agency prior to releasing this product for shipment. The stewardship program must include all of the elements listed in the attached document "Terms and Conditions for End-Use Picloram Registrations". After the product is released for shipment, the picloram stewardship program must be practiced.
4. Submit final labeling for this product within 30 days of the date of this letter.

Signature of Approving Official:

Date:

4-6-06

20920

page 2

EPA Reg. No. 70506-80

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)

Picloram 2

# Summary of Comments on ~~Sencor DF~~

## Page: 1

Sequence number: 1  
Author: Tobi  
Date: 3/31/2006 4:25:48 PM  
Type: Note  
Add "and forestry use sites."

## Page: 2

Sequence number: 1  
Author: Tobi  
Date: 3/31/2006 4:29:37 PM  
Type: Note  
Change the second sentence to:  
Avoid contact with eyes or skin. Wear protective clothing.

## Page: 4

Sequence number: 1  
Author: Steve Kay  
Date: 3/29/2006 2:09:57 PM  
Type: Note  
Required language.

Sequence number: 2  
Author: Steve Kay  
Date: 3/29/2006 2:10:13 PM  
Type: Note  
Required language

Sequence number: 3  
Author: Tobi  
Date: 3/31/2006 4:30:48 PM  
Type: Note  
Change "should" to "must".

## Page: 7

Sequence number: 1  
Author: Tobi  
Date: 3/31/2006 4:38:02 PM  
Type: Note  
Change this to the following:  
For rights-of-way and other non-crop areas, do not apply more than 1 lb ai/A (2 quarts / acre of Picloram 2) in an annual growing season. Do not apply more than 0.5 lb ai/A of picloram (1 qt/A of Picloram 2) on areas where grazing may be allowed.

## Page: 12

Sequence number: 1

Author: Tobi

Date: 3/31/2006 4:39:20 PM

Type: Note

Add "To the extent permitted by law," immediately prior to "THE EXCLUSIVE REMEDY"

## Terms and Conditions for End-Use Picloram Registrations

These Terms and Conditions for End-Use Picloram Registrations shall apply to end-use picloram herbicide products registered by the U.S. Environmental Protection Agency ("Agency" or "EPA").

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.

### 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.

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 years.

On or before January 31 of each year after the Effective Date, starting in 2007 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 Registrant's Approved Picloram Retail Location 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 will state:

- 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 (Name of Product, Registration No \_\_\_\_-\_\_\_\_). Applicators of this product must be able to show certification of such training on demand by the State, Tribal or Federal enforcement agent."

80220

**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 SPECIALTY HERBICIDE

A herbicide for control of annual and perennial broadleaf weeds, woody plants, and vines in non-crop sites.



**ACTIVE INGREDIENT:**

Picloram: 4-amino-3,5,6-trichloropicolinic acid, potassium salt ..... 24.4%

**INERT INGREDIENTS:**..... 75.6%

100.0%

**Acid Equivalent:**

Picloram: 4-amino-3,5,6-trichloropicolinic acid - 21.1% - 2 lb/gal

**KEEP OUT OF REACH OF CHILDREN  
CAUTION PRECAUCION**

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.)

<b>FIRST AID</b>	
<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>
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact The National Pesticide Information Center at 1-800-858-7378 for emergency medical treatment information.</p>	
<p>For Chemical Emergency: Spill, leak, fire, exposure or accident, call CHEMTREC at 1-800-424-9300.</p>	



United Phosphorus, Inc.  
423 Riverview Plaza  
Trenton, NJ 08611  
609-392-8200  
[www.upi-usa.com](http://www.upi-usa.com)

EPA Reg. No. 70506-  
EPA Establishment No.  
Net Contents: 2.5 Gallons

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

**APR 6 2006**  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
70506-81



**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMAN AND DOMESTIC ANIMALS  
CAUTION**



**Causes Moderate Eye Irritation.** Avoid contact with eyes or clothing. Prolonged or frequent repeated skin contact may cause allergic skin reactions in some individuals.

**Personal Protective Equipment (PPE)**

**Applicators and other handlers must wear:**

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

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**ENGINEERING CONTROLS STATEMENT**

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

**USER SAFETY RECOMMENDATIONS**

**Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. Wash 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, 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 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). These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

**Note:** Use in Hawaii limited exclusively to Supplemental Labeling. See "Precautions and Restrictions" for details.

**Notice:** Read the entire label. Use only according to label directions. Before using this product, read Conditions of Sale and Limitation of Warranty and Liability elsewhere on this label. If terms are unacceptable, return at once unopened.

