

UNITED STATES FISH AND WILDLIFE SERVICE

ENVIRONMENTAL ACTION STATEMENT FOR NEPA COMPLIANCE

Within the spirit and intent of the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA; 40 CFR 1500-1508), and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record and determined that the following changes are fully covered under existing NEPA documentation and no further documentation is required.

Proposed Change

The intent of the Environmental Assessment (EA) finalized in June 2008 was to cover all herbicide applications in the Walker River Basin. At that time, a list of all herbicides that could be used were included, listed by Company name. It has since been recognized that new products with the same chemical composition but different Company names are continually added to the market. In addition, herbicides are a rapidly evolving area of research and increasingly specialized herbicides are being developed and added to the market. In some instances, these specialized herbicides are highly targeted for some of the most prevalent weeds in the Walker Basin. This EAS evaluates whether the analysis in the EA dated June 2008, is sufficient to cover the use of the following four herbicides (listed by chemical common name), which are approved by the EPA and registered in the State they will be used (i.e., California and/or Nevada):

- Isopropylamine salt of Imazapyr (2-[4,5-dihydro-4-methyl-4-(1-methylehtyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid
- Dimethylamine Salt of 2,4-Dichlorophenoxyacetic Acid
- 2,4-Dichlorophenoxyacetic Acid, dimethylamine Salt
- fluroxypyr 1-methylheptyl ester: ((4-amino-3,5-dicholor-6-fluoro-2-pyridinyl)oxy) acetic acid, 1-methylheptyl ester

All future herbicides will be listed by chemical composition.

Environmental Considerations

The herbicides listed above have similar chemical compositions as those analyzed in the EA. The analysis in the EA supported our finding that application of herbicides to control invasive species did not have a significant impact on the human environment as long as they are applied according to the label directions and the applicator follows all Best Management Practices (BMPs). The chemical composition of the herbicides listed above is not substantially different from the ones previously listed and analyzed in the EA. The effect of applying these four herbicides is not expected to result in any impacts different or greater than what was disclosed in the EA. All BMPs outlined in the EA must be followed for each of these herbicides used. Herbicide applicators must always be in compliance with the Best Management Practices (BMPs) outlined in the EA and

directions for use and all requirements on the herbicide label and Material Safety Data Sheet (MSDS) must always be followed. Expanding the herbicides eligible for use in the Basin, while following all BMPs listed in the EA, will not result in any different impacts on the resources.

Permits/Approvals

No additional permits or approvals beyond what is outlined in the EA and following the Best Management Practices (BMPs) will be required.

Public Involvement/Interagency Coordination

This change has been discussed with the Mason and Smith Valley Conservation District Manager who is overseeing a large scale noxious weed mapping and removal project and with Otis Bay Ecological Consultants and the Walker River Paiute Tribe who are actively involved in weed management as a partnership project with the Service. All agree that to most effectively treat noxious weeds we need to expand the herbicide list, so that the most effective and specialized herbicide on the market may be used.

Supporting Documents

Proposed Funding to Eradicate Noxious Weeds Utilizing Select Manual and Mechanical Removal and the Application of Prescribed Herbicides: Walker River Basin, Nevada and California. June 2008.

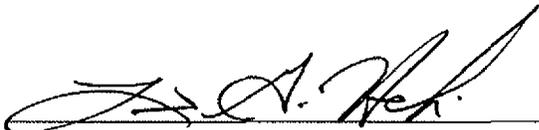
Attachment 1 – Labels and Material Safety Data Sheet (MSDS)

Isopropylamine salt of Imazapyr (2-[4,5-dihydro-4-methyl-4-(1-methylehtyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acidpg 1

Dimethylamine Salt of 2,4-Dichlorophenoxyacetic Acidpg 13

2,4-Dichlorophenoxyacetic Acid, dimethylamine Saltpg 25

fluroxpyr 1-methylheptyl ester: ((4-amino-3,5-dicholor-6-fluoro-2-pyridinyl)oxy) acetic acid, 1-methylheptyl esterpg 38



(Project Leader)

9-3-09
(Date)

This information is for promotional purposes only. Space considerations may require information to be omitted. Always refer to the actual package for complete label verbiage. This product may not yet be available or approved for sale or use in your area.

Nufarm
POLARIS[®] SP
 Herbicide

FOR CONTROL OF VEGETATION ON FORESTRY SITES

ACTIVE INGREDIENT:

| | |
|--|--------|
| Isopropylamine salt of Imazapyr (2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid)* | 27.6% |
| OTHER INGREDIENTS: | 72.4% |
| TOTAL | 100.0% |

*Equivalent to 22.6% 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid or 2 pounds acid per gallon.

**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).

SEE FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300
 For Medical Emergencies Only, Call (877) 325-1840

EPA REG. NO. 228-536

EPA EST. NO. 228-IL-1

**MANUFACTURED FOR
 NUFARM AMERICAS INC.
 BURR RIDGE, ILLINOIS 60527-0866**

**PRECAUTIONARY STATEMENTS
 HAZARDS TO HUMANS
 CAUTION - PRECAUCION**

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

PERSONAL PROTECTIVE EQUIPMENT (PPE):

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-sleeve shirt and long pants.
- Chemical-resistant gloves, such as barrier laminate, butyl rubber or polyethylene
- Shoes plus socks.

Follow manufacturer's instructions for cleaning and 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.

FIRST AID

| | |
|---|--|
| IF IN EYES | <ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice. |
| IF ON SKIN OR CLOTHING | <ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice. |
| IF INHALED | <ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice. |
| 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 1-877-325-1840 for emergency medical treatment information. | |

PHYSICAL AND CHEMICAL HAZARDS

Spray solutions of this product should be mixed, stored, and applied only in stainless steel, fiberglass, plastic, and plastic-lined steel containers. Do not mix, store, or apply this product or spray solutions of this product in unlined steel (except stainless steel) containers or spray tanks.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate. This herbicide is phytotoxic at extremely low concentrations. Non-target plants may be adversely affected from drift.

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.

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. The requirements in this box apply to use on trees being grown for sale or other commercial use, or for commercial seed production, or for production of timber or wood products, or for research purposes.

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, such as barrier laminate, butyl rubber or polyethylene
- 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 (WPS) 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.

Noncrop weed control is not within the scope of the Worker Protection Standard. See the GENERAL INFORMATION section of this label for a description of noncrop sites.

Do not enter treated areas without protective clothing until sprays have dried.

This product may be used only in accordance with recommendations and restrictions in this leaflet label. Keep containers closed to avoid spills and contamination.

IMPORTANT

Do not use on food or feed crops. Do not apply to the inside of ditches used to transport irrigation water. Keep from contact with fertilizers, insecticides, fungicides, and seeds to prevent unintentional exposure of desirable vegetation to this product. Do not apply or drain or flush equipment on or near sensitive desirable plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. Do not use on Christmas trees. Thoroughly clean application equipment after use. Flush tank, pump, hoses, and boom with several changes of water after removing nozzle tips and screens (clean these parts separately).

GENERAL INFORMATION

This product is an aqueous formulation that is readily mixable with water, diesel oil, or recommended seed oils and penetrating oils. For foliar applications, this product may be mixed with water as the spray carrier or an emulsion carrier may be prepared by mixing this product into water and then adding a suitable seed oil at 12 to 50%, by volume. This product is to be mixed with water or a penetrating oil and applied as a spray to cut stumps. This product should be mixed with a penetrating oil for application to the basal area of brush and trees. Adequate agitation should be maintained with all emulsion mixtures of this product to prevent phase separation. Prior to actual tank mixing with other products, herbicides and carrier oils, compatibility testing in small containers is recommended!

This product is recommended for vegetation control in forestry sites. Roadsides contiguous with the treated area may be included.

This product is recommended for control of vegetation in forestry site preparation, in directed applications for conifer release and for mid-rotation release using understorey broadcast applications.

This product is also recommended for the control of undesirable vegetation along non-irrigation ditch banks and for the establishment and maintenance of wildlife openings, except in the state of California. See use directions for CUT STUMP TREATMENTS, TREE INJECTION TREATMENTS, FRILL OR GIRDLE TREATMENTS, THIN LINE BASAL AND STEM APPLICATIONS, LOW VOLUME BASAL BARK TREATMENTS and LOW VOLUME FOLIAR APPLICATIONS.

This product may be applied on forestry sites that contain areas of temporary surface water caused by the collection of water between planting beds, in equipment ruts, or in other depressions created by forest management activities, except in the states of California and New York. It is permissible to treat drainage ditches, intermittent drainage, intermittently flooded low lying sites, seasonally dry flood plains, and transitional areas between upland and lowland sites when no water is present, except in the states of California and New York. Only the edge of drainage ditches can be treated for drainage ditches that contain water. It is also permissible to treat marshes, swamps, and bogs after water has receded, as well as seasonally dry flood deltas, except in the states of California and New York. Do not make applications to natural or man-made bodies of water such as lakes, reservoirs, ponds, streams, rivers and canals.

SYMPTOMOLOGY:

This product is readily absorbed through foliage, bark and roots and is translocated rapidly throughout the plant, with accumulation in meristematic regions. Treated plants stop growing soon after herbicide application. Chlorosis first appears in the youngest leaf tissue. In perennials, the herbicide is translocated into the roots, thus preventing resprouting. Chlorosis and tissue necrosis may not be apparent in some species for several weeks after application. Woody plants, brush, and trees may not display the full extent of herbicide control until several months following application.

MANAGING OFF-TARGET MOVEMENT

The following information is provided as general guidance for managing off-target movement. Specific use recommendations for this product may differ depending on the application technique used and the vegetation management objective.

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.

Spray drift from applying this product may result in damage to sensitive plants adjacent to the treatment area. Only apply this product when the potential for drift to these and other adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, or non-target crops) is minimal. Do not apply when the following conditions exist that increase the likelihood of spray drift from intended targets: high or gusty winds, high temperatures, low humidity, temperature inversions.

To minimize spray drift, the applicator should be familiar with and take into account the following drift reduction advisory information. Additional information may be available from state enforcement agencies or the Cooperative Extension on the application of this product.

The best drift management strategy and most effective way to reduce drift potential are to apply large 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 recommended practice. Significant deflection from the 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. Do not use nozzles producing a mist droplet spray.

Application Height: Making applications at the lowest possible height (aircraft, ground driven spray boom) that is safe and practical 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 application equipment (e.g. aircraft, ground) upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller droplets, etc.).

Wind: Drift potential is lowest between wind speeds of 3 to 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 3 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: Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud, which 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.

Wind Erosion: Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

Aerial Application Methods and Equipment: Use 2 or more gallons of water per acre. The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume to provide accurate and uniform distribution of spray particles over the treated area and to avoid spray drift.

Managing spray drift from aerial applications: Applicators must follow these requirements to avoid off-target drift movement: 1) boom length - the distance of the outermost nozzles on the boom must not exceed 3/4 the length of the rotor, 2) nozzle orientation - nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees, and 3) application height - without compromising aircraft safety, applications should be made at a height of 10 feet or less above the crop canopy or tallest plants. Applicators must follow the most restrictive use cautions to avoid drift hazards, including those found in this labeling as well as applicable state and local regulations and ordinances.

Ground Application (Broadcast): Use 5 or more gallons of water per acre. The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume to provide accurate and uniform distribution of spray particles over the treated area and to avoid spray drift.

CONIFER SITE PREPARATION TREATMENTS

This product may be used to control labeled grasses, broadleaf weeds, vines and brambles, and woody brush and trees on forest sites in advance of regeneration for the following conifer crop species:

| Crop Species | Rate (oz/A) |
|--|-------------|
| Loblolly Pine (<i>Pinus taeda</i>) | 48 - 80 |
| Loblolly X Pitch Hybrid | 48 - 80 |
| Longleaf Pine (<i>Pinus palustris</i>) | 48 - 80 |
| Shortleaf Pine (<i>Pinus echinata</i>) | 48 - 80 |

CONIFER SITE PREPARATION TREATMENTS (continued)

| Crop Species | Rate (oz/A) |
|---|-------------|
| Virginia Pine (<i>Pinus virginiana</i>) | 48 – 80 |
| Slash Pine (<i>Pinus elliottii</i>) | 40 – 64 |
| Douglas-Fir (<i>Pseudotsuga menziesii</i>) | 24 – 48 |
| Western Hemlock (<i>Tsuga heterophylla</i>) | 24 – 48 |
| Coastal Redwood (<i>Sequoia sempervirens</i>) | 24 – 48 |
| California Red Fir (<i>Abies magnifica</i>) | 24 – 40 |
| California White Fir (<i>Abies concolor</i>) | 24 – 40 |
| Jack Pine (<i>Pinus banksiana</i>) | 24 – 32 |
| Lodgepole Pine (<i>Pinus contorta</i>) | 24 – 32 |
| Pitch Pine (<i>Pinus rigida</i>) | 24 – 32 |
| Ponderosa Pine (<i>Pinus ponderosa</i>) | 24 – 32 |
| Sugar Pine (<i>Pinus lambertiana</i>) | 24 – 32 |
| White Pine (<i>Pinus strobus</i>) | 24 – 32 |
| Black Spruce (<i>Picea mariana</i>) | 24 – 32 |
| Red Spruce (<i>Picea rubens</i>) | 24 – 32 |
| White Spruce (<i>Picea glauca</i>) | 24 – 32 |

Use the specified rate of this product per acre applied as a broadcast foliar spray for long-term control of labeled woody plants and residual control of herbaceous weeds. Within 4 to 6 weeks of treatment, grasses and other herbaceous weeds will be controlled and may provide fuel to facilitate a site preparation burn, if desired, to control conifers or other species tolerant to the herbicide.

For tracts to be planted with loblolly, loblolly x pitch hybrid, longleaf pine, shortleaf pine, Virginia pine and slash pine, this product may be applied at a rate of 64 oz per acre on areas that have little to no resprouting vegetation because of recent management activities such as harvesting, mechanical shearing, burning piling or bedding. Applications must be made after September 1.

MIXING AND APPLICATION INSTRUCTIONS FOR SITE PREPARATION

Apply the specified rate of this product per acre in 5 to 20 gallons total spray carrier for helicopter applications or 5 to 40 gallons total spray carrier for mechanical or backpack ground spray applications. Enhanced brownout for burning and improved control of brush and grasses may be obtained by application of this product in 12 to 50% oil:water (volume:volume) emulsion carrier. Methylated or ethylated seed oils containing at least 50% esterified seed oil by volume are recommended. Mix this product into the water portion of the carrier thoroughly, then add the oil and mix thoroughly again to obtain a uniform emulsion. Use the higher label rates of this product and higher spray volumes when controlling particularly dense or multi-layered canopies of hardwood stands, or difficult to control species. Make applications during the growing season, beginning in the spring after full leaf expansion of the target weed or brush has occurred and complete applications before leaf drop in the fall.

Tank mixes may be necessary for chemical control of conifers and other species tolerant to this product in certain cases. Tank mix products may be used provided that the label of the tank mix product does not prohibit such mixing. Observe all precautions and restrictions on the product labels. Always follow the most restrictive label instructions for all products used. Combinations with other products labeled for forest site preparation may kill certain plants such as legumes and blackberry which are desirable for wildlife habitat.

Do not plant seedlings of black spruce (*Picea mariana*) or white spruce (*Picea glauca*) on sites that have been site prepared with a broadcast application of this product or into the treated zone of spot or banded site preparation applications for three months following treatment or injury may occur.

HELICOPTER SPRAY EQUIPMENT

All precautions should be taken to minimize or eliminate spray drift. Applications should not be made under gusty conditions. The use of controlled droplet booms and nozzle configurations is recommended.

IMPORTANT: Do not make applications by fixed wing aircraft. Maintain adequate buffer zones. Thoroughly clean application and mixing equipment, including landing gear, immediately after use. Prolonged exposure of this product to uncoated steel (except stainless steel) surfaces may result in corrosion and failure of the exposed part.

HARDWOOD SITE PREPARATION TREATMENTS

For site preparation prior to planting hardwood species in the southeast and gulf coast states (Virginia to Texas), use this product at a rate of 48 oz per acre and spray before the end of July. Application in an emulsion carrier with a minimum of 12% oil is recommended. Do not plant hardwood seedlings before January of the year following site preparation or injury may occur.

DIRECTED FOLIAR APPLICATIONS FOR CONIFER RELEASE

This product may be applied as a directed spray using water or oil emulsion carrier for control and suppression of labeled brush and weed species. Directed spray applications may be made using low carrier volumes (generally 10 gallons total spray per acre or less)

in labeled conifer stands of all ages by targeting the unwanted vegetation and avoiding direct application to the conifer. Ensure that the maximum labeled rates per acre listed for the conifer species are not exceeded.