**Agricultural Chemical:** Do not ship or store with food, feeds, drugs or clothing.

**DIRECTIONS FOR USE**

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

Read all Directions for Use carefully before applying.

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 into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

**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 are worn.

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

**Pesticide Storage:** If this product is exposed to subfreezing temperatures, the active ingredient may crystallize and settle out of solution. Under these conditions the product should be warmed to at least 40°F and agitated well to dissolve any crystallized material prior to use.

**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 (Metal): Do not reuse container.** Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Container Disposal (Plastic): Do not reuse container.** Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**General:** Consult Federal, state or local disposal authorities for approved alternative procedures.

**SPRAY DRIFT**

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

Because minute quantities of spray (that may not even be visible) may seriously damage susceptible plants, spray only when wind conditions will not carry spray drift towards susceptible crops or ornamental plants.

Using a continuous smoke source at the spray site or a smoke generator on the spray equipment will permit the applicator to detect undesirable conditions for spraying such as air movement towards sensitive plants, temperature inversions or lapse conditions. This product should not be applied by aerial spray if the smoke indicates a potential for hazardous spray drift.

When applying to rights-of-way or other areas near susceptible plants, a drift control additive such as Nalco-Trol may be used. A drift-reducing system such as a Micro-Flo or Thru-Valve boom may also be used to reduce spray drift in these situations. High viscosity invert systems or similar drift control additives may be used as long as the product used provides drift control that is comparable to that provided by Nalco-Trol or a Thru-Valve boom. Do not use a thickening agent with a drift reducing boom such as the Micro-Foil boom or other systems that cannot operate correctly using thick sprays.

**Ground Equipment**

To reduce spray drift when applying using ground equipment:

- Keep the spray boom as low as possible
- Apply a minimum of 20 gallons of spray solution per acre
- Use the minimum spray pressure necessary to obtain adequate plant coverage
- Use nozzle tips that produce large droplets. Do not apply using hollow cone-type nozzles or other nozzles that produce a fine-droplet spray.
- Spray only when wind velocity is low.

**High-Volume Leaf-Stem Treatments**

When making high volume leaf-stem treatments, spray drift can be reduced by the following measures:

- Do not spray above brush tops
- Avoid the formation of fine spray mists caused by excessive pressures by using the minimum spray pressure necessary to obtain adequate plant coverage.
- Use a thickening agent such as Nalco-Trol to reduce spray drift

**Aerial Applications**

When making aerial applications, the following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations:

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



**NOTE:** 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 Information below.

[The 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 produced 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 1/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

**Application Height**

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making 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 local, low level 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 the 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).

**GENERAL INFORMATION**

Picloram 2 is a herbicide for control of unwanted annual and perennial broadleaf weeds, woody plants, and vines in non-crop sites including:

- forestry sites
- industrial sites
- rights-of-way (power lines, communication lines, pipelines, roadsides, railroads, etc.)
- wildlife openings in forest and non-agricultural areas

**PESTS CONTROLLED BY PICLORAM 2**

**Annual and Perennial Broadleaf Weeds:**

artichoke thistle	field bindweed	rush skeletonweed
asbith wormwood	goldenrod	Russian thistle
bouncingbet	horsenettle	sowthistle
broom snakeweed	knapweeds	starthistles
burroweed	larkspurs	tansy ragwort
bursage	leafy spurge	toadflax
Canada thistle	locoweed	wild carrot
chicory	lupines	wild parsnip
clover	milkweeds	
fleabane	musk thistle	

**Woody Plants and Vines:**

aspen	gums	poison oak
blackberries	haw	poplars
buttonbush	hemlock	rabbitbrush
cactus species	hickory	salmonberry
catclaw acacia	java plum	sassafras
cedar	lantana	sourwood
chaparral species	liveoak	spruce
dogwood	locust	sumac
Douglas fir	maple	trumpet creeper
firs	mesquite	willows
fringed sagebrush	oak	juniper
gorse	persimmon	
guava	pine	

**USE PRECAUTIONS AND RESTRICTIONS**



- Use of this product must conform to all applicable regulations, including any special use and application restrictions and limitations, including method of application and permissible areas of use as required by state or tribal authorities.
- For rights-of-way and other non-crop areas, do not apply more than 2 quarts / acre of Picloram 2 in an annual growing season.
- For forest sites, do not apply more than 2 quarts / acre of Picloram 2 within a period of two (2) annual growing seasons.
- Do not allow Picloram 2 to contact susceptible crops or other desirable broadleaf plants including but not limited to the following:

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.		