Use directed foliar applications of this product for release of the following conifers from hardwood competition:

| Crop Species | Rate (fl oz/Acre) |
|--|-------------------|
| Loblolly Pine (<i>Pinus taeda</i>) | 24 – 40 |
| Loblolly X Pitch Hybrid | 24 – 40 |
| Virginia Pine (<i>Pinus virginiana</i>) | 24 – 40 |
| Longleaf Pine (<i>Pinus palustris</i>) | 24 – 32 |
| Pitch Pine (<i>Pinus rigida</i>) | 24 – 32 |
| Shortleaf Pine (<i>Pinus echinata</i>) | 24 – 32 |
| Slash Pine (<i>Pinus elliottii</i>) | 24 – 32 |
| White Pine (<i>Pinus strobus</i>) | 16 – 32 |
| Lodgepole Pine (<i>Pinus contorta</i>) | 16 – 24 |
| Douglas-Fir (<i>Pseudotsuga menziesii</i>) | 16 – 24 |
| Jack Pine (<i>Pinus banksiana</i>) | 12 – 24 |
| Black Spruce (<i>Picea mariana</i>) | 12 – 24 |
| Red Spruce (<i>Picea rubens</i>) | 12 – 24 |
| White Spruce (<i>Picea glauca</i>) | 12 – 24 |

For applications directed to the foliage of undesirable brush mix 2 to 10% this product in water. For brush species with thick leaf cuticles or difficult to control species use oil emulsion carrier containing 12 to 50%, by volume, recommended oil diluent. Apply the spray solution or emulsion to at least two-thirds of each hardwood crown using backpack sprayers or hand held equipment. Do not spray to the point of runoff and avoid spraying the conifers for best results. For low volume foliar applications to control big leaf maple a 5% by volume solution or emulsion of this product is recommended.

Some minor conifer growth inhibition may be observed when release treatments are made during periods of active conifer growth. To minimize potential conifer height growth inhibition, release treatments may be made late in the growing season after formation of final conifer resting buds. To prevent possibility of conifer injury, do not apply this product when conifers are under stress from drought, diseases, animal or winter injury, or other stresses reducing conifer vigor.

Injury may occur to non-target or desirable hardwoods if they extend from the same root system as treated stems, or their root systems are grafted to those of the treated tree, or if their roots extend into the soil near treated trees.

BAG AND BROADCAST APPLICATIONS FOR CONIFER RELEASE

In Douglas-fir and Ponderosa pine stands, broadcast applications of this product up to 32 oz per acre are permissible when the trees are covered by bags prior to the application. The bags must prevent the spray mix from contacting the conifer foliage. For improved control of brush species, particularly evergreens, add a suitable seed oil at 5 to 12 % by volume. On sites with coarse textured soils (e.g. decomposed granite, pumice, sandy or rocky sites) or low levels of soil organic matter (generally 5% or less) significant conifer growth inhibition and mortality is possible. Do not use this treatment on these types of sites if conifer growth inhibition and mortality cannot be tolerated.

LATE ROTATION VEGETATION CONTROL IN WESTERN CONIFERS

In California, the Pacific Northwest and Inland Northwest, broadcast aerial applications of this product up to 48 oz per acre are permissible in conifer stands that are targeted for harvesting the year following treatment. Use a minimum spray volume of 15 gallons per acre. For improved control of brush species, particularly evergreens, add a suitable seed oil at 5 to 12 % by volume. Significant conifer injury or mortality must be expected. Do not use this treatment if conifer injury or mortality cannot be tolerated.

UNDERSTORY BROADCAST APPLICATIONS FOR MID-ROTATION RELEASE

This product may be applied as a broadcast application below the conifer canopy to control understory brush and suppress trees for labeled species. Ground spray machinery or hand held equipment may be used to broadcast this product in water or oil emulsion carrier below the crop tree canopy in a manner as to minimize spray contact by the live crown of crop trees.

Ensure that maximum labeled rates per acre listed for crop species below are not exceeded.

| Crop Species | Maximum Rate (fl oz/Acre) |
|---|---------------------------|
| Loblolly Pine (<i>Pinus taeda</i>) | 64 |
| Loblolly X Pitch Hybrid | 64 |
| Virginia Pine (<i>Pinus virginiana</i>) | 64 |
| Longleaf Pine (<i>Pinus palustris</i>) | 32 |
| Pitch Pine (<i>Pinus rigida</i>) | 32 |
| Shortleaf Pine (<i>Pinus echinata</i>) | 32 |
| Slash Pine (<i>Pinus elliottii</i>) | 32 |

CUT STUMP TREATMENTS

Mix 8.0-16.0 fluid ounces of this product in one gallon of water,* diesel oil, or a penetrating oil.

This product may be tank mixed with Tahoe[®] 3A, Tahoe[®] 4E, picloram, Razor[®]/Razor[®] Pro or Foresters[™] Non-Selective to control labeled species. Spray or brush this product's solution onto the cambium area of the freshly cut stump surface. Insure that this product's solution thoroughly wets the cambium area (the wood next to the bark) of the stump. The use of a surfactant or penetrating agent may improve uptake through partially callused cambiums. Applications can be made anytime during the year except during periods of heavy sap flow in the spring. Do not over apply causing puddling.

*Note: Use water as a diluent only when temperatures are sufficient to prevent freezing or add antifreeze (ethylene glycol) according to label directions to prevent freezing.

TREE INJECTION TREATMENTS

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

Mix 8.0-12.0 fluid ounces of this product in one gallon of water*. Using standard injection equipment, apply 1 ml of this product's solution at each injection site around the tree with no more than 1 inch intervals between cut edges. Insure that the injector completely penetrates the bark at each site.

*Note: Use water as a diluent only when temperatures are sufficient to prevent freezing or add antifreeze (ethylene glycol) according to label directions to prevent freezing.

FRILL OR GIRDLE TREATMENTS

Mix 8.0-12.0 fluid ounces of this product in one gallon of water*, diesel oil, or a penetrating oil. Using a hatchet, machete, or similar tool, make cuts through the bark and completely around the tree with no more than 2 inch intervals between cut edges. Spray or brush this product's solution into each cut until thoroughly wet.

*Note: Use water as a diluent only when temperatures are sufficient to prevent freezing or add antifreeze (ethylene glycol) according to label directions to prevent freezing.

THIN LINE BASAL AND STEM APPLICATIONS

This product may be applied as a THIN LINE basal or arcing application to the stems of susceptible species such as big leaf maple (*Acer macrophyllum*), willow (*Salix spp.*) and Eucalyptus (*Eucalyptus spp.*) with a stem ground line diameter of 3 inches or less. Mix 24 to 48 ounces of this product in one gallon of diesel oil or penetrating oil. Maintain uniform mixtures with frequent agitation. Direct a thin line of the spray solution to the stems beginning a few feet from the ground and descending toward the base of the tree making a zig-zag motion. Do not over apply causing puddling.

LOW VOLUME BASAL BARK TREATMENTS

Mix 8.0-12.0 fluid ounces of this product in one gallon of diesel oil or a penetrating oil. To control mixed brush species with up to 4 inch stem diameter at breast height, spray to wet the lower 12-18 inches of the stem with this product's oil mixture (include the root collar area). Do not over apply causing dripping or puddling. Maintain uniform mixtures with frequent agitation.

LOW VOLUME FOLIAR APPLICATIONS

This product may be applied as a low volume foliar application. Mix 3-5% of this product in water and adjuvant or in a penetrating oil. For small brush spray down on the crown to cover approximately 70% of the plant foliage. For larger brush insure coverage on as much of the crown as possible and spray at least two sides of the plant. May be tank mixed with other labeled herbicides. Use a tank mix of 3 to 5% of this product plus 15 to 20% Tahoe[®] 4E in basal oil to control black locust, honey locust, hackberry, elms and other species listed on manufacturer's labels. Use the higher rate of this product (5%) in areas containing sassafras, oak, hickory, cherry, and maples or in the southern 2/3's of the U.S. A tank mix of 3% of this product + Tahoe[®] 4E is effective in the Northeastern U.S.

SPRAY SOLUTION MIXING GUIDE FOR LOW VOLUME FOLIAR APPLICATIONS

| AMOUNT OF SPRAY SOLUTION BEING PREPARED | DESIRED CONCENTRATION (fluid volume) | | | |
|---|--------------------------------------|-------------|-----------------------|--------------|
| | This Product | | Tahoe [®] 4E | |
| | 3% | 5% | 15% | 20% |
| 1 gallon | 3.8 oz | 6.4 oz | 19.2 oz | 25.6 oz |
| 3 gallons | 11.5 oz | 19.2 oz | 57.6 oz | 76.8 oz |
| 4 gallons | 15.4 oz | 25.6 oz | 76.8 oz | 102.4 oz |
| 5 gallons | 19.2 oz | 32.0 oz | 96.0 oz | 1.0 gallon |
| 50 gallons | 1.5 gallons | 2.5 gallons | 7.5 gallons | 10.0 gallons |
| 100 gallons | 3.0 gallons | 5.0 gallons | 15.0 gallons | 20.0 gallons |

INVERT EMULSIONS

This product can be applied as an invert emulsion carrier. The carrier is a thick invert water-in-oil spray emulsion designed to minimize spray drift and spray run off, resulting in more herbicide on the target foliage. The spray emulsion may be formed in a single tank (batch mixing) or injected (in-line mixing). Consult the invert chemical label for proper mixing directions. Do not exceed 3 quarts/Acre of this product.

WEEDS CONTROLLED

This product will provide postemergence control and some residual control of the following target vegetation species. Degree of control is both species and rate dependent.

GRASSES

The species of annual and perennial grasses controlled by this product include the following:

| | |
|-----------------------|---|
| Annual bluegrass | (<i>Poa annua</i>) |
| Bahiagrass | (<i>Paspalum notatum</i>) |
| Barnyardgrass | (<i>Echinochloa crus-galli</i>) |
| Beardgrass | (<i>Andropogon spp.</i>) |
| Bermudagrass | (<i>Cynodon dactylon</i>) |
| Big bluestem | (<i>Andropogon gerardii</i>) |
| Broadleaf signalgrass | (<i>Brachiaria platyphylla</i>) |
| Canada bluegrass | (<i>Poa compressa</i>) |
| Cattail | (<i>Typha spp.</i>) |
| Cheat | (<i>Bromus secalinus</i>) |
| Cogongrass | (<i>Imperata cylindrica</i>) ¹ |
| Crabgrass | (<i>Digitaria spp.</i>) |
| Crowfootgrass | (<i>Dactyloctenium aegyptium</i>) |
| Dallisgrass | (<i>Paspalum dilatatum</i>) |
| Downy brome | (<i>Bromus tectorum</i>) |
| Fall panicum | (<i>Panicum dichotomiflorum</i>) |
| Feathertop | (<i>Pennisetum villosum</i>) |
| Fescue | (<i>Festuca spp.</i>) |
| Foxtail | (<i>Setaria spp.</i>) |
| Giant reed | (<i>Arundo donax</i>) |
| Goosegrass | (<i>Eleusine indica</i>) |
| Guineagrass | (<i>Panicum maximum</i>) |
| Italian ryegrass | (<i>Lolium multiflorum</i>) |
| Ilchgrass | (<i>Rottboellia exaltata</i>) |
| Johnsongrass | (<i>Sorghum halepense</i>) |
| Junglerice | (<i>Echinochloa colonum</i>) |
| Kentucky bluegrass | (<i>Poa pratensis</i>) |
| Lovegrass | (<i>Eragrostis spp.</i>) |
| Orchardgrass | (<i>Dactylis glomerata</i>) <i>Panicum spp.</i> |
| Paragrass | (<i>Brachiaria mutica</i>) |
| Phragmites | (<i>Phragmites australis</i>) |
| Prairie cordgrass | (<i>Spartina pectinata</i>) |
| Prairie threeawn | (<i>Aristida oligantha</i>) |
| Quackgrass | (<i>Agropyron repens</i>) |
| Reed canary grass | (<i>Phalaris arundinacea</i>) |
| Saltgrass | (<i>Distichlis stricta</i>) |
| Sand dropseed | (<i>Sporobolus cryptandrus</i>) |
| Sandbur | (<i>Cenchrus spp.</i>) |
| Smooth brome | (<i>Bromus inermis</i>) |
| Sprangletop | (<i>Leptochloa spp.</i>) |
| Timothy | (<i>Pheum pratense</i>) |
| Torpedograss | (<i>Panicum repens</i>) |
| Vaseygrass | (<i>Paspalum urvillei</i>) |
| Wild barley | (<i>Hordeum spp.</i>) |
| Wild oats | (<i>Avena fatua</i>) |
| Wirestem muhly | (<i>Muhlenbergia frondosa</i>) |
| Witchgrass | (<i>Panicum capillare</i>) |
| Woolly cupgrass | (<i>Eriochloa villosa</i>) |

¹ Use minimum of 48 oz per acre.

BROADLEAF WEEDS

The species of annual and perennial broadleaf weeds controlled by this product include the following:

| | |
|--------------------------|---------------------------------------|
| Arrowwood | (<i>Pluchea sericea</i>) |
| Broom snakeweed | (<i>Gutierrezia sarothrae</i>) |
| Bull Thistle | (<i>Cirsium vulgare</i>) |
| Burdock | (<i>Medicago spp.</i>) |
| Burdock | (<i>Arctium spp.</i>) |
| Camphorweed | (<i>Heterotheca subaxillaris</i>) |
| Carolina geranium | (<i>Geranium carolinianum</i>) |
| Carpelweed | (<i>Mullugo verticillata</i>) |
| Chickweed, mouseear | (<i>Cerastium vulgatum</i>) |
| Clover | (<i>Trifolium spp.</i>) |
| Cocklebur | (<i>Xanthium strumarium</i>) |
| Common chickweed | (<i>Stellaria media</i>) |
| Common ragweed | (<i>Ambrosia artemisiifolia</i>) |
| Cudweed | (<i>Gnaphalium spp.</i>) |
| Dandelion | (<i>Taraxacum officinale</i>) |
| Desert carnation | (<i>Alhagi pseudalhagi</i>) |
| Diffuse knapweed | (<i>Centaurea diffusa</i>) |
| Deck | (<i>Rumex spp.</i>) |
| Dogfennel | (<i>Eupatorium capillifolium</i>) |
| Fiddleneck | (<i>Amsinckia intermedia</i>) |
| Filaree | (<i>Erodium spp.</i>) |
| Fleabane | (<i>Erigeron spp.</i>) |
| Giant ragweed | (<i>Ambrosia trifida</i>) |
| Goldenrod | (<i>Solidago spp.</i>) |
| Gray rabbitbrush | (<i>Chrysothamnus nauseosus</i>) |
| Herbil | (<i>Lanium aplexicaule</i>) |
| Hoary vervain | (<i>Verbena stricta</i>) |
| Horseweed | (<i>Coryza canadensis</i>) |
| Indian mustard | (<i>Brassica juncea</i>) |
| Japanese bamboo/knotweed | (<i>Polygonum cuspidatum</i>) |
| Knotweed, prostrate | (<i>Polygonum aviculare</i>) |
| Kochia | (<i>Kochia scoparia</i>) |
| Lambsquarters | (<i>Chenopodium album</i>) |
| Little mallow | (<i>Malva parviflora</i>) |
| Milkweed | (<i>Asclepias spp.</i>) |
| Miners lettuce | (<i>Montia perfoliata</i>) |
| Mullein | (<i>Verbascum spp.</i>) |
| Nettleleaf goosefoot | (<i>Chenopodium murale</i>) |
| Oxeye daisy | (<i>Chrysanthemum leucanthemum</i>) |
| Pepperweed | (<i>Lepidium spp.</i>) |
| Pigweed | (<i>Amaranthus spp.</i>) |
| Plantain | (<i>Plantago spp.</i>) |
| Pokeweed | (<i>Phytolacca americana</i>) |
| Primrose | (<i>Oenothera kuntziana</i>) |
| Puncturevine | (<i>Tribulus terrestris</i>) |
| Purple loosestrife | (<i>Lythrum salicaria</i>) |
| Purslane | (<i>Portulaca spp.</i>) |
| Pusley, Florida | (<i>Richardia scabra</i>) |
| Rocket, London | (<i>Sisymbrium irio</i>) |
| Rush skeletonweed | (<i>Chondrilla juncea</i>) |
| Russian knapweed | (<i>Centaurea repens</i>) |
| Russian thistle | (<i>Salsola kali</i>) |
| Saltbush | (<i>Atriplex spp.</i>) |
| Shepherd's purse | (<i>Capsella bursa-pastoris</i>) |
| Silverleaf nightshade | (<i>Solanum elaeagnifolium</i>) |
| Smartweed | (<i>Polygonum spp.</i>) |
| Sorrell | (<i>Rumex spp.</i>) |
| Sowthistle | (<i>Sonchus spp.</i>) |
| Spurge, annual | (<i>Euphorbia spp.</i>) |
| Stinging nettle | (<i>Urtica dioica</i>) |
| Sunflower | (<i>Helianthus spp.</i>) |
| Sweet clover | (<i>Melilotus spp.</i>) |

| | |
|--------------------|-----------------------------------|
| Tansymustard | (<i>Descurainia pinnata</i>) |
| Texas thistle | (<i>Cirsium texanum</i>) |
| Velvetleaf | (<i>Abutilon theophrasti</i>) |
| Western ragweed | (<i>Ambrosia psilostachya</i>) |
| Wild carrot | (<i>Daucus carota</i>) |
| Wild lettuce | (<i>Lactuca spp.</i>) |
| Wild parsnip | (<i>Pastinaca sativa</i>) |
| Wild turnip | (<i>Brassica campestris</i>) |
| Woollyleaf bursage | (<i>Ambrosia grayi</i>) |
| Yellow starthistle | (<i>Centaurea solstitialis</i>) |
| Yellow woodsorrel | (<i>Oxalis stricta</i>) |

VINES AND BRAMBLES

The species of vines and brambles controlled by this product include the following:

| | |
|---------------------------|--|
| Field bindweed | (<i>Convolvulus arvensis</i>) |
| Hedge bindweed | (<i>Calystegia sepium</i>) |
| Honeysuckle | (<i>Lonicera spp.</i>) ¹ |
| Morningglory | (<i>Ipomoea spp.</i>) |
| Poison ivy | (<i>Rhus radicans</i>) |
| Redvine | (<i>Brunnichia cirrhosa</i>) |
| Trumpet creeper | (<i>Campsis radicans</i>) |
| Virginia creeper | (<i>Parthenocissus quinquefolia</i>) |
| Wild buckwheat | (<i>Polygonum convolvulus</i>) |
| Wild grape | (<i>Vitis spp.</i>) |
| Wild rose | (<i>Rosa spp.</i>) ¹ |
| Including Multiflora rose | (<i>Rosa multiflora</i>) |
| Macartney rose | (<i>Rosa bracteata</i>) |

¹ Use higher labeled rates.