- On treated land, do not rotate to food or feed crops not registered for use with picloram until a bioassay or chemical test indicates that no detectable picloram is present in the soil.
- Do not move treated soil to other areas or use it to grow plants that are not registered for use with picloram until a bioassay or chemical test indicates that no detectable picloram is present in the soil.
- Legumes may be injured or killed when exposed to Picloram 2. If the loss of forage legumes cannot be tolerated or new legume seedlings are desired within two years of application, do not apply Picloram 2.
- The urine and manure from animals grazing in areas treated with Picloram 2 may contain sufficient picloram to damage sensitive broadleaf plants. Allow a minimum of 7 days of grazing on untreated grass pasture before transferring livestock to areas with sensitive broadleaf plants or using the manure on land used to grow broadleaf crops, ornamentals, orchards or any other desirable plants that may be susceptible.
- Do not compost or mulch susceptible broadleaf plants with grass or hay from areas treated with Picloram 2.
- Do not apply this product with a mist blower.
- Do not contaminate water intended for irrigation or domestic purposes by allowing 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 on residential or commercial lawns or near ornamental trees and shrubs.
- Because untreated trees may be affected by root uptake of this product through movement onto the topsoil or by excretion of the product from the roots of nearby treated trees, do not apply Picloram 2 within the root zone of desirable trees unless injury can be tolerated.

**Minimum Conifer Planting Intervals:**

- South or West of the Cascade Mountains: Pines planted sooner than six months after treatment with Picloram 2 may be injured. Other conifers should be planted at least 8 - 9 months after treatment.
- Between the Cascade and Rocky Mountains: All conifers should be planted 11 - 12 months after treatment.
- Lake States and Northeastern US: All conifers should be planted at least 8 - 9 months after treatment.

**APPLICATION INSTRUCTIONS**

Use 1/4 to 2 quarts of Picloram 2 per acre as directed below to control unwanted broadleaf weeds, woody plants, and vines.

**Adjuvants**

A drift control additive such as Nalco-Trol may be used with Picloram 2 Herbicide. For all applications of Picloram 2 Herbicide, a non-ionic agricultural surfactant, such as Ortho X-77, Triton AG-98, or Trionic is recommended. 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.

**Tank Mixes**

To broaden the spectrum of control, Picloram 2 Herbicide may be tank mixed with Garlon\* 4 Herbicide, Garlon\* 3A Herbicide, 2,4-D amines or low-volatile esters, Envert 171 and Weedone 2,4-DP. Be sure to observe the most restrictive limitations on each product label when tank mixing. In all cases use the amounts specified in enough spray volume to give thorough and uniform coverage of the plants to be controlled.

**General Preparation Instructions**

1. Add to the spray tank the total volume of water specified below based on your method of application.
2. Begin agitation of the mix and maintain agitation for the duration of the spray preparation.
3. If using a drift control additive, add it at the rates specified on its container.
4. Add the Picloram 2 Herbicide using the amount specified below for your method of application.
5. If tank mixing with other herbicides, add them using the rates recommended in their respective labels.

**High Volume Leaf-Stem Applications**

**Preparation:** Following the General Mix Preparation Instructions above, mix 1/2-4 quarts of Picloram 2 Herbicide in enough water to make 100 gallons of spray.

**Tank Mixes:** To broaden the spectrum of control mix 1/2 -1 quart of Picloram 2 with one of the following in 100 gallons of spray mixture:

- 1-3 quarts of Garlon 4 Herbicide, or
- 1-4 quarts of Garlon 3A Herbicide, or
- 4-8 quarts of 3.8 lb/gal 2,4-D amine or low volatile ester.

**Application:** Apply after the foliage is well developed. Thoroughly cover the plant wetting all leaves, stems, and root collars. For hard-to-kill species such as hickory and oak, wet the soil around the root collar. The amount of spray mixture applied per acre is dependent upon plant size and density. DO NOT apply more than 2 quarts of Picloram 2 Herbicide per acre.

**Spot Treatment Applications**

**Preparation:** Following the General Mix Preparation Instructions above, mix 1/4-4 quarts of Picloram 2 Herbicide in enough water to make 100 gallons of spray.

**Tank Mixes:** To broaden the spectrum of control mix 1/4 -1 quart of Picloram 2 with one of the following in 100 gallons of spray mixture:

- 1-2 quarts of Garlon 4 Herbicide, or

- 1-3 quarts of Garlon 3A Herbicide, or
- 1-2 quarts of 2.8 lb/gal 2,4-D amine or low volatile ester, or
- 2/3-1 2/3 quarts of 5.6 lb/gal 2,4-D low volatile ester.

**Application:** Thoroughly cover the plant wetting all leaves, stems, and root collars. For hard-to-kill species such as hickory and oak, wet the soil around the root collar. The amount of spray mixture applied per acre is dependent upon plant size and density. DO NOT apply more than 2 quarts of Picloram 2 Herbicide per acre.

**Broadcast Ground or Aerial Foliage Applications**

**Preparation:** Following the General Mix Preparation Instructions above, mix 1/4-2 quarts of Picloram 2 Herbicide (as recommended in the tables below) in 15 or more gallons of total spray mixture per acre for ground applications, or 5-20 gallons per acre for aerial applications. In general, use the higher spray volumes when the vegetation to be treated is dense, the plants are tall, or difficult to control species are present.

**Suggested Rates for Broadleaf Weed and Woody Vine Control**

Weed Species	Rate (Per Acre)
Yellow Starthistle, Scotch Thistle, Musk Thistle, Ox-eye Daisy	1/4 - 1/2 quart
Artichoke Thistle, Diffuse Knapweed, Spotted Knapweed, Henbane, Buffalobur, Lupines, Locoweeds, Broom Snakeweed	1/2 - 1 quart
Pricklypear and Cholla Cactus, Burroweed, Plains Larkspur	1 - 2 quarts
Canada Thistle, Rush Skeletonweed, Russian Knapweed, Dalmatian Toadflax, White Horsenettle	2 quarts
Tall Larkspur, Leafy Spurge, Field Bindweed, Poison Oak	2 quarts

**Suggested Rates for Woody Plant Control**

Plant Species	Rate (Per Acre)
Rabbitbrush, Mesquite	1/2 - 1 quart
Catclaw Acacia	1 - 2 quarts
Pinyon, Juniper, Chaparral, Gorse, Poplars, Douglas Fir, Cedars	1 - 2 quarts
Gamble Oak, Liveoak, Poison Oak	2 quarts

**Tank Mixes:** To broaden the spectrum of control for broadleaf weeds and woody vine control, mix 1/4 - 1 quart of Picloram 2 with one of the following:

- 1-3 quarts of Garlon 4 Herbicide, or
- 1-4 quarts of Garlon 3A Herbicide, or
- 1-2 quarts of 3.8 lb/gal 2,4-D amine or low volatile ester, or
- 2/3-1 1/3 quarts of 5.6 lb/gal 2,4-D low volatile ester.

To broaden the spectrum of control for difficult to control woody species such as balsam fir, spruce (black or Sitka), gums, hickory, maple, oaks, and sourwood, mix 2 quarts of Picloram 2 with one of the following:

- 2-5 quarts of Garlon 4 Herbicide, or
- 4-8 quarts of Garlon 3A Herbicide, or
- 6-8 quarts of 3.8 lb/gal 2,4-D low volatile ester, or
- 4-5 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, mix 1 1/2 - 2 quarts of Picloram 2 per acre with one of the following:



- 3-5 quarts of Garlon 4 Herbicide, or
- 4-8 quarts of Garlon 3A Herbicide, or
- 4-10 quarts of 3.8 lb/gal 2,4-D low volatile ester, or
- 4-10 quarts of Weedone 2,4-DP, or
- 2 2/3-6 2/2 quarts of 5.6 lb/gal 2,4-D low volatile ester.

**Application:** Apply to unwanted weeds and vines after growth begins in the spring but before full bloom in the late summer or fall.