WOODY BRUSH AND TREES

The species of woody brush and trees controlled by this product include the following:

| | |
|----------------------|--|
| Alder | (<i>Alnus spp.</i>) |
| American beech | (<i>Fagus grandifolia</i>) |
| Ash | (<i>Fraxinus spp.</i>) ¹ |
| Aspen | (<i>Populus spp.</i>) |
| Australian pine | (<i>Casuarina equisetifolia</i>) ⁵ |
| Autumn olive | (<i>Elaeagnus umbellata</i>) |
| Bald cypress | (<i>Taxodium distichum</i>) ¹ |
| Bigleaf maple | (<i>Acer macrophyllum</i>) ¹ |
| Birch | (<i>Betula spp.</i>) |
| Black locust | (<i>Robinia pseudoacacia</i>) ⁵ |
| Black oak | (<i>Quercus kelloggii</i>) |
| Blackgum | (<i>Nyssa sylvatica</i>) ² |
| Boxelder | (<i>Acer negundo</i>) |
| Brazilian peppertree | (<i>Schinus terebinthifolius</i>) |
| Ceanothus | (<i>Ceanothus spp.</i>) |
| Cherry | (<i>Prunus spp.</i>) ^{1,2} |
| Chinaberry | (<i>Melia azedarach</i>) |
| Chinese tallow-tree | (<i>Sapium sebiferum</i>) |
| Chinquapin | (<i>Castanopsis chrysophylla</i>) ¹ |
| Cottonwood | (<i>Populus spp.</i>) |
| Cypress | (<i>Taxodium spp.</i>) |
| Dogwood | (<i>Cornus spp.</i>) ¹ |
| Elderberry | (<i>Sambucus spp.</i>) ⁵ |
| Elm | (<i>Ulmus</i>) ⁵ |
| Eucalyptus | (<i>Eucalyptus spp.</i>) |
| Hawthorn | (<i>Crataegus spp.</i>) |
| Hazel | (<i>Corylus cornuta</i>) ⁵ |
| Hickory | (<i>Carya spp.</i>) ¹ |
| Holly | (<i>Ilex spp.</i>) ^{1,4} |
| Including Gallberry | (<i>Ilex glabra</i>) ^{4,5} |
| Tail gallberry | (<i>Ilex coriacea</i>) ⁴ |
| Yaupon | (<i>Ilex vomitoria</i>) ¹ |
| Honeylocust | (<i>Gleditsia triacanthos</i>) ⁵ |

Continued

WOODY BRUSH AND TREES (continued)

| | |
|---|---|
| Huckleberry | (<i>Gaylussacia spp.</i>) |
| Lyonia spp. Including Fetterbush Staggerbush | (<i>Lyonia lucida</i>) (<i>Lyonia mariana</i>) |
| Madrone | (<i>Arbutus menziesii</i>) |
| Manzanita, greenleaf | (<i>Arctostaphylos patula</i>) ¹ |
| Maple | (<i>Acer spp.</i>) |
| Melaleuca | (<i>Melaleuca quinquenervia</i>) |
| Mulberry | (<i>Morus spp.</i>) ^{1,3} |
| Oak | (<i>Quercus spp.</i>) ^{1,3} |
| Persimmon | (<i>Diospyros virginiana</i>) ² |
| Poison oak | (<i>Rhus diversiloba</i>) |
| Popcorn-tree | (<i>Sapindus sebiferum</i>) |
| Poplar | (<i>Populus spp.</i>) ² |
| Privet | (<i>Ligustrum vulgare</i>) |
| Red alder | (<i>Alnus rubra</i>) |
| Red maple | (<i>Acer rubrum</i>) |
| Saltcedar | (<i>Tamarix pentandra</i>) |
| Sassaparilla | (<i>Sassaparilla albidum</i>) |
| Scotch broom | (<i>Cytisus scoparius</i>) ⁵ |
| Sourwood | (<i>Oxydendrum arboreum</i>) ² |
| Sumac | (<i>Rhus spp.</i>) |
| Sweetbay magnolia | (<i>Magnolia virginiana</i>) ^{1,5} |
| Sweetgum | (<i>Liquidambar styraciflua</i>) |
| Sycamore | (<i>Platanus occidentalis</i>) |
| Tanoak | (<i>Lithocarpus densiflorus</i>) ^{1,3,5} |
| Titi | (<i>Cynilla racemiflora</i>) ^{1,3} |
| Tree of heaven | (<i>Ailanthus altissima</i>) ⁵ |
| Vaccinium spp. Including Blueberry Sparkleberry | (<i>Vaccinium spp.</i>) (<i>Vaccinium arboreum</i>) |
| Waxmyrtle | (<i>Myrica californica</i>) ^{4,5} (<i>Myrica cerifera</i>) ^{4,5} |
| Willow | (<i>Salix spp.</i>) |
| Yellow-poplar | (<i>Liriodendron tulipifera</i>) ¹ |

¹ Use higher labeled rates.

² Best control with applications prior to formation of fall leaf color.

³ The degree of control may be species dependent.

⁴ Oil emulsion carrier is recommended.

⁵ Tank mix with Tahoe™ 4E as a basal or cut stump treatment

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Do not store below 10°F.

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: FOR QUART, 1.0 GALLON, 2.5 GALLON, 15 GALLON AND 30 GALLON: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in an approved sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

CONTAINER DISPOSAL FOR FIELD KEG, MINI BULK AND BULK: When this container is empty, replace the cap and seal all openings that have been opened during use, and return the container to the point of purchase, or to a designated location. This container must only be refilled with the pesticide product. Do not reuse the container for any other purpose. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transport. Do not transport if this container is damaged or leaking. If the container is damaged or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling. Disposal of container must be in compliance with state and local regulations.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR ARISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV021508N)

© Polaris, Foresters®, Razor and Tahoe are registered trademarks of Nufarm Americas Inc.

MANUFACTURED FOR
NUFARM AMERICAS INC.
BURR RIDGE, IL 60527



150 Harvester Drive • Suite 200
Burr Ridge, IL 60527
Phone: 630.455.2000 • Fax: 630.455.2001
Toll-free 1.800.345.3330
www.nufarm.com/US

SPL 0308 Nufarm Polaris SP
© 2008 Nufarm Americas Inc.



For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night: 1-800-424-9300
For Medical Emergencies Only, Call 1-877-325-1840

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Nufarm Polaris® SP Herbicide
EPA Reg. No.: 228-536
Synonyms: Imazapyr, Isopropylamine Salt; IPA Salt of Imazapyr; 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridine-carboxylic acid, salt with 2-propanamine (1:1)
Product Type: Herbicide
Company Name: Nufarm Americas Inc.
 150 Harvester Drive, Suite 200
 Burr Ridge, IL 60527
Date of Issue: January 14, 2008 **Supersedes:** New
Sections Revised: New

2. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance and Odor: Clear, light green colored liquid with an unpleasant odor.

Warning Statements: Keep out of reach of children. CAUTION. Harmful if inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing.

Potential Health Effects:

Likely Routes of Exposure: Inhalation, eye and skin contact.

Eye Contact: Mildly irritating based on toxicity studies.

Skin Contact: Slightly toxic and slightly irritating based on toxicity studies.

Ingestion: Slightly toxic based on toxicity studies.

Inhalation: Low inhalation toxicity.

Medical Conditions Aggravated by Exposure: None known.

See Section 11: TOXICOLOGICAL INFORMATION for more information.

Potential Environmental Effects:

This product is phytotoxic at extremely low concentrations. Non-target plants may be adversely affected from drift.

See Section 12: ECOLOGICAL INFORMATION for more information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| COMPONENT | CAS NO. | % BY WEIGHT |
|--|------------|-------------|
| Isopropylamine Salt of Imazapyr | 81510-83-0 | 27.6 |
| Other Ingredients Including Ethoxylated Tallowamines | 61791-26-2 | 72.4 |

4. FIRST AID MEASURES

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If on Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flash Point: >210°F (>99°C) Pinsky-Martens

Autoignition Temperature: Not determined **Flammability Limits:** Not determined

Extinguishing Media: Recommended for large fires: foam or water spray. Recommended for small fires: dry chemical or carbon dioxide.

Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.

Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as oxides of carbon, hydrogen and nitrogen.

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 1 Flammability: 1 Reactivity: 0

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: Pump any free liquid into an appropriate closed container. Collect washings for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other Information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE**Handling:**

Avoid breathing spray mist. Avoid contact with skin, eyes or clothing. 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 Personal Protective Equipment (PPE) immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Spray solutions of this product should be mixed, stored and applied only in stainless steel, fiberglass, plastic and plastic-lined steel containers. Do not mix, store or apply this product or spray solutions of this product in unlined steel (except stainless steel) containers or spray tanks.

Storage:

Do not store below 10°F. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:

Eye/Face Protection: Not normally required. To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin, wear long pants, long-sleeved shirt, socks, shoes and chemical-resistant gloves. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

| Component | OSHA | | ACGIH | | Unit |
|---------------------------------|------|------|-------|------|------|
| | TWA | STEL | TWA | STEL | |
| Isopropylamine Salt of Imazapyr | NE | NE | NE | NE | |
| Ethoxylated Tallowamines | NE | NE | NE | NE | |

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Clear, light green colored liquid with an unpleasant odor.

| | | | |
|--------------------------|--------------------|-----------------------------|-------------------|
| Boiling Point: | Not determined | Solubility in Water: | Soluble |
| Density: | 8.85 pounds/gallon | Specific Gravity: | 1.062 @ 20°C |
| Evaporation Rate: | Not determined | Vapor Density: | Not determined |
| Freezing Point: | Not determined | Vapor Pressure: | Not determined |
| pH: | 5.61 (1% solution) | Viscosity: | 21.888 cst @ 20°C |

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal handling and storage conditions.

Conditions to Avoid: Excessive heat. Do not store near heat or flame.

Incompatible Materials: Oxidizing agents and reducing agents.

Hazardous Decomposition Products: Under fire conditions may produce gases such as oxides of carbon, hydrogen and nitrogen.

Hazardous Reactions: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicological Data:

Data from laboratory studies on this product are summarized below:

Oral: Rat LD₅₀: >5,000 mg/kg (female)

Dermal: Rat LD₅₀: >5,000 mg/kg

Inhalation: Rat 4-hr LC₅₀: >2.07 mg/L

Eye Irritation: Rabbit: Mildly irritating

Skin Irritation: Rabbit: Slightly irritating

Skin Sensitization: Not a contact sensitizer in guinea pigs following repeated skin exposure.

Subchronic (Target Organ) Effects: No adverse effects at approximately 1,700 mg/kg/day (highest dose tested). The surfactant component of this product is reported to cause irritation to the eyes and skin and may contribute to the irritation potential reported for this product. Ingestion may produce gastrointestinal irritation, nausea, vomiting and diarrhea.

Carcinogenicity / Chronic Health Effects: Imazapyr did not cause cancer in laboratory animals. EPA has classified imazapyr as a Group E (evidence of non-carcinogenicity for humans) carcinogen.

Reproductive Toxicity: The results of animal studies gave no indication of a fertility impairing effect.

Developmental Toxicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Genotoxicity: No mutagenic effect was found in various tests with microorganisms and mammals.

Assessment Carcinogenicity: None listed with ACGIH, IARC, NTP or OSHA.

See Section 2: HAZARDS IDENTIFICATION for more information.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Data on Imazapyr:

| | | | |
|---|-------------|---|--------------|
| 96-hour LC ₅₀ Bluegill: | >100 mg/l | Bobwhite Quail 8-day Dietary LC ₅₀ : | >5,000 ppm |
| 96-hour LC ₅₀ Rainbow Trout: | >100 mg/l | Bobwhite Quail Oral LD ₅₀ : | >2,150 mg/kg |
| 48-hour EC ₅₀ Daphnia: | >100 mg/l | Mallard Duck 8-day Dietary LC ₅₀ : | >5,000 ppm |
| Honey Bee LD ₅₀ : | >100 mg/bee | Mallard Duck Oral LD ₅₀ : | >2,150 mg/kg |

Environmental Fate:

Imazapyr is degraded by microbial metabolism and can be relatively persistent in soils. It has an average half-life in soils that ranges from 2 weeks to 5 months. Half-lives tend to be shorter in forest litter and soils. Imazapyr is water-soluble and variably binds to organic materials in the soils. Although the potential to leach is high, leaching is limited under typical field conditions. In water, imazapyr can be rapidly degraded by photolysis with a half-life averaging 2 days. Due to its rapid photodegradation by sunlight, water contamination by imazapyr is generally not of concern.

13. DISPOSAL CONSIDERATIONS**Waste Disposal Method:**

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

Container Handling and Disposal:

Plastic Bottles and Non-Returnable Plastic Drums: Triple rinse container (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in an approved sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Returnable/Refillable Containers: When this container is empty, replace the cap and seal all openings that have been opened during use, and return the container to the point of purchase, or to a designated location. This container must only be refilled with the pesticide product. Do not reuse the container for any other purpose. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transport. Do not transport if this container is damaged or leaking. If the container is damaged or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling. Disposal of container must be in compliance with state and local regulations.

14. TRANSPORTATION INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this MSDS.

DOT

Non Regulated – See 173.132(b)(3)

IMDG

Non Regulated - See IMDG 2.6.2.1.3

IATA

Non Regulated - See IATA 3.6.1.5.3

15. REGULATORY INFORMATION**U.S. Federal Regulations:**

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):

Immediate

Section 313 Toxic Chemical(s):

None

Reportable Quantity (RQ) under U.S. CERCLA:

None

RCRA Waste Code:

None

State Information:

Other state regulations may apply. Check individual state requirements.

California Proposition 65: Not listed

16. OTHER INFORMATION

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Nufarm Americas Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Nufarm Americas Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

Polaris is a registered trademark of Nufarm Americas Inc.

AMINE 4



A SELECTIVE HERBICIDE

FOR CONTROL OR SUPPRESSION OF MANY BROADLEAF WEEDS IN BOTH NON-CROP AREAS AND CERTAIN CROP AREAS, LAWNS, PONDS, DITCH BANKS, PASTURES AND RANGELANDS. ALSO FOR CONTROL OF TREES BY INJECTION.

ACTIVE INGREDIENT:

Dimethylamine Salt of 2,4-Dichlorophenoxyacetic Acid* 47.3%

INERT INGREDIENTS: 52.7%

TOTAL 100.0%

Isomer Specific AOAC Method:

*2,4-Dichlorophenoxyacetic Acid Equivalent39.3%, 3.8 lbs./gal.

EPA Reg. No. 2935-512

EPA Est. No. 228-IL-1

**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.)

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

FIRST AID

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

If in Eyes: -Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
-Call a poison control center or doctor for treatment advice.

If Swallowed: -Call a poison control center or doctor immediately for treatment advice.
-Have person sip a glass of water if able to swallow.
-Do not induce vomiting unless told to do so by a poison control center or doctor.
-Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIANS: Probable mucosal damage may contraindicate the use of gastric lavage.

**PRECAUTIONARY STATEMENTS
HAZARDS to HUMANS and DOMESTIC ANIMALS**

DANGER

CORROSIVE: Causes irreversible eye damage. Do not get in eyes or on clothing. Avoid contact with skin. May cause skin irritation. Harmful if swallowed. Avoid inhaling vapor or spray mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

NON-WPS USES: Applicators and other handlers who handle this pesticide for any use NOT covered by the Worker Protection Standard (40 CFR Part 170) – in general, only agricultural plant uses are covered by the WPS – must wear: face shield, goggles or safety glasses and long pants, long-sleeved shirt, socks, shoes and rubber gloves.

It is recommended that safety glasses include brow and temple protection. In addition to the clothing and eye protection listed above, commercial mixers/loaders/applicators must wear Chemical-resistant in place of rubber gloves except when the product is applied to a golf course. After using this product, remove clothing and launder separately before reuse and promptly and thoroughly wash hands and exposed skin with soap and water. The maximum number of broadcast applications to turf per treatment site is two per year.

NON-WPS INDUSTRIAL/AQUATIC USES: When mixing, loading or applying this product or repairing or cleaning equipment used with this product, wear face shield or goggles and chemical-resistant gloves, long-sleeved shirt, long pants, socks and shoes. For aerial applicators in an enclosed cockpit and applicators applying this product from a tractor that has a completely enclosed cab, eye protection is not required. Wash hands, face and arms with soap and water as soon as possible after mixing, loading or applying this product. After work, remove all clothing and shower using soap and water. Do not reuse clothing worn during the previous day's mixing and loading or application of this product without cleaning first. Clothing must be kept and washed separately from other household laundry.

WPS USES: Applicators and other handlers who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR Part 170) – in general, only agricultural plant uses are covered – must wear: coveralls over short-sleeved shirt and short pants, waterproof gloves, chemical-resistant footwear plus socks, protective eyewear, chemical-resistant headgear for overhead exposure and chemical-resistant apron when cleaning equipment, mixing or loading. 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 instruction for cleaning/maintaining Personal Protective Equipment (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 controls statements: If this container is over 1 gallon and less than five gallons, mixers and loaders who do not use a mechanical system (probe and pump) to transfer contents of this container must wear coveralls or a chemical resistant apron in addition to the other required PPE. If this container contains 5 gallons or more in capacity, do not open pour product from this container. A mechanical system (such as a probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a nonrefillable 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) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

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. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. For terrestrial uses, 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 apply this product through any type of irrigation system. Do not contaminate water used for irrigation or domestic purposes. Use care to avoid spray contact or drift to 2,4-D susceptible plants such as cotton, tomatoes, flowers, okra, grapes, fruit trees and ornamentals or other susceptible crops, or severe damage may result. Excessive amounts of this product in soil may temporarily inhibit seed germination and plant growth. Do not permit spray mist containing this product to drift onto them. Do not apply when a temperature air inversion exists. Such a condition is characterized by little or no air movement and an increase in air temperature with an increase in height. In humid regions, a fog or mist may form. An inversion may be detected by producing

ENVIRONMENTAL HAZARDS continued...

a smoke column and checking for a layering effect. If questions exist pertaining to the existence of an inversion, consult with local weather services before making an application. Do not spray when the wind is blowing towards susceptible crops or ornamental plants. Use coarse sprays to minimize drift. Spray drift can be lessened by keeping the spray boom as low as possible, by spraying when wind velocity is low, by decreasing the pounds of pressure at the nozzle tips, and by stopping all spraying when wind is blowing toward susceptible plants. Do not use the same spray equipment for applying other materials to 2,4-D susceptible crops as injury may result. It is best to use a separate sprayer for application of insecticides and fungicides.

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 or 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.

When using on (1) Pastures and Rangeland Grasses, there is (a) 7 day pre-grazing interval for dairy cattle; (b) 30 day pre-harvest interval for grass cut for hay; and (c) 3 day pre-slaughter interval for meat animals. (2) Corn and small grains; Do not allow livestock to forage or graze treated fields within 14 days after treatment. Do not feed treated straw to livestock. (3) Sorghum; do not allow livestock to graze treated areas within 14 days after treatment, and (4) Grass Seed Crops; Do not graze dairy animals within 7 days after treatment.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read entire label before using this product.

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 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 over short-sleeved shirt and short pants, waterproof gloves, chemical-resistant footwear plus socks, protective eyewear and chemical-resistant headgear for overhead exposure.

NONAGRICULTURAL 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.

Reentry statement for residential and other turf sites excluding sod farms; Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment areas until spray has dried or dust has settled.

GENERAL INFORMATION

AMINE 4 will control or suppress the following weeds in addition to many other noxious plants susceptible to 2,4-D. Alders, Alligator weed, American lotus, Arrowhead, Artichoke, Aster, Austrian fieldcress, Beggarticks, Bidden, Bindweed, Bitterweeds, Bitter winter cress, Black-eyed Susan, Blessed thistle, Blue lettuce, Box elder, Broomweed, Buckhorn, Bull thistle, Bulrush, Burdock, Bur ragweed, Buttercup, Canada thistle, Carpetweed, Catnip, Chickweed, Chicory, Cinquefoil, Cockle, Cocklebur, Coffee bean, Coffeeweed, Common sowthistle, Creeping Jenny, Croton, Curly indigo, Dandelion, Devil's claw, Diffuse Knapweed, Dock, Dogbane, Duckweed, Elderberry, Flea bane (daisy), Flixweed, Florida pusley, Frenchweed, Galinsoga, Goatsbeard, Goldenrod, Goosefoot, Ground ivy, Gumweed, Healall, Hemp, Henbit, Hoary cress, Honeysuckle, Horsetail, Indigo, Indiana mallow, Ironweed, Jerusalem artichoke, Jewelweed, Jimsonweed, Knotweed, Lambsquarters, Locoweed, Lupines, Mallow, Many flowered aster, Marijuana, Marshelder, Mexican weed, Morningglory, Muskthistle, Mustards, Nettle, Nutgrass, Orange hawkweed, Parrot feather, Parsnip, Pennycress, Pennywort, Pepperweeds, Pigweed, Plantains, Poison hemlock, Poison ivy, Pokeweed, Poorjoe, Povertyweed, Prickly lettuce, Primrose, Puncture vine, Purslane, Ragweed, Rush, Russian thistle, Sagebrush, St. Johnswort, Salsify, Shepherdspurse, Sicklepod, Smartweed, Sneezeweed, Southern wild rose, Sowthistle, Spanishneedles, Spatterdock, Spotted Knapweed, Stinging nettles, Stinkweed, Sumac, Sunflower, Sweet clover, Tanweed, Tarweed, Thistles, Toadflax, Tumbleweed, Velvet leaf, Vervain, Vetch, Virginia creeper, Water hyacinth, Water lily, Water plantain, Water primrose, Water shield, Wild carrot, Wild garlic, Wild lettuce, Wild onion, Wild parsnips, Wild radish, Wild rape, Wild strawberry, Wild sweet potato, Willow, Witchweed, Wormsweed, Yellow rocket.

Generally the lower dosages given will be satisfactory for young, succulent growth of sensitive weed species. For less sensitive species and under conditions where control is more difficult, the higher dosages will be needed or the use of an approved tank mix combination. Apply AMINE 4 during warm weather when weeds are young and growing actively. If band treatment is used, base the dosage rate on the actual area to be sprayed. Although water quantities may vary due to different types of application equipment, sufficient water must be used to provide for complete and uniform coverage. Higher water gallonage may be used if desired to improve spray coverage. In all cases, use the same recommended amount of 2,4-D per acre. When product is used for weed control in crops, the growth stage of the crop must be considered. For crop uses, do not mix with oil, surfactants or other adjuvants unless specifically recommended on label. To do so may reduce herbicide's selectivity and could result in crop damage. If you are not prepared to accept some degree of crop injury, do not use this product. Crop varieties vary in response to 2,4-D and some are easily injured. Apply this product to varieties known to be tolerant to 2,4-D. If you are uncertain concerning tolerant varieties or local use situations that may affect crop tolerance to 2,4-D, consult your seed company, State Agricultural Extension Service or qualified crop consultant's advice.

Be sure that use of this product conforms to all applicable laws, rules and regulations. Certain states have restrictions pertaining to application distances from susceptible crops. The applicator should become familiar with these laws, rules or regulations and follow them exactly. Do not apply when temperature exceeds 90°F. Read and follow all directions and precautions on this label and on the labels of any products for which a tank mixture is being considered. Wilbur-Ellis Company recommends the use of a drift retardant agent such as IN-PLACE®.

COMPATIBILITY: If AMINE 4 is to be tank mixed with fertilizers or with other pesticides, compatibility should be tested prior to mixing. To test for compatibility, use a small container and mix a small amount (0.5 to 1 qt.) of spray, combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. Indications of incompatibility usually will appear within five to 15 minutes.

TO PREPARE THE SPRAY: Mix AMINE 4 only with water. Add about half the water to the mixing tank, then add the AMINE 4 with agitation, and finally the rest of the water with continuing agitation. Note: Adding oil, wetting agent or other surfactant to the spray may increase effectiveness on weeds, but also may reduce selectivity to crops resulting in crop damage.

WITH LIQUID NITROGEN SOLUTIONS: For late season application in corn, pastures or small grains in one operation for control or suppression of smartweed, cocklebur, annual morningglory and other annual broadleaf weeds less than one-inch high. Field should be as clean as possible and corn 20 to 30" tall. Apply one pint with 80 to 120 lbs. Nitrogen per acre: the spray must be prepared by first adding the required amount of liquid nitrogen solution to spray tank. Next dilute one pint of AMINE 4 with 2 quarts clean water for each acre to be treated with one tankful. Start the tank agitator and slowly add the diluted 2,4-D solution. Spray immediately, maintaining continuous agitation until spray tank is empty. Direct the spray to lower 3" to 4" of corn stalk. Use spray equipment designated to handle corrosive liquid nitrogen solutions. After spraying, remove any remaining solution and rinse rig thoroughly with water. Mix only one tank at a time. Do not spray during or immediately following cold, near freezing weather. Do not allow mixture to stand overnight.

NOTE: If good continuous agitation is not maintained, separation of the spray mixture and/or clogging of the nozzles is likely to occur. Fertilizers can increase foliage contact burn of herbicides. Reducing the fertilizer rate and concentrate will reduce the hazard of leaf burn.

ADJUVANT USE: An agricultural surfactant, such as R-11® Spreader-Activator may be added at 0.25% by volume (1qt. per 100 gallons of spray solution) to help increase the control of large or difficult weeds.

EQUIPMENT CLEANUP: Sprayers and equipment should be washed thoroughly after use. Neutral Clean™ tank cleaner will aid in cleaning equipment. Do not let washwater accumulate on the ground. Pesticide residue must be captured and disposed of according to state, local and federal regulations.

SELECTIVE WEEDING IN CROPS

BARLEY, WHEAT, OATS AND RYE: Spring Post-emergence (not underseeded with legumes) – In spring grown grains, spray after grain begins tillering and before the boot stage (usually 4" to 8" tall) and weeds are small. Apply 1/2 to 1 pint of AMINE 4 per acre. For aerial application on grain, application rates should be 1 to 5 gallons of total spray by air or 3 to 25 gallons by ground equipment. Oats are more sensitive to 2,4-D than other grains and should be sprayed in the spring when well established and tillered and before jointing after crop has reached the dough stage. In winter grains, use 1 to 2 pints of AMINE 4 to control large weeds that will interfere with harvest or to suppress perennial weeds. Fall seeded oats for grain planted in Southern U.S. – apply after full tillering but before the early bud stage. Do not spray during or immediately following cold weather. Spring Post-emergence (underseeded with legumes) – Apply 1/4 to 1/2 pint after grain is 8" tall. Do not spray grain in boot to dough stage. Do not spray alfalfa or sweet clover unless the infestation is severe and injury to these legumes can be tolerated. Pre-harvest treatment can be applied when the grain is in the dough stage. Best results will be obtained when soil moisture is adequate for plant growth and weeds are growing well.

FOR EMERGENCY WEED CONTROL IN WHEAT – Perennial broadleaf weeds – apply 3 pints per acre when weeds are approaching bud stage. Do not spray grain in the boot to dough stage. The 3 pint per acre application can produce injury to wheat. Balance the severity of your weed problem against the possibility of crop damage. Where perennial weeds are scattered, spot treatment is suggested to minimize the extent of crop injury. Use lower rate if small annual and biennial weeds are the major problem. Use the higher rate if perennial weeds or annual and biennial weeds are present which are in the hard-to-kill categories as determined by local experience. The higher rates increase the risk of grain injury and should be used only where the weed control problem justifies the grain damage risk. Do not apply AMINE 4 to grain in the seedling stage. For aerial application on grain, application rates should be 1 to 5 gallons of total spray by air or 3 to 25 gallons by ground equipment.

CORN (Field, Sweet and Popcorn): Preplant – Apply 1-2 pints per acre in 15-30 gallons of water to control emerged broadleaf weed seedlings or existing cover crops prior to planting corn, apply 7 to 14 days before planting. Do not use on light, sandy soil, or where soil moisture is inadequate for normal weed growth. Use high rate for less susceptible weeds or cover crops such as alfalfa.

Preemergence (For annual grasses and broadleaf weeds) – Apply 2-4 pints in 15-30 gallons of water per acre to soil anytime after planting but before corn emerges. Do not use on light sandy soil, or where soil moisture is low.

Emergence – Apply one pint in 15 to 30 gallons of water per acre ground application, 1 to 5 gallons of water by air, just as corn plants are breaking ground.

Post-emergence (For broadleaf weeds) – Apply 1/2 to 1 pint in 8 to 15 gallons of water per acre, when most weeds have germinated. Spray after corn emerges and until 8" tall. Spray sweet corn before 6" in height. Use low rates on inbreds. Corn is susceptible to injury shortly after emergence and after unfolding of leaves. Do not spray during this period nor after first tassels appear. When corn is over 8" tall or beyond the five-leaf stage, use drop nozzle to keep spray off corn foliage. Spray must strike tops of weeds but should not drench corn plants. Do not apply from tasseling to dough stage. Injury to corn is most likely to occur if AMINE 4 is applied when corn is growing rapidly under high temperatures and high soil moisture conditions. In such conditions, use the low rate. For resistant weeds, use up to 2 pints per acre though corn injury may result. Do not use higher rates unless possible crop injury will be acceptable. After application, delay cultivation for 8 to 10 days to allow the corn to overcome any temporary brittleness. During Post-emergent application, do not use this product with atrazine, oil or other adjuvants unless approved by seed company. Pre-harvest: After the hard dough or denting stage, apply by air or ground equipment to suppress perennial weeds, decrease weed seed production and control tall weeds such as bindweed, cocklebur, dogbane, jimsonweed, ragweed, sunflower, velvetleaf and vines that interfere with harvesting. Use 1 to 2 pints in 1 to 5 gallons of water per acre by air to 5 to 30 gallons of water by ground equipment.

CROP STUBBLE AND FALLOW LAND: On established perennial species such as Canada thistle and Field bindweed, apply up to 3 quarts of product per acre. **NOTE:** Do not forage for 14 days following application. Apply to weeds actively growing. Do not plant any crop for three months after treatment or until 2,4-D has disappeared from soil.

GRASSES IN ESTABLISHED PASTURES AND RANGELANDS: Use 1 to 4 pints of product in 25 gallons of water or more to give good coverage to one acre depending on type of weeds and stage of growth. Use only on established stands of perennial grasses. Do not use on bentgrass, alfalfa, clover or other legumes. Do not use from early boot to milk stage where grass seed production is desired.

NOTE: For small areas, use 3/4 to 1 fluid ounce (1-1/2 to 2 Tablespoons) per 1,000 square feet; mix 1 to 3 gallons of water and apply uniformly over 1,000 square feet.

GRASSES IN CONSERVATION RESERVE PROGRAM AREAS: To control or suppress annual broadleaf weeds, apply when seeds are actively growing. Use 1/2-1 pint per acre when weeds are small. Use higher rates on older weeds. Excessive injury may result if applied to young grasses with fewer than six leaves or prior to grasses being well established. To control or suppress biennial and perennial broadleaf weeds in established grasses, apply at a rate of 1-2 quarts per acre. Apply to actively growing weeds. Treat when biennial weeds are in the seedling to rosette stage and before flower stalks become apparent. Treat perennial weeds in the bud to bloom stage.

NOTE: Suggest at least 2 gallons of water per acre by air and 5 gallons of water per acre by ground. Do not harvest or graze treated Conservation Reserve Program areas. Do not apply to grasses in the boot to dough stage if grass seed production is desired.

GRASS SEED CROPS: Use 1 to 4 pints in up to 30 gallons of water per acre by air or ground equipment in spring or fall to control broadleaf weeds in grass being grown for seed. Do not apply from early boot to the milk stage. Spray seedling grass only after the five-leaf stage, using 3/4 to 1 pint per acre to control small seedling weeds. After the grass is well established higher rates of up to 4 pints can be used to control hard-to-kill annual or perennial weeds. For best results, do not use on bentgrass unless grass injury can be tolerated.

SOYBEANS: FOR USE IN CROP RESIDUE MANAGEMENT SYSTEMS IN SOYBEANS (Preplant only)

GENERAL INFORMATION: AMINE 4 is a herbicide that provides control of many emerged susceptible annual and perennial broadleaf weeds. AMINE 4 spray may be applied prior to planting soybeans to provide foliar burndown control of susceptible annual and perennial broadleaf weeds and certain broadleaf cover crops such as those listed on this label. AMINE 4 should only be applied preplant to soybeans in situations such as reduced tillage production systems, where emerged weeds are present. Apply only according to the application instructions given below. Do not use any tillage operations between application of AMINE 4 and planting soybeans.

MIXING INSTRUCTIONS: Compatible crop oil concentrates, agricultural surfactants and fluid fertilizers approved for use on growing crops may increase the herbicidal effectiveness of 2,4-D on certain weeds and may be added to the spray tank. Read and follow directions and precautions on this label and on all labels of adjuvants or fertilizers mixed with this product.

APPLICATION PROCEDURES: Apply using air or ground equipment in sufficient gallonage to obtain adequate coverage of weeds. Use 2 or more gallons of water per acre in aerial equipment and 10 or more gallons of water per acre in ground equipment.

APPLICATIONS TIMING AND USE RATES

| 2,4-D Formulation Used | Maximum Rate (per acre) | When to apply (Days prior to planting Soybeans) |
|------------------------|-------------------------|---|
| AMINE 4 | 1 pint (16 fl. oz.) | NOT LESS THAN 15 DAYS |
| | 2 pints (32 fl. oz.) | NOT LESS THAN 30 DAYS |

WEEDS CONTROLLED: Alfalfa*, Bindweed*, Bullnettle, Bittercress-smallflowered, Buttercup-smallflowered, Carolina geranium, Cinquefoil-common and rough, Clover-red*, Cocklebur-common, Dandelion*, Eveningprimrose-cutleaf, Garlic-wild*, Horseweed or Maretail, Ironweed, Lambsquarters-common, Lettuce-prickly, Morningglory-annual, Mousetail, Mustard-wild, Onion-wild*, Pennycress-field, Peppergrass*, Purslane-common, Ragweed-common, Ragweed-giant, Shepherdspurse, Smartweed-Pennsylvania*, Sowthistle-annual, Speedwell, Thistle-Canada*, Thistle-bull, Velvetleaf, Vetch-hairy*, Virginia copperleaf.