DO NOT apply more than 2 quarts of Picloram 2 Herbicide per acre.

**Broadcast Cut Stubble Applications**

**Preparation:** Following the General Mix Preparation Instructions above, mix 2 quarts of Picloram 2 Herbicide in 25 or more gallons of spray mixture per acre.

**Application:** To prevent re-sprouting of susceptible woody species after mowing or hand cutting, make broadcast cut stubble applications as soon after cutting as possible, and before the sprouting of woody species has occurred.

For best results, apply before or during periods of active root growth.

Do not apply when the soil is frozen or covered by snow or standing water.

**Invert Emulsions**

To minimize spray drift, Picloram 2 Herbicide can be applied as a thick water-in-oil (invert) spray emulsion by combining with Envert 171 Woody Plant Herbicide or another approved invert agent. Refer to the Envert 171 Woody Plant Herbicide or other invert agent label for use recommendations.

**Preparation:** To treat root-suckering species such as sumac, sassafras, locust and black gum, follow the invert emulsion instructions and mix 3 gallons of Envert 171 with 1 1/2 quarts of Picloram 2 Herbicide in 9 gallons of water per acre.

To treat hard-to-control species such as red maple, elm or oaks, follow the invert emulsion instructions and mix 5-6 gallons of Envert 171 with 1-2 quarts of Picloram 2 Herbicide in 15-18 gallons of water per acre.

**Application:** Follow the application instructions in the Envert 171 label (or other invert emulsion used).

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

**Southern States**

(Alabama, Arkansas, Delaware, Georgia, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas and Virginia)

**Preparation:** Following the General Mix Preparation instructions above, prepare a 2 quarts/acre spray mixture in a total spray volume of 5-25 gallons per acre by air or 10-100 gallons per acre by ground. Use spray volumes that will assure thorough coverage of treated foliage.

NOTE: Higher spray volumes may be necessary to provide adequate coverage when using nozzles or additives that produce larger spray droplets.

**Tank Mixes:** To broaden the spectrum of control for undesirable woody plants, add 2-4 quarts of Garlon 4 Herbicide to the tank mix.

For grass control, Picloram 2 Herbicide alone or with Garlon 4 Herbicide may be tank mixed with:

- 1-4 quarts per acre of Accord or glyphosate herbicides, or
- 8-16 oz. per acre of Arsenal Applicator's Concentrate herbicide.

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Broadleaf weeds, grass and woody plants may also be controlled using a tank mix of Picloram 2 Herbicide with:

- 3-5 quarts per acre of Accord or glyphosate herbicides, or
- 16-24 oz. of Arsenal Applicator's Concentrate herbicide.

**Application:** Apply using application systems designed to prevent spray-drift; be sure to consult the Spray Drift section above.

**Western, Northeastern, North Central and Lake States  
(States Not Listed Above as Southern States)**

**Preparation:** Following the General Mix Preparation instructions above, prepare a 1-2 quarts / acre spray mixture in a total spray volume of 5-25 gallons per acre by air or 10-100 gallons per acre by ground. Use spray volumes that will assure thorough coverage of treated foliage.

**NOTE:** Higher spray volumes may be necessary to provide adequate coverage when using nozzles or additives that produce larger spray droplets.

**Tank Mixes:** To broaden the spectrum of control for undesirable woody plants, add 1½-3 quarts of Garlon 4 Herbicide to the tank mix.

For grass control, Picloram 2 Herbicide alone or with Garlon 4 Herbicide may be tank mixed with any one of the following:

- 1-3 quarts per acre of Accord or glyphosate herbicide,
- 2-4 oz. per acre of Oust, or
- a combination of Accord (or glyphosate) plus Oust at the rates listed above, or
- 8-16 oz. per acre of Arsenal Applicator's Concentrate herbicide.

**Application:** Apply using application systems designed to prevent spray-drift; be sure to consult the Spray Drift section above.

**IMPORTANT INFORMATION  
READ BEFORE USING PRODUCT**

**CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

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Rev. 8/05

200920

**Label Revision Notes**  
**Picloram 2**

- Rev. 8/05    revise label to avoid copyright infringement issues
- Rev. 5/05    changes to UPI ownership (also warranty statement)
- 4/28/05    transferred from AgValue 75722-G to UPI 70506-IR