* These species are only partially controlled.

For best weed control at time of treatment, weeds should be small, actively growing, and free of stress caused by extremes in climatic conditions, diseases or insect damage. The response of individual weed species to AMINE 4 is variable. Consult your local County or State Agricultural Extension Service or crop consultant for advice.

APPLICATION RESTRICTIONS AND PRECAUTIONS: Important Notice – Unacceptable injury to soybeans planted in fields treated with AMINE 4 may occur. Whether or not soybean injury occurs and the extent of the injury will depend on weather (temperature and rainfall) from herbicide application until soybean emergence and agronomic factors such as the amount of weed vegetation and previous crop residue present. Injury is more likely under cool, rainy conditions and where there is less weed vegetation and crop residue present.

Do not use on low organic sandy soils (<1.0%).

Apply a maximum of one application per growing season regardless of the treatment rate.

Do not apply AMINE 4 when weather conditions such as temperature air inversions or wind favor drift from treated areas to susceptible plants.

Livestock Grazing Restriction: Do not feed hay, forage or fodder. Restrict livestock from grazing treated fields. Livestock should be restricted from feeding/grazing of treated cover crops.

In fields treated with AMINE 4, plant soybean seed as deep as practical or at least 1-1/2 to 2" deep. Adjust the planter, if necessary, to ensure that planted seed is completely covered.

If desired, this product may be applied preplant to soybeans in tank mixtures with other herbicides that are registered for preplant soybean use. Observe all precautions on other product labels when used with AMINE 4.

Do not apply AMINE 4 prior to planting soybeans, if you are not prepared to accept the results of soybean injury, including possible loss of stand and yield.

Do not replant fields treated with AMINE 4 in the same growing season with crops other than those labeled for 2,4-D use.

Compatible crop oil concentrates, agricultural surfactants and fluid fertilizers approved for use on growing crops may increase the herbicidal activity of 2,4-D on certain weeds and may be added to the spray tank. Read and follow all directions and precautions on this label and on all labels of adjuvants or fertilizers mixed with this product.

SORGHUM (Milo): Post-emergence – Apply 2/3 to 1 pint with suggested water at 5 gallons of water by air or 5 to 20 gallons of water with ground equipment per acre when sorghum is 6" to 8" tall. Use 1 pint when sorghum is 8" to 15" tall. Treat only after the sorghum is 6" high and preferably before it is 15" high. Do not treat during the boot, tasseling, or early dough stages. Reduce spray drift by keeping the boom and spray nozzle as low as possible. If crop is taller than 8", use crop nozzle to keep the spray off the leaves. Temporary spray injury can be expected under conditions of high soil moisture and high air temperatures. If it is necessary to apply AMINE 4 under these conditions, use no more than 2/3 pints per acre.

NOTE: Corn and Sorghum Hybrids vary in tolerance to 2,4-D. Some are easily injured. Spray only varieties known to be tolerant to 2,4-D. Consult the seed company or your Agricultural Experiment Station or Extension Service Weed Specialist for this information.

SUGARCANE: Preemergence – Use 4 pints in 15 to 20 gallons of water per acre as a blanket spray through lay-by, to aid in control of Johnsongrass seedlings and susceptible broadleaf weeds. Post-emergence – Use 1-1/2 to 2 pints in 10 to 30 gallons. Apply when cane is 1' to 2' tall.

RICE: Use 1-1/2 to 2-1/2 pints of AMINE 4 in 5 to 10 gallons of water per acre to control curly indigo and other broadleaf weeds. Apply in the late tillering stage of rice development, at the time of first joint development (first to second green ring), usually 6 to 9 weeks after emergence. Do not apply after panicle initiation, after rice internodes exceed 1/2 inch at early seedling, early panicle, boot, flowering or early heading growth stages. Do not apply nitrogen during 7 to 21 days before application of 2,4-D. Do not use in rice paddies where shellfish are of economic importance or where flood water is used for irrigation of other crops.

NOTE: Some rice varieties under certain conditions can be injured by 2,4-D. Therefore, before spraying, consult local Extension Service or University specialist for appropriate rates and timing of 2,4-D sprays.

STONE FRUIT AND NUT ORCHARDS (Except in California): To control annual broadleaf weeds on the orchard floor, apply 3 pints per acre using coarse sprays and low pressure in sufficient volume of water to obtain thorough wetting of weeds. Treat when weeds are small and actively growing. Do not use on light, sandy soil.

NOTE: Do not apply (1) to bare ground as injury may result, (2) to newly established or young orchards. Trees must be at least one-year-old and in vigorous condition, (3) during bloom, (4) more than twice a year, (5) immediately before irrigation and withhold irrigation for two days before and three days after treatment. Also, do not allow spray to drift onto or contact foliage, fruit, stems, trunks of trees or exposed roots, as injury may result. Do not graze or feed cover crops from treated orchards. Do not harvest stone fruit within 40 days of application or nuts within 60 days of application.

CONTROL OF SOUTHERN WILD ROSE: On rangelands, roadsides and fence rows, use 1 gallon of AMINE 4 plus 4 to 8 fluid ounces of an agricultural surfactant per 100 gallons of water and spray thoroughly as soon as foliage is well developed. Two or more treatments may be required. On rangeland, apply a maximum of 4 pints of AMINE 4 per acre per application.

SELECTIVE WEEDING IN NON-CROP AREAS

BROADLEAF WEED CONTROL IN NON-CROPLAND GRASS AREAS SUCH AS AIRFIELDS, RIGHTS-OF-WAY, FENCE ROWS, ROADSIDES, VACANT LOTS, DRAINAGE DITCH BANKS, INDUSTRIAL SITES AND SIMILAR PLACES.

Do not use on dichondra or other herbaceous ground covers. Do not use on creeping grasses such as bent except for spot treatment, or on freshly seeded turf until grass is well established. Reseeding of Lawns should be delayed following treatment. With spring application, reseed in the fall. With fall application, reseed in the spring. Legumes are usually damaged or killed. Thoroughly wet weeds when applying this mixture. Bindweed, Whitetop, Perennial sow thistle, Blue lettuce, Bur Ragweed, Canada thistle and other noxious perennials somewhat resistant to 2,4-D will require repeated treatments to control or suppress them.

Use 1/2 gallon of this product in 5 to 50 gallons of water, or more to obtain thorough coverage, per acre. Treat when weeds are young and growing well. The maximum seasonal application rate is 1 gallon of product per acre per application site.

ORNAMENTAL TURF such as Lawns, Golf Courses (Fairways, Aprons, Tees and roughs), Sod Farms, Cemeteries and Parks: Use 2 to 4 pints of product in a minimum of 10 gallons of water to give good coverage to one acre on established stands of perennial grasses. Usually 4 pints per acre provides good weed control under average conditions. On turf, apply a maximum of 4 pints of this product per acre per application per site. Treat when weeds are young and actively growing. Do not apply to newly seeded grasses until well established. Use higher rate for hard-to-control weeds. Use higher rate when using higher volume of water per acre. Do not exceed specified application dosages for any area. Deep-rooted perennial weeds may require repeat treatments in the same season or in subsequent years. Spray when air temperature does not exceed 85°F. Avoid applying during excessively dry or hot periods unless irrigation (watering) is used before treatment: Reseed no sooner than 3 to 4 weeks after application of this product. Adding oil, wetting agent or other surfactant to the spray may be used to increase effectiveness on weeds but doing so may reduce selectivity to turf resulting in turf damage. Maximum control of weeds will be obtained by applying in Spring and early Fall when weeds are actively growing. Do not use on golf greens or on dichondra or other broadleaf herbaceous ground cover. Do not use on creeping grasses such as bent and St. Augustine except for spot treating or on newly seeded turf until grass is well established. The maximum number of broadcast applications per treatment site is two per year.

AQUATIC APPLICATIONS

AQUATIC WEED CONTROL: For use in ponds, lakes, reservoirs, marshes, bayous, drainage ditches, canals, rivers and streams that are quiescent or slow moving.

NOTICE TO APPLICATORS: State and Local Coordination: Before application, coordination and approval of local and state authorities may be required, either by letter of agreement or issuance of special permits for such use.

FISH TOXICITY -- OXYGEN RATIO: Fish breath oxygen in the water and a water-oxygen ratio must be maintained. Decaying weeds use up oxygen. To avoid fish kill from decaying plant material do not treat more than one-half of lake or pond at one time. For large bodies of weed-infested waters leave buffer strips of at least 100 feet wide and delay treatment of these strips for four to five weeks or until the dead vegetation has decomposed.

Wind Velocity – Ground or surface Application: Do not apply when wind speeds are at or above 10 m.p.h..

Air Application: Do not apply when wind speeds are at or above 5 m.p.h.. The restrictions do not apply to subsurface applications used in weed control programs.

Irrigation: Delay the use of treated waters for irrigation for three weeks after treatment unless an approved assay shows that the water does not contain more than 0.1 ppm 2,4-D acid. Do not treat irrigation ditches in areas where water will be used to overhead sprinkler irrigate susceptible crops especially grapes, tomatoes and cotton.

Potable Water: Delay the use of treated water for domestic purposes for a period of three weeks or until such time as an approved assay shows that the water contains no more than 0.1 ppm 2,4-D acid.

WATER HYACINTH (*Eichornia crassipe*) – Directions for use – 2,4-D AMINE 4 will control water hyacinth with surface and air applications.

Amounts to Use: 2 to 4 quarts (4 lb. acid equivalent per gallon) per acre. Spray the weed mass only. Use 4 quarts when plants are matured or when the weed mass is dense.

When to Apply: Spray when water hyacinth plants are actively growing. Repeat as necessary to kill regrowth and hyacinth plants missed in the previous operation.

How to Use – Surface Application: Use power sprayers operated with a boom or spray gun mounted on a boat, tractor or truck. Thorough wetting of foliage is essential for maximum control. Use 100 to 400 gal./A of spray mixture. Special precautions such as the use of low pressure, large nozzles and thickening agents should be taken to avoid spray drift in areas of sensitive crops. For DIRECTA-SPRA™ operation use AMINE 4 with 1 pint of drift control agent in 50 to 100 gallons of water. For other applications, follow the drift control agent label for mixing directions.

Air Application: Use drift control spray equipment or thickening agents mixed into the spray solution. Apply 1.0 gallon per acre of AMINE 4 through standard boom systems with a minimum of 5 gallons of spray mix per acre. For MICROFOIL® drift control systems, apply AMINE 4 in 12 to 15 gallons spray mix per acre.

| | | | | | |
|-----------------------|---------|--------|--------|--------|--------|
| 2,4-D Acid Equivalent | 1/2 lb. | 1 lb. | 2 lbs. | 3 lbs. | 4 lbs. |
| AMINE 4 | 1 pt. | 2 pts. | 2 qts. | 3 qts. | 4 qts. |

Water Milfoil (*Myriophyllum spicatum*) – Directions for use: For Eurasian Water Milfoil in programs conducted by the Tennessee Valley Authority in dams and reservoirs of the TVA system. AMINE 4 will control water milfoil with surface, subsurface and air application.

How to Use: To control water milfoil when less than 5 gallons of concentrate per acre is recommended, dilute the concentrate with water to apply a minimum of 5 gallons of spray mix per acre. Do not treat within 1/2 mile of potable water intakes. Shoreline areas should be treated by subsurface injection applied by boat to avoid aerial drift. Do not apply when weather conditions favor drift from target area. Do not contaminate water by cleaning of equipment washwaters.

Open Water Areas: To reduce contamination and prevent undue exposure to fish and other aquatic organism, do not treat water areas that are not infested with aquatic weeds.

Amounts to Use: Apply 2.5 to 10 gallons of AMINE 4 per acre. The higher rate is used in areas of greater water exchange. These areas may require a repeat application.

When to Apply: For best results, apply in spring or early summer when milfoil starts to grow. This timing can be checked by sampling the lake bottom in areas heavily infested with weeds the year before.

Subsurface Application: Apply 2.5 to 10 gallons of AMINE 4 per acre as a concentrate directly into the water through boat mounted distribution systems.

Surface Application: Apply 2.5 to 10 gallons of AMINE 4 per acre in a minimum spray volume of 5 gallons mix per acre.

Air Application: Use drift control spray equipment or thickening agents mixed into the spray solution. Apply 2.5 to 10 gallons per acre of AMINE 4 through standard boom systems with a minimum of 5 gallons of spray mix per acre. For MICROFOIL® drift control spray systems apply AMINE 4 in 12 to 15 gallons spray mix per acre.

WEEDS AND BRUSH ON IRRIGATION CANAL DITCH BANKS – SEVENTEEN WESTERN STATES: Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, New Mexico, Nevada, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington and Wyoming.

For control of annual and perennial broadleaf weeds, apply 1 to 2 quarts of AMINE 4 per acre in approximately 20 to 100 gallons of water per acre. Treat when weeds are young and actively growing before the bud or early bloom stage. For harder-to-control weeds, a repeat spray after three to four weeks using the same rates may be needed for maximum results. Apply no more than two treatments per season. The maximum seasonal application rate is 4 quarts of product per acre per application site.

For woody brush and patches of perennial broadleaf weeds, mix one gallon of AMINE 4 in 150 gallons of water. Wet foliage thoroughly using about one gallon of solution per square rod. Apply only one application per season.

SPRAYING INSTRUCTION: Apply with low pressure (10 to 40 psi) power spray equipment mounted on truck, tractor or boat. Apply while traveling upstream to avoid accidental concentration of chemical into water. Spray when the air is fairly calm, five m.p.h. or less. Do not use on small canals (less than 10 cfs) where water will be used for drinking purposes.

Boom spraying onto water surfaces must be held to a minimum and no cross-stream spraying to opposite banks should be permitted. When spraying shoreline weeds, allow no more than two foot overspray onto water with an average of less than one foot overspray to prevent introduction of greater than negligible amounts of chemical into the water. Water within treated banks should not be fished

BRUSH CONTROL

WOODY PLANT CONTROL: To control woody plants susceptible to 2,4-D such as Alder, Buckbrush, Elderberry, Sumac and Willow on non-crop areas, use 2-3 quarts of product per acre in 100 gallons of water. Wet all parts of the plants thoroughly, including stem and foliage to the point of runoff. Higher volumes of up to 400 gallons per acre are necessary where the brush is very dense and over 6 to 8 feet high. Applications are more effective when made on actively growing plants. Treatment should not be made during time of severe drought or in early Fall when leaves lose the green color. The maximum seasonal application rate is 4 quarts of product per acre per application site.

Hard to control species may require re-treatment next season.

The maximum application rate for forestry site preparation is 1 gallon 6 fluid ounces per acre per application per site. The maximum seasonal application rate is 1 gallon, 6 fluid ounces of product per acre per application site.

NOTE: For rates to use in small areas with a hand-held sprayer see Grass Seed Section.

POPLAR/COTTONWOOD TREES GROWN FOR PULP-BROADLEAF WEED CONTROL – AMINE 4 may be applied through wick applicators or conventional ground sprayers (excluding irrigation systems). Do not allow AMINE 4 to contact leaves of the tree. Use 1/2 pint to 3 pints per acre prior to planting or after planting. The maximum seasonal application rate is 8 pints of product per acre per application site.

Two quarts or more of WILBUR-ELLIS R-11® SPREADER-ACTIVATOR per 100 gallons of spray solution may be added to improve herbicide performance.

ACCORD® may be mixed with AMINE 4 to increase weed control.

STORAGE AND DISPOSAL

Pesticide Storage: Always store pesticides in a secured warehouse or storage building. Do not store near seeds, fertilizers, insecticides or fungicides. Store at temperatures above 32°F. If allowed to freeze, rewarm to 40°F, remix thoroughly before using. This does not alter this product. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use. Do not stack cardboard cases more than two pallets high. Do not contaminate water, food or feed by storage or disposal.

Pesticide Disposal: Pesticide wastes are toxic. If container is damaged or if pesticide has leaked, contain all spillage. Absorb and clean up all spilled material with granules or sand. Place in a closed labeled container for proper disposal. Improper disposal of excess pesticide, spray mixtures, or rinsate is a violation of Federal law and may contaminate ground water. If these wastes cannot be disposed of by use according to label instructions, contact your state Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or other procedures approved by State and Local authorities.

Conditions of Sale and Limitation of Warranty and Liability:

The Directions for Use of the product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of many different factors including, without limitation, manner of use or application, weather, combination with other products, or crop conditions. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Manufacturer and Seller harmless from any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label. EXCEPT FOR THIS WARRANTY, THE PRODUCT IS FURNISHED "AS-IS", AND NEITHER SELLER NOR MANUFACTURER MAKES ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE SELECTION, PURCHASE OR USE OF THIS PRODUCT; SELLER AND MANUFACTURER SPECIFICALLY DISCLAIM ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Buyer and User accept all risks arising from any use of this product, including without limitation uses contrary to label instructions, under abnormal conditions, or under conditions not reasonably foreseeable to (or beyond the control of) Seller or Manufacturer.

To the extent permitted by law, neither Manufacturer nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE BUYER OR USER, AND THE EXCLUSIVE LIABILITY OF MANUFACTURER AND SELLER, FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT, OR, AT THE ELECTION OF MANUFACTURER OR SELLER, THE REPLACEMENT OF THE PRODUCT.

These Conditions of Sale and Limitation of Warranty and Liability shall be interpreted in accordance with the laws of the State of California, excluding its conflicts of laws rules, and may not be amended by any oral or written agreement.

WILBUR-ELLIS Logo®, IDEAS TO GROW WITH®, R-11®, and IN-PLACE® are registered trademarks of WILBUR-ELLIS Company.

NEUTRAL CLEAN™ is an applied trademark of WILBUR-ELLIS Company.

GARLON® is a trademark of Dow Chemical.

ACCORD® is a registered trademark of Monsanto Co.

F-605

In Case of Emergency, Call Chemtrec: (800) 424-9300



P.O. Box 16458 – Fresno, CA 93755



PO BOX 16458 • FRESNO CA 93755

MATERIAL SAFETY DATA SHEET

PRODUCT/TRADE NAME:

AMINE 4

I. NAME

PRODUCT/TRADE NAME: AMINE 4
EPA REGISTRATION #: 2935-512 & 228-145-2935 & 42750-19-2935
CHEMICAL NAME/Common Name:
Dimethylamine Salt of 2,4-Dichlorophenoxy Acetic Acid/2,4-D

II. HAZARDOUS INGREDIENTS

| | CAS# | OSHA PEL | ACGIH TLV |
|-------|-----------|----------|-----------|
| 2,4-D | 2008-39-1 | 10 mg/m3 | 10 mg/m3 |

III. PHYSICAL DATA

SPECIFIC GRAVITY (H2O = 1): 1.16
MELTING POINT: NA
VAPOR DENSITY (AIR = 1): NE
% VOLATILES BY VOL.: NA
ODOR: Phenolic
APPEARANCE: Amber Liquid
FLASH POINT/METHOD: >200 Deg. F
VAPOR PRESSURE (mmHg): NE
SOLUBILITY IN H2O: Soluble

IV. FIRE & EXPLOSION HAZARD

EXTINGUISHING MEDIA: Water Fog Foam Alcohol Foam
 CO2 Dry Chemical Other
FIRE FIGHTING PRECAUTIONS & HAZARDS:
Fight fire upwind. Wear positive pressure self-contained breathing apparatus and full protective clothing. Do not breathe smoke or spray mist. Avoid fallout and runoff. Dike to prevent entering drains, sewers, or water courses. Evacuate people downwind from fire.

V. CARCINOGEN STATUS

OSHA NTP IARC No Listing Type : 2,4-D

VI. REACTIVITY

Stable HAZARDOUS POLYMERIZATION
 Unstable May Occur Will Not Occur
AVOID: Oxidizers, Acids and bases
HAZARDOUS DECOMPOSITION PRODUCTS: COx, NOx, HC1

VII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE OF SPILL: Wear appropriate respiratory protective equipment. Absorb with inert material. Vacuum or sweep material up and place in an approved disposal container.
DECONTAMINATION: Treat spill area with detergent and water. Absorb with inert material. Place in disposal container and repeat procedure as necessary until area is clean.
ENVIRONMENTAL HAZARDS: Dike to prevent entering drains, sewers or water courses.
DISPOSAL: Place in DOT-approved container and dispose of in an EPA Class I disposal site.

VIII. HEALTH PRECAUTION DATA

INGESTION: Acute oral LD50 (rate) 625 mg/kg (RTECS*). Do not ingest. Wash before eating, drinking or smoking. Do not store near food or feed.
INHALATION: PEL/TLV 10 mg/m3. Avoid inhalation of vapors or spray mist. Use appropriate respiratory protection for exposures above the PEL/TLV.
SKIN ABSORPTION: Dermal LD50 (rate) 2115 mg/kg (RTECS*). Avoid contact with skin. May cause skin irritation and burn. Wear appropriate personal protective equipment to reduce exposure.
EYE EXPOSURE: Keep out of eyes. May cause corneal injury. Wear appropriate eye protection to reduce exposure. If exposed flush eyes with water for 15 minutes.
EFFECTS OF OVEREXPOSURE: May irritate mouth, throat and gastrointestinal tract. Symptoms of overexposure are chest pain, abdominal pain, diarrhea, muscle twitching, stiffness, sweating and convulsions. Can be fatal. Chronic exposure may cause kidney, liver, blood or testicular damage. Medical conditions involving the above symptoms may be aggravated by exposure.
FIRST AID: In all cases, get prompt medical attention. Give several glasses of

water. Do not induce vomiting. For eye exposure, flush eyes for 15 minutes with water. If inhaled, remove victim to fresh air, and administer CPR if necessary. For skin contact, remove contaminated clothing and shower with soap and water.

IX. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Use NIOSH/MSHA - approved respirator for exposures up to 10 times the PEL/TLV. Positive pressure self-contained breathing apparatus should be used for confined space entry and exposures above 10 times the PEL/TLV.
PERSONAL PROTECTIVE EQUIPMENT: Neoprene or rubber boots, Neoprene or rubber gloves, long-sleeved coveralls, chemical goggles and hat. For manufacture, formulation and application operations, recommend a shower at the end of the work shift.
VENTILATION: Local exhaust ventilation recommended for manufacture and formulation. Store in a well-ventilated area. Allow closed trucks adequate time to ventilate prior to entering.

X. SPECIAL PRECAUTIONS

Keep out of the reach of children. Read and follow all label instructions. Do not store near open flame, sparks or other ignition sources.

XI. REGULATORY DATA

SARA HAZARD CLASS: Acute Chronic Flammable
 Pressure Reactive None
SARA 313: Yes No Chemical: 2,4-D
SARA 302: Yes No Chemical:
TPQ:
CERCLA: Yes No Chemical: 2,4-D
RQ: 100*
RCRA: Yes No
NFPA HAZARD RATING: NFPA HAZARD RATING SCALE:
Health: [2] 0 = Minimal 3 = Serious
Fire: [1] 1 = Slight 4 = Severe
Reactivity: [0] 2 = Moderate
Special: []
HMIS CODES: HMIS HAZARD RATING SCALE:
Health: [2] 0 = Minimal 3 = Serious
Fire: [1] 1 = Slight 4 = Severe
Reactivity: [0] 2 = Moderate

DATE PREPARED: February 6, 1990
REVISED DATE: March 13, 2000

Notice: This information was developed from information on the constituent materials. No warranty is expressed or implied regarding the completeness or continuing accuracy of the information contained herein, and Wilbur-Ellis disclaims all liability for reliance thereon. The user should satisfy himself that he has all current data relevant to his particular use.

*Technical Material NE - Not Established NA - Not Applicable

24 Hour Emergency Phone Number
CHEMTREC: (800) 424-9300



wccomsds\Amine4.PM6

This information is for promotional purposes only. Space considerations may require information to be omitted. Always refer to the actual package for complete label verbiage. This product may not yet be available or approved for sale or use in your area.



WEEDAR® 64

BROADLEAF HERBICIDE

THE 2,4-D AMINE WEED KILLER
TO CONTROL SUSCEPTIBLE BROADLEAF WEEDS IN CEREAL GRAINS, CORN, SORGHUM, RICE, SUGARCANE, SOYBEANS (Preplant only), TURF, NON-CROP AREAS, AND CERTAIN AQUATIC APPLICATIONS.

ACTIVE INGREDIENT:

2,4-Dichlorophenoxyacetic acid, dimethylamine salt* 46.8%

OTHER INGREDIENTS: 53.2%

TOTAL 100.0%

*2,4-Dichlorophenoxyacetic acid equivalent 38.9% by weight or 3.8 pounds per gallon. Isomer specific by AOAC method No. 978.05

KEEP OUT OF REACH OF CHILDREN

DANGER - PELIGRO

PRECAUCION AL USUARIO: 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.)

See Inside Booklet for First Aid and Additional Precautionary Statements

For Chemical Spill, Leak, Fire, Exposure Call CHEMTREC (800) 424-9300.

For Medical Emergencies Only, Call 877-325-1840.

EPA Reg. No. 71368-1

EPA Est. No. 228-IL-1

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER - PELIGRO

Corrosive. Causes irreversible eye damage. Harmful if swallowed. May be fatal if absorbed through the skin. Avoid breathing vapors or spray mist. Do not get in eyes, on skin or on clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some of the 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: coveralls over short-sleeved shirt and short pants, chemical resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride, chemical-resistant footwear plus socks, chemical-resistant headgear for overhead exposure and protective eye wear. A chemical-resistant apron should also be worn when cleaning equipment, mixing or loading.

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. After each day of use, clothing or PPE must not be reused until it has been cleaned.

ENGINEERING CONTROL STATEMENTS

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 (personal protective equipment) may be reduced or modified as specified in the WPS

For containers over 1 gallon but less than 5 gallons, mixers and loaders who do not use a mechanical system (probe and pump) to transfer the contents of this container must wear coveralls or a chemical-resistant apron in addition to the other required PPE.

For containers of 5 gallons or more, a mechanical transfer system (probe and pump) must be used for transferring the contents of the container. If the contents of non-refillable pesticide containers 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.

FIRST AID

| | |
|-------------------------------|--|
| IF IN EYES | <ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice. |
| IF SWALLOWED | <ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person. |
| IF ON SKIN OR CLOTHING | <ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice. |
| IF INHALED | <ul style="list-style-type: none"> • Move the person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice. |

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 1-877-325-1840 for emergency medical treatment information.

NOTE TO PHYSICIAN

This product contains a phenoxy herbicidal chemical. There is no specific antidote. All treatments should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and non-target plants. For terrestrial uses, 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 apply when weather conditions favor drift from treated areas. Do not use the same spray equipment for other purposes unless thoroughly cleaned.

Do not contaminate water used for irrigation or domestic purposes (except as specifically recommended on this label) especially in areas where grapes, cotton, tomatoes or other susceptible plants are grown.

Do not treat irrigation ditches in areas where water will be used to overhead (sprinkler) irrigate susceptible crops especially grapes, tomatoes, tobacco, and cotton.

Do not apply WEEDAR® 64 Broadleaf Herbicide directly to, or permit to drift onto cotton, okra, grapes, tomatoes, fruit trees, vegetables, flowers or other desirable crop or ornamental plants which are susceptible to 2,4-D herbicide. Do not apply near susceptible plants since very small quantities of the 2,4-D will cause severe injury during the growing or dormant periods. Crops contacted by WEEDAR® 64 sprays or spray drift may be killed or suffer significant stand loss with extensive quality and yield reduction.

Do not apply when a temperature air inversion exists. Such a condition is characterized by little or no air movement and an increase in air temperature with an increase in height. In humid regions, a fog or mist may form. An inversion may be detected by producing a smoke column and checking for a layering effect. If questions exist pertaining to the existence of an inversion, consult with local weather services before making an application.

Use coarse sprays to minimize drift. Do not apply with hollow cone-type insecticide or other nozzles that produce fine spray droplets. Drift from aerial or ground application may be reduced by: (1) applying as near to the target as possible in order to obtain coverage; (2) by increasing the volume of spray mix per acre; (3) by decreasing the pounds of pressure at the nozzle tips; and (4) by using nozzles which produce a coarse spray pattern; (5) by not applying when wind is blowing toward susceptible crops or valuable plants.

MIXING AND LOADING: Most cases of ground water 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 ground water supplies. Use of closed systems for mixing or 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 ground water contamination.

DIRECTIONS FOR USE

It Is A Violation Of Federal Law To Use This Product In A Manner Inconsistent With Its Labeling.

Read entire label before using this product.

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 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 over short-sleeved shirt and short pants, chemical-resistant gloves made of any waterproof material, chemical-resistant footwear plus socks, chemical-resistant headgear for overhead exposure and 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 (WPS) 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.

For ornamental turf uses (golf courses, cemeteries, parks and other turf grass areas), do not enter treatment areas until sprays have dried. Do not allow people (other than applicator) or pets on treatment area during application.

GENERAL PRECAUTIONS AND RESTRICTIONS

Do not apply WEEDAR® 64 through any type of irrigation system. Do not use in or near a greenhouse.

GENERAL INFORMATION

INJURY TO CROPS FROM THIS HERBICIDE MAY OCCUR. IF YOU ARE NOT PREPARED TO ACCEPT SOME DEGREE OF CROP INJURY DO NOT USE THIS PRODUCT.

Crop varieties vary in response to 2,4-D and some are easily injured. Apply WEEDAR® 64 only to varieties known to be tolerant to 2,4-D. If you are uncertain concerning tolerant varieties or local use situations that may affect crop tolerance to 2,4-D, consult your seed company, State Agricultural Extension Service or qualified crop consultant for advice.

Be sure that use of this product conforms to all applicable laws, rules and regulations. Certain states have restrictions pertaining to application distances from susceptible crops. The applicator should become familiar with these laws, rules or regulations and follow them exactly.

MIXING INSTRUCTIONS

Add about one-half the water to the mixing tank, then add WEEDAR® 64 with agitation and finally the rest of water with continuing agitation.

NOTE: Adding oil, wetting agent, or other surfactants to the spray may increase effectiveness on weeds but also may reduce selectivity to crops, resulting in crop damage.

COMPATIBILITY

If WEEDAR® 64 is to be tank mixed with fertilizers or with other pesticides, compatibility should be tested prior to mixing. To test for compatibility, use a small container and mix a small amount (0.5 to 1 quart) of spray, combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. Indications of incompatibility usually will appear within 5 to 15 minutes after mixing.

Read and follow all directions and precautions on this label and on the labels of any products for which a tank mixture is being considered.

APPLICATION PROCEDURES

Apply by air or ground equipment in sufficient gallonage to obtain adequate coverage, except as otherwise directed on this label.

Use 2 or more gallons of water per acre for aerial application and 10 or more gallons of water per acre for ground application.

SMALL QUANTITY DILUTION TABLE

To spray small areas use the following dilution table.

| If Dosage on Label shows Following Rate Per Acre: | Use this Amount for each Gallon of Water Per 1,000 Square Feet |
|---|--|
| 2 pints (1 quart) | 3/4 ounces (4 teaspoons) |
| 3 pints (1-1/2 quarts) | 1-1/4 ounces (2-1/2 Tablespoons) |
| 4 pints (2 quarts) | 1-1/2 ounces (3 Tablespoons) |
| 6 pints (3 quarts) | 2-1/4 ounces (4-1/2 Tablespoons) |

GENERAL WEED LIST

Annual and Biennial Weeds

| | | | |
|-------------------------|------------------------------------|---------------------------------|---------------|
| Beggarticks* | Knotweed* | Prickly lettuce | Velches |
| Bullthistle | Mallow* (venice or little) | Ragweed (common or giant) | Wild carrot |
| Coffeeweed | Marshelder | Rough fleabane | Wild lettuce |
| Common cocklebur | Morningglory (common, ivy, woolly) | Russian thistle* | Wild parsnips |
| Common burdock | Musk thistle* (**) | Salsify (western or common) | |
| Common evening primrose | Mustards (except blue mustard) | Smartweeds* (annual or species) | |
| Common lambsquarters | Pepperweeds* | Sowthistles (annual or spiny) | |
| Hairy galinsoga | Pigweeds** (Amaranthus spp.) | Sunflower | |
| Jimsonweed | | Vervains* | |

Perennial Weeds

| | | | |
|------------------------------------|---------------------|-------------------------------|------------------------|
| Bindweed* (hedge, field, European) | Docks* | Many flowered aster | Sowthistle (perennial) |
| Blue lettuce | Dogbanes* | Nettles* (including stinging) | Vervains* |
| Canada thistle* | Goldenrod* | Orange hawkweed* | Wild garlic* |
| Catnip | Ground Ivy* | Plantains | Wild onion* |
| Chicory | Healall | | |
| Dandelion | Hoary cress* | | |
| | Ironweed* | | |
| | Jerusalem artichoke | | |

*These species may require repeated applications and/or use of the higher rate recommended on this product label even under ideal conditions for application.

**Control of pigweeds in the High Plains area of Texas and Oklahoma may not be satisfactory with this product.

***Not registered for control of musk thistle in California.

SPECIFIC USE DIRECTIONS

APPLES, PEARS, STONE FRUIT AND NUT ORCHARDS

| WEEDS IN CROPS | AMOUNT OF WEEDAR® 64 PER ACRE | DIRECTIONS |
|------------------------|-------------------------------|---|
| Annual broadleaf weeds | 3 pints | For control of weeds on the orchard floor, apply using coarse sprays and low pressure in sufficient volume of water to obtain thorough wetting of weeds. Treat when weeds are small and actively growing. Do not use on light, sandy soil. DO NOT USE IN CALIFORNIA. |

RESTRICTIONS AND LIMITATIONS FOR USE IN APPLES, PEARS, STONE FRUIT AND NUT ORCHARDS

- Do not apply to bare ground as injury may result.
- Do not apply immediately before irrigation and withhold irrigation for 2 days before and for 3 days after treatment.
- Do not allow spray to drift onto or contact foliage, fruit, stems, trunks of trees or exposed roots as injury may result.
- Do not apply to newly established or young orchards. Trees must be at least 1 year old and in vigorous condition.
- Do not apply during bloom.
- Do not graze or feed cover crops from treated orchards.
- Do not make more than 2 applications per year.
- Do not harvest stone fruit within 40 days of application.
- Do not harvest nuts within 60 days of application.
- Do not harvest apples or pears within 14 days of application.
- For apples and pears, allow at least 75 days between applications.

CEREAL GRAINS

Barley, Millet, Oats, Rye, Triticale, Wheat

| WEEDS IN CROP | AMOUNT OF WEEDAR® 64 PER ACRE | DIRECTIONS |
|--|-------------------------------|--|
| Not underseeded with legumes Postemergence Annual and biennial broadleaf weeds | 1/2 to 2 pints* | Apply after grain is fully tilled (usually about 4 to 8 inches high) but not forming joints in the stem. Do not spray grain in the boot to dough stage. |
| Perennial broadleaf weeds | 1 to 2 pints* | |
| Underseeded with legumes | 1/4 to 1/2 pint* | Apply after grain is 8 inches tall. Do not spray grain in boot to dough stage. Do not spray alfalfa or sweet clover unless the infestation is severe and injury to these legumes can be tolerated. |
| Emergency weed control in Triticale, Wheat, Perennial broadleaf weeds | 3 pints | Apply when weeds are approaching bud stage, after the grain dough stage. Do not spray during the boot to dough stage. The 3 pints per acre application can produce injury to wheat. Balance the severity of your weed problem against the possibility of crop damage. Where perennial weeds are scattered, spot treatment is suggested to minimize the extent of crop injury. |

*Use the lower rate if small annual and biennial weeds are the major problem. Use the higher rate if perennial weeds or annual and biennial weeds are present which are in the hard-to-kill categories as determined by local experience. The higher rates increase the risk of grain injury and should be used only where the weed control problem justifies the grain damage risk. Do not apply WEEDAR® 64 to grain in the seedling stage.

RESTRICTIONS AND LIMITATIONS FOR USE ON CEREAL GRAINS

- For aerial application on grain, apply WEEDAR® 64 in 3 to 10 gallons of water per acre.
- For ground application a minimum of 10 to 15 gallons of water per acre is recommended for proper spray coverage.
- Do not permit dairy animals or meat animals being finished for slaughter to forage treated grain fields within 2 weeks after treatment.
- Do not feed treated straw to livestock if an emergency treatment as described above is applied.

CORN AND SORGHUM

| WEEDS IN CROP | AMOUNT OF WEEDAR® 64 PER ACRE | DIRECTIONS |
|--------------------------------------|-------------------------------|--|
| CORN (Field and Sweet) Preplant | 1 to 2 pints | To control emerged broadleaf weed seedlings or existing cover crops prior to planting corn, apply 7 to 14 days before planting. Do not use on light, sandy soil, or where soil moisture is inadequate for normal weed growth. Use high rate for less susceptible weeds or cover crops such as alfalfa. |
| Preemergence | 2 to 3 pints | Apply 3 to 5 days after planting but before corn emerges. Do not use on light, sandy soils or where soil moisture is low. |
| Postemergence Annual broadleaf weeds | 1/2 to 1 pint | Apply when weeds are small and corn is less than 8 inches tall (to top of canopy). When corn is over 8 inches tall, use drop nozzles and keep spray off foliage. Treat perennial weeds when they are in the bud to bloom stage. Do not spray corn in the tassel to dough stage. Corn treated with 2,4-D may become temporarily brittle. Winds or cultivation may cause stalk breakage during the period of time when the corn is brittle. |
| Perennial broadleaf weeds | 1 to 1-1/2 pints | |
| Grain Sorghum (Milo) Postemergence | 1 pint | Apply when sorghum is 6 to 15 inches tall. If sorghum is taller than 8 inches to top of the canopy, use drop nozzles and keep spray off the foliage. Do not treat during the boot, flowering or dough stage. |

RESTRICTIONS AND LIMITATIONS FOR USE ON CORN AND SORGHUM

- Do not forage or feed fodder for 7 days following application.

HOPS (Except CA)

| WEEDS IN CROP | AMOUNT OF WEEDAR® 64 PER ACRE | DIRECTIONS |
|------------------------|-------------------------------|--|
| Annual broadleaf weeds | 1 pint | Make directed applications to the row middles. Make up to 3 applications at 30-day intervals with the last application before harvest. |

RESTRICTIONS AND LIMITATIONS FOR HOPS:

- Limited to 3 applications per crop cycle.
- Maximum of 1 pint product/acre (0.5 lbs. ae/A) per application.
- Maximum of 3 pints product/acre (1.5 lbs. ae/A) per crop cycle.
- Minimum of 30 days between applications. Observe the preharvest interval (PHI) of 28 days.

RICE

| WEEDS IN CROP | AMOUNT OF WEEDAR® 64 PER ACRE | DIRECTIONS |
|---------------|-------------------------------|--|
| Preplant | 1 to 2 pints | Apply four or more weeks prior to planting rice. DO NOT USE IN CALIFORNIA. |
| Postemergence | 1 to 2-1/2 pints | Apply when rice is in the late tillering stage of development at the time of first joint development. Do not apply after panicle initiation, after rice internodes exceed one-half inch, at early seedling, early panicle, boot or heading stages. Consult local university or Agricultural Extension Service specialists for more specific information on rates and timing of application. DO NOT USE IN CALIFORNIA. |

RESTRICTIONS AND LIMITATIONS FOR USE IN RICE

- Do not apply more than a total of 2-1/2 pints of WEEDAR® 64 to rice per growing season.
- Do not use on rice in California without an approved Supplemental Label allowing the use.

WILD RICE (For Use in Minnesota Only)

| WEEDS IN CROP | AMOUNT OF WEEDAR® 64 PER ACRE | DIRECTIONS |
|----------------------|-------------------------------|--|
| Common waterplantain | 1/2 pint | Broadcast in 4 to 10 gallons total spray volume. Apply after waterplantain has emerged from the water and when wild rice is in the 1 to 2 aerial leaf to early tillering stage. Do not spray after wild rice has reached the boot stage. |

RESTRICTIONS AND LIMITATIONS FOR WILD RICE

- For use only on wild rice grown in commercial paddies.
- Do not apply to wild rice growing in lakes, rivers or streams.
- Water that is drained out of wild rice paddies is not to be used to irrigate other crops. In order to protect federally listed endangered or threatened species, the Minnesota Department of Agriculture has a program to pre-notify landowners where pesticide applications may affect federally listed endangered or threatened species.
- Limited to 1 application per crop cycle.
- Do not apply more than 1/2 pint/acre of 2,4-D Amine 4 (0.25 lbs. ae/A) per use season. Observe the preharvest interval (PHI) of 60 days.

SOYBEANS* (Preplant Only)

| WEEDS IN CROP | AMOUNT OF WEEDAR® 64 PER ACRE | DIRECTIONS |
|---------------|-------------------------------|--|
| Postemergence | 3/4 to 1 pint | Apply not less than 15 days prior to planting soybeans, when weeds are small and actively growing. Use the higher rate on larger weeds and when perennials are present. |
| | >1 to 2 pints | Apply not less than 30 days prior to planting soybeans, when weeds are actively growing. |
| | | In addition to those weeds found on the GENERAL WEED LIST, WEEDAR® 64 will suppress or control the following broadleaf weeds frequently encountered in reduced tillage soybean production systems: alfalfa*, bullhettle, smallflowered bit-tercress, Carolina geranium, small-flowered buttercup, common and rough cinquefoil, red clover*, horse-weed or mare's tail, mousetail, wild mustard, field pennycress, cutleaf evening primrose, common purslane, speedwell, velvetleaf, and Virginia coppersleaf. * These weeds are only partially controlled. Apply no more than 2.0 pints of WEEDAR® 64 in one season prior to planting soybeans. After applying, plant soybean seed as deep as practical or at least 1-1/2 to 2 inches deep. Adjust the planter press wheel, if necessary, to ensure that planted seed is completely covered. If desired, WEEDAR® 64 may be applied pre-plant to soybeans in tank mixtures with other herbicides such as Poast®, Poast Plus®, Roundup®, Roundup D-Pak®, Honcho®, Gramoxone Extra®, Prowl®, Pursuit Plus®, Scepter®, Scepter70DG, Squadron® and others that are registered for pre-plant soybean use. NOTE: Unacceptable injury to soybeans planted in fields previously treated with WEEDAR® 64 may occur and the extent of injury will depend on weather and agronomic factors such as the amount of weed vegetation and previous crop residue present that may be in effect between the time of application and the emergence of the soybean plant. |

RESTRICTIONS AND LIMITATIONS FOR USE IN SOYBEANS (PREPLANT)

- Do not apply WEEDAR® 64 when weather conditions such as temperature, air inversions, or wind favor drift from treated areas to susceptible plants.
- Apply no more than 2.0 pints of WEEDAR® 64 per acre in one season prior to planting soybeans.

- Only one application per growing season, regardless of the application rate used, is allowed.
- Do not apply WEEDAR® 64 prior to planting soybeans if you are not prepared to accept the results of soybean injury including possible loss of stand and yield.
- Do not replant fields treated with WEEDAR® 64 in the same growing season with crops other than those labeled for 2,4-D pre-plant use.
- Do not mow or cultivate weeds prior to treating with WEEDAR® 64 as poor control may result.
- Do not cut for feed treated hay, forage, or fodder or graze treated soybeans to livestock.
- Do not apply WEEDAR® 64 preplant to soybeans in fields having a coarse-textured soil where the percent organic matter is <1.0%.
- Only one application of WEEDAR® 64 may be made prior to planting soybeans per growing season.
- Do not feed treated hay, forage, or fodder. Livestock should be restricted from feeding/grazing of treated cover crops.
- *Not currently registered for use in California.

SUGARCANE

| WEEDS IN CROP | AMOUNT OF WEEDAR® 64 PER ACRE | DIRECTIONS |
|---------------|-------------------------------|---|
| Preemergence | 4 pints | Apply before canes appear for control of emerged broadleaf weeds. DO NOT USE IN CALIFORNIA. |
| Postemergence | 1-1/2 to 4 pints | Apply after cane emerges and through lay-by. DO NOT USE IN CALIFORNIA. |

RESTRICTIONS AND LIMITATIONS FOR USE IN SUGARCANE

- Do not apply more than a total of 8 pints of WEEDAR® 64 to sugarcane per acre per growing season.

CONSERVATION RESERVE PROGRAM AREAS

| WEEDS | AMOUNT OF WEEDAR® 64 PER ACRE | DIRECTIONS |
|---|-------------------------------|---|
| Annual broadleaf weeds in young grasses | 1/2 to 1 pint | Apply to actively growing annual broadleaf weeds. Use 1/2 to 1 pint when weeds are small; use higher rates on older weeds. Do not apply to young grasses with fewer than 6 leaves or prior to tillering, as excessive injury may result. Do not apply more than 1 pint until grasses are well established as excessive injury may result. |
| In established grasses | 1/2 to 2 pints | |
| Biennial and perennial broadleaf weeds in established grasses | 2 to 4 pints | Treat when biennial weeds are in the seedling to rosette stage and before flower stalks become apparent. Treat perennial weeds in the bud to bloom stage. Apply to actively growing weeds. |

RESTRICTIONS AND LIMITATIONS FOR USE ON CONSERVATION RESERVE PROGRAM AREAS

- Use at least 2 gallons of water per acre by air and 5 gallons of water per acre by ground.
- Do not harvest or graze treated Conservation Reserve Program areas.
- Do not apply to grasses in the boot to dough stage if grass seed production is desired.

ESTABLISHED GRASS PASTURES, RANGELAND, AND CONSERVATION RESERVE PROGRAM AREAS

| WEEDS | AMOUNT OF WEEDAR® 64 PER ACRE | DIRECTIONS |
|--|-------------------------------|---|
| Annual broadleaf weeds | 2 pints | Apply when weeds are small and actively growing and prior to bud stage. Spray while musk thistles or other biennial species are in the seedling to rosette stage and before flower stalks become apparent. The lower rate can be used in the spring during rosette stage. Use the highest rate in the fall or after flower stalks have developed. Do not apply to newly seeded areas until grass is well established. Do not apply to grass in the early boot through milk stage if grass seed production is desired. Bentgrass and legumes may be injured by this treatment. |
| Biennial and perennial broadleaf weeds | 2 to 4 pints | |

GRASS CUT FOR HAY

| WEEDS | AMOUNT OF WEEDAR® 64 PER ACRE | DIRECTIONS |
|--|-------------------------------|---|
| Annual broadleaf weeds | 2 pints | Apply when weeds are small and actively growing and prior to bud stage. Spray while musk thistles or other biennial species are in the seedling to rosette stage and before flower stalks become apparent. The lower rate can be used in the spring during rosette stage. Use the highest rate in the fall or after flower stalks have developed. Do not apply to newly seeded areas until grass is well established. Do not apply to grass in the early boot through milk stage if grass seed production is desired. Bentgrass and legumes may be injured by this treatment. |
| Biennial and perennial broadleaf weeds | 2 to 4 pints | |

RESTRICTIONS AND LIMITATIONS FOR USE IN PASTURES, RANGELANDS AND GRASS CUT FOR HAY

- Do not graze (dairy) cattle in treated areas for 7 days after application.
- Do not cut forage for hay within 7 days of application.
- Do not permit dairy animals or meat animals being finished for slaughter to forage treated fields within 3 days of slaughter.

FALLOWLAND AND CROP STUBBLE

| WEEDS | AMOUNT OF WEEDAR® 64 PER ACRE | DIRECTIONS |
|---------------------------------------|-------------------------------|--|
| Annual broadleaf weeds | 1 to 2 pints | Use the lower rate when weeds are small (2 to 3 inches tall) and actively growing. Use the higher rate on older and drought-stressed plants. |
| Biennial broadleaf weeds | 2 to 4 pints | Spray when musk thistles or other biennial species are in the seedling to rosette stage and before flower stalks become apparent. The lower rate can be used in the spring during rosette stage. Use the highest rate in the fall or after flower stalks have developed. |
| Perennial broadleaf weeds | 2 to 6 pints | Spray weed in the bud to bloom stage or while in good vegetative growth. Do not disturb treated areas for at least 2 weeks after treatment, or until tops are dead. |
| Wild garlic and onion in crop stubble | 4 to 6 pints | Apply to new regrowth of wild garlic or onion which occurs in the fall following harvest of small grains, corn or grain sorghum. |

RESTRICTIONS AND LIMITATIONS FOR USE IN FALLOWLAND AND CROP STUBBLE

- Do not plant any crop for 3 months after treatment or until chemical has disappeared from the soil.

GRASSES FOR SEED PRODUCTION

| WEEDS | AMOUNT OF WEEDAR® 64 PER ACRE | DIRECTIONS |
|--------------------------------------|-------------------------------|--|
| Annual and perennial broadleaf weeds | 2 to 4 pints | Apply to established stands in spring from tiller to early boot stage. Do not spray in boot stage. New spring seedlings may be treated with the lower rate after grass seedlings have at least 5 leaves. Perennial weed regrowth may be treated in the fall. |

RESTRICTIONS AND LIMITATIONS FOR USE ON GRASSES FOR SEED PRODUCTION

- Do not graze dairy animals or cut forage for hay within 7 days of application.

NON-CROPLAND

Such as Fencerows, Hedgerows, Roadsides, Drainage Ditches, Rights-of-Way, Utility Power Lines, Railroads and Other Non-Crop Areas

| WEEDS | AMOUNT OF WEEDAR® 64 PER ACRE | DIRECTIONS |
|--|-------------------------------|--|
| Annual broadleaf weeds | 2 to 4 pints | Treat when weeds are young and actively growing. Perennial weeds should be near the bud stage, but not flowering at application. Do not use on susceptible southern grasses such as St. Augustine. Do not apply to newly seeded areas until grass is well established. Bentgrass, clover, legumes and dichondria may be injured by this treatment. |
| Biennial and perennial broadleaf weeds | 4 pints | |

RESTRICTIONS AND LIMITATIONS FOR USE ON NON-CROPLAND

- Do not graze dairy animals for 7 days following application.
- Use sufficient gallonage for thorough and uniform coverage.

SPOT TREATMENT IN NON-CROP AREAS

Mix 2 to 3 fluid ounces of WEEDAR® 64 in 3 gallons of water. Wet all weeds and stems thoroughly. For best results, treat when weeds are actively growing.

ORNAMENTAL TURF AREAS

Golf Courses, Cemeteries, Parks, Turfgrass, and Other Grass Areas

| WEEDS | AMOUNT OF WEEDAR® 64 PER ACRE | DIRECTIONS |
|--|-------------------------------|--|
| Annual broadleaf weeds | 2 to 4 pints | Treat when weeds are young and actively growing. Perennial weeds should be near the bud stage, but not flowering at application. Do not use on susceptible southern grasses such as St. Augustine. Do not apply to newly seeded areas until grass is well established. Bentgrass, clover, legumes and dichondria may be injured by this treatment. |
| Biennial and perennial broadleaf weeds | 4 pints | |

RESTRICTIONS AND LIMITATIONS FOR USE ON ORNAMENTAL TURF AREAS

- Use sufficient gallonage for thorough and uniform coverage.
- Do not apply more than 2 broadcast applications per year per treatment site. This does not exclude spot treatments.
- Do not allow people (other than applicator) or pets on treatment area during application.
- Do not enter treatment areas until sprays have dried.

POPLAR/COTTONWOOD TREES GROWN FOR PULP BROADLEAF WEED CONTROL

WEEDAR® 64 may be applied through wick applicators or conventional ground sprayers. (Excluding irrigation systems) Do not allow WEEDAR® 64 to contact leaves or green bark of the tree. Use 1/2 pint to 3 pints per acre in enough water to provide uniform coverage prior to or after planting of Poplar/Cottonwood trees. Application during warm weather is preferred. Apply when weeds are actively growing, preferably before bud stage. Repeat treatment may be necessary for less susceptible weeds; re-apply as needed. Accord® may be mixed with WEEDAR® 64 to increase weed control. Follow both labels to determine correct rates. Two quarts or more of a spreader - activator per 100 gallons of spray solution may be added to improve herbicide performance.

FORESTRY - TREE INJECTION

For Controlling Species Such as Alder, Aspen, Birch, Blackgum, Cherry, Oak, Sweetgum, and Tulip Poplar

Make injections as near to the root collar as possible, using one injection per inch of trunk dbh (4-1/2 feet). For resistant species such as hickory, injections should overlap. For best results, injections should be made during the growing season, May 15th through October 15th.

For Dilute Injection

Mix 1 gallon of WEEDAR® 64 in 19 gallons of water for dilute injections.

For Concentrate Injections

Use 1 to 2 ml of concentrate WEEDAR® 64 per injection. The injection bit must penetrate the inner bark.

WEEDS AND BRUSH ON IRRIGATION CANAL DITCHBANKS

(Seventeen Western States: Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, New Mexico, Nevada, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming)

For Control of Annual and Perennial Broadleaf Weeds

Apply 1 quart of WEEDAR® 64 per acre in enough water to wet all parts of the brush foliage, stem and bark. This may require 20 to 100 gallons of water per acre. Treat when weeds are young and actively growing before the bud or early bloom stage. For harder-to-control weeds, a repeat spray after 3 to 4 weeks using the same rates may be needed for maximum results. Apply no more than two treatments per season.

For Woody Brush and Patches of Perennial Broadleaf Weeds

Mix 1 gallon of WEEDAR® 64 per acre in enough water to wet all parts of the brush foliage, stem and bark. This may require up to 150 gallons of water per acre. Wet foliage thoroughly using about 1 gallon of solution per square rod.

This product will either kill, control or suppress the weeds listed in the label booklet for this product. Some of these species may require repeat spot applications even under ideal conditions.

* Maximum Seasonal Application Rate to non-crop sites is 4 pounds 2,4-D Acid equivalent per acre per application site.

Spraying Instructions

Apply with low pressure (10 to 40 psi) power spray equipment mounted on a truck, tractor, or boat. Apply while traveling upstream to avoid accidental concentration of chemical into water. Spray when the air is fairly calm, 5 mph or less. Do not use on small canals (less than 10 cfs) where water will be used for drinking purposes.

Boom spraying onto water surface must be held to a minimum and no cross-stream spraying to opposite banks should be permitted. When spraying shoreline weeds, allow no more than 2 foot overspray onto water with an average of less than 1 foot overspray to prevent introduction of greater than negligible amounts of chemical into the water.

RESTRICTIONS AND LIMITATIONS FOR USE ON IRRIGATION CANAL DITCHBANKS

Do not allow dairy animals to graze on treated areas for at least 7 days after spraying.

Water within treated banks should not be fished.

AQUATIC WEED CONTROL

For Use in Ponds, Lakes, Reservoirs, Marshes, Bayous, Drainage Ditches, Canals, Rivers and Streams that are Quiescent or Slow Moving.

NOTICE TO APPLICATORS

State and Local Coordination

Before application, coordination and approval of local and state authorities may be required, either by letter of agreement or issuance of special permits for such use.

Fish Toxicity - Oxygen Ratio: Fish breathe oxygen in the water and a water - oxygen ratio must be maintained. Decaying weeds use up oxygen. To avoid fish kill from decaying plant material do not treat more than one half the lake or pond at one time. For large bodies of weed infested waters leave buffer strips of at least 100 feet wide and delay treatment of these strips for 4 to 5 weeks or until the dead vegetation has decomposed.

Wind Velocity - Ground or Surface Application: Do not apply when wind speeds are at or above 10 mph. **Air Application:** Do not apply when wind speeds are at or above 5 mph. The restrictions do not apply to subsurface applications used in weed control programs.

Irrigation: Delay the use of treated waters for irrigation for three weeks after treatment unless an approved assay shows that the water does not contain more than 0.1 ppm 2,4-D acid. Do not treat irrigation ditches in areas where water will be used to overhead sprinkler irrigate susceptible crops especially grapes, tomatoes and cotton.

Potable Water: Delay the use of treated water for domestic purposes for a period of three weeks or until such time as an approved assay shows that the water contains no more than 0.1 ppm 2,4-D acid.

WATER HYACINTH (*Eichornia crasipe*)- Directions For Use

WEEDAR® 64 will control water hyacinth with surface and air applications.

Amounts to Use: 2 to 4 quarts (4 lb. acid equivalent per gallon) per acre. **Spray the weed mass only.** Use 4 quarts when plants are matured or when the weed mass is dense.

When To Apply: Spray when water hyacinth plants are actively growing. Repeat as necessary to kill regrowth and hyacinth plants missed in the previous operation.

How To Use - Surface Application: Use power sprayers operated with a boom or spray gun mounted on a boat, tractor or truck. Thorough wetting of foliage is essential for maximum control. Use 100 to 400 gal. per acre of spray mixture. Special precautions such as the use of low pressure, large nozzles and thickening agents should be taken to avoid spray drift in areas of sensitive crops. For DIRECTA-SPRA™ operation use WEEDAR® 64 with 1 pint of drift control agent in 50 to 100 gallons of water. For other applications, follow the drift control agent label for mixing directions.

Air Application: Use drift control spray equipment or thickening agents mixed into the spray solution. Apply 1.0 gallon per acre of WEEDAR® 64 through standard boom systems with a minimum of 5 gallons of spray mix per acre. For MICROFOIL® drift control spray systems, apply WEEDAR® 64 in 12 to 15 gallons spray mix per acre.

| 2,4-D Acid Equivalent | 1/2 pound | 1 pound | 2 pounds | 3 pounds | 4 pounds |
|-----------------------|-----------|---------|----------|----------|----------|
| WEEDAR® 64 | 1 pint | 2 pints | 2 quarts | 3 quarts | 4 quarts |

WATER MILFOIL (*Myriophyllum spicatum*)- Directions For Use

For Eurasian Water Milfoil in programs conducted by the Tennessee Valley Authority in dams and reservoirs of the TVA system.

WEEDAR® 64 will control water milfoil with surface, subsurface and air applications.

How To Use: To control water milfoil when less than 5 gallons of concentrate per acre is recommended, dilute the concentrate with water to apply a minimum of 5 gallons of spray mix per acre. Do not treat within 1/2 mile of potable water intakes. Shoreline areas should be treated by sub-surface injection applied by boat to avoid aerial drift. Do not apply when weather conditions favor drift from target area. Do not contaminate water by cleaning of equipment washwaters.

Open Water Areas: To reduce contamination and prevent undue exposure to fish and other aquatic organisms, do not treat water areas that are not infested with aquatic weeds.

Amounts To Use: Apply 2.5 to 10 gallons of WEEDAR® 64 per acre. The higher rate is used in areas of greater water exchange. These areas may require a repeat application.

When To Apply: For best results, apply in spring or early summer when milfoil starts to grow. This timing can be checked by sampling the lake bottom in areas heavily infested with weeds the year before.

Subsurface Application: Apply 2.5 to 10 gallons of WEEDAR® 64 per acre as a concentrate directly into the water through boat mounted distribution systems.

Surface Application: Apply 2.5 to 10 gallons of WEEDAR® 64 per acre in a minimum spray volume of 5 gallons mix per acre.

Air Application: Use drift control spray equipment or thickening agents mixed into the spray solution. Apply 2.5 to 10 gallons per acre of WEEDAR® 64 through standard boom systems with a minimum of 5 gallons of spray mix per acre. For MICROFOIL® drift control spray systems apply WEEDAR® 64 in 12 to 15 gallons spray mix per acre.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in original container in a dry, secured storage area. Keep container tightly closed when not in use. Store at temperature above 32°F. If allowed to freeze, warm to at least 40°F and remix before using. Freezing does not alter this product.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate ground water. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL -- NONRETURNABLE PLASTIC: 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.

RETURNABLE -- REFILLABLE CONTAINERS: After use, return the container to the point of purchase or designated locations. This container must only be refilled with WEEDAR® 64. DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Prior to refilling, inspect thoroughly for damage such as cracks, punctures, abrasions and damaged or worn out threads on closure devices. Do not refill or transport damaged or leaking containers. Check for leaks after refilling and before transportation. If the container is not being refilled, return it to the point of purchase.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR ARISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV083007-S)

NOTICE TO BUYER

Purchase of this material does not confer any rights under patents governing this product or the use thereof in countries outside of the United States.

Weedar is a Registered Trademark of Nufarm, Inc.

Directa-Spray and Microoil are Registered Trademarks of Aventis.

Poast, Poast Plus, Prowl, Pursuit Plus, Scepter and Squadron are Registered Trademarks of BASF Corporation.

Accord and Garlon are Registered Trademarks of Dow AgroSciences.

Honcho, Roundup, and Roundup D-Pak are Registered Trademarks of Monsanto Co.

Gramoxone Extra is a Registered Trademark of Syngenta Crop Protection

MANUFACTURED FOR
NUFARM AMERICAS INC.
BURR RIDGE, IL 60527



150 Harvester Drive • Suite 200
Burr Ridge, IL 60527
Phone: 630.455.2000 • Fax: 630.455.2001
Toll-free 1.800.345.3330
www.nufarm.com/US

SPL 022008.Weedar64
© 2008 Nufarm Americas Inc.



For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night: 1-800-424-9300.
For Medical Emergencies Only, Call 1-877-325-1840.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Weedar[®] 64 Broadleaf Herbicide
Synonyms: 2,4-D DMA; 2,4-Dichlorophenoxyacetic acid, dimethylamine salt
EPA Reg. No.: 71368-1

Company Name: Nufarm, Inc.
 150 Harvester Drive, Suite 200
 Burr Ridge, IL 60527

Date of Issue: November 14, 2006 **Supersedes:** March 12, 2002
Sections Revised: New or updated information all sections

2. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance and Odor: Clear, pale yellow liquid with a phenolic-amine odor.

Warning Statements: Keep out of reach of children. DANGER. Corrosive. Causes irreversible eye damage. Harmful if swallowed. May be fatal if absorbed through the skin. Avoid breathing vapors or spray mist. Do not get in eyes, on skin or on clothing.

Potential Health Effects:

Likely Routes of Exposure: Inhalation, eye and skin contact.

Eye Contact: Causes corneal opacity, irreversible eye damage. Vapors and mist can cause irritation.

Skin Contact: May cause slight transient irritation. Overexposure by skin absorption may cause symptoms similar to those for ingestion.

Ingestion: Harmful if swallowed. May cause nausea, vomiting, abdominal pain, decreased blood pressure, muscle weakness, muscle spasms.

Inhalation: Harmful if inhaled. May cause upper respiratory tract irritation and symptoms similar to those from ingestion.

Medical Conditions Aggravated by Exposure: Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

See Section 11: TOXICOLOGICAL INFORMATION for more information.

Potential Environmental Effects:

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and non-target plants.

See Section 12: ECOLOGICAL INFORMATION for more information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| COMPONENT | CAS NO. | % BY WEIGHT |
|--|-----------|-------------|
| Dimethylamine Salt of 2,4-Dichlorophenoxyacetic Acid | 2008-39-1 | 46.8 |
| Inert Ingredients | | 53.2 |

4. FIRST AID MEASURES

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If on Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Note to Physician: This product contains a phenoxy herbicidal chemical. There is no specific antidote. All treatments should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.

5. FIRE FIGHTING MEASURES

Flash Point: >212°F (100°C) Pensky-Martens closed cup

Autoignition Temperature: Not determined

Flammability Limits: Not determined

Extinguishing Media: Recommended for large fires: foam or water spray. Recommended for small fires: dry chemical or carbon dioxide.

Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: Containers will burst from internal pressure under extreme fire conditions. If water is used to fight fire or cool containers, dike to prevent runoff contamination of municipal sewers and waterways.

Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as hydrogen chloride and oxides of carbon and nitrogen.

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 2 Flammability: 1 Reactivity: 0

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: Pump any free liquid into an appropriate closed container. Collect washings for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other Information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

Handling:

Avoid breathing vapors or spray mist. Do not get in eyes, on skin or on clothing. 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 Personal Protective Equipment (PPE) immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

If the container is over one gallon and less than five gallons, mixers and loaders who do not use a mechanical system (probe and pump) to transfer the contents of this container must wear coveralls or a chemical-resistant apron in addition to the other required PPE. If the container is five gallons or more in capacity, do not open pour product from the container. A mechanical system (such as a probe and pump or spigot) must be used for transferring the contents of the container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal.

Storage:

Store in original container in a dry, secured storage area. Keep container tightly closed when not in use. Store at temperatures above 32°F. If allowed to freeze, warm to at least 40°F and remix before using. Freezing does not alter the product. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear face shield, goggles or safety glasses with front, brow and temple protection. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin, wear coveralls over short-sleeved shirt and short pants, chemical-resistant footwear plus socks and chemical-resistant made of any waterproof material such as polyethylene or polyvinyl chloride. For overhead exposure, wear chemical-resistant headgear. Wear a chemical-resistant apron when cleaning equipment, mixing, or loading. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

| Component | OSHA | | ACGIH | | Unit |
|-------------------|------|------|-------|------|-------------------|
| | TWA | STEL | TWA | STEL | |
| DMA Salt of 2,4-D | 10* | NE | 10* | NE | mg/m ³ |

*Based on adopted limit for 2,4-D

NE = Not Established

| |
|--|
| 9. PHYSICAL AND CHEMICAL PROPERTIES |
|--|

| | | | |
|---|--------------------|-----------------------------|----------------|
| Appearance and Odor: Clear, pale yellow liquid with a phenolic-amine odor. | | | |
| Boiling Point: | Not determined | Solubility in Water: | Soluble |
| Density: | 9.65 pounds/gallon | Specific Gravity: | 1.158 @ 20°C |
| Evaporation Rate: | Not determined | Vapor Density: | Not determined |
| Freezing Point: | Not determined | Vapor Pressure: | Not determined |
| pH: | 8.3 – 8.7 | Viscosity: | Not determined |

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

| |
|-------------------------------------|
| 10. STABILITY AND REACTIVITY |
|-------------------------------------|

Chemical Stability: This material is stable under normal handling and storage conditions.
Conditions to Avoid: Excessive heat. Do not store near heat or flame.
Incompatible Materials: Strong oxidizing agents: bases and acids.
Hazardous Decomposition Products: Under fire conditions may produce gases such as hydrogen chloride and oxides of carbon and nitrogen.
Hazardous Reactions: Hazardous polymerization will not occur.

| |
|--------------------------------------|
| 11. TOXICOLOGICAL INFORMATION |
|--------------------------------------|

Toxicological Data:

Except as noted, data from laboratory studies conducted on this product are summarized below:

- Oral:** Rat LD₅₀: 1,161 mg/kg
- Dermal:** Rabbit LD₅₀: 1,544 mg/kg
- Inhalation:** Rat 4-hr LC₅₀: >3.5 mg/l (data on similar product)
- Eye Irritation:** Rabbit: Severely irritating
- Skin Irritation:** Rabbit: Minimally irritating
- Skin Sensitization:** Not a contact sensitizer in guinea pigs following repeated skin exposure.

Subchronic (Target Organ) Effects: Repeated overexposure to phenoxy herbicides may cause effects to liver, kidneys, blood chemistry, and gross motor function. Rare cases of peripheral nerve damage have been reported, but extensive animal studies have failed to substantiate these observations, even at high doses for prolonged periods.

Carcinogenicity / Chronic Health Effects: Prolonged overexposure can cause liver, kidney and muscle damage. The International Agency for Research on Cancer (IARC) lists exposure to chlorophenoxy herbicides as a class 2B carcinogen, the category for limited evidence for carcinogenicity in humans. However, more current 2,4-D lifetime feeding studies in rats and mice did not show carcinogenic potential. The U.S. EPA has given 2,4-D a Class D classification (not classifiable as to human carcinogenicity).

Reproductive Toxicity: No impairment of reproductive function attributable to 2,4-D has been noted in laboratory animal studies.

Developmental Toxicity: Studies in laboratory animals with 2,4-D have shown decreased fetal body weights and delayed development in the offspring at doses toxic to mother animals.

Genotoxicity: There have been some positive and some negative studies, but the weight of evidence is that 2,4-D is not mutagenic.

Assessment Carcinogenicity:

This product contains substances that are considered to be probable or suspected human carcinogens as follows:

| Component | Regulatory Agency Listing As Carcinogen | | | |
|--------------------------|---|------|-----|------|
| | ACGIH | IARC | NTP | OSHA |
| Chlorophenoxy Herbicides | No | 2B | No | No |

See Section 2: HAZARDS IDENTIFICATION for more information.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Data on 2,4-D Dimethylamine Salt:

| | | | |
|---|----------|---|------------|
| 96-hour LC ₅₀ Bluegill: | 524 mg/l | Bobwhite Quail Oral LD ₅₀ : | 500 mg/kg |
| 96-hour LC ₅₀ Rainbow Trout: | 250 mg/l | Mallard Duck 8-day Dietary LC ₅₀ : | >5,620 ppm |
| 48-hour EC ₅₀ Daphnia: | 184 mg/l | | |

Environmental Fate:

In laboratory and field studies, 2,4-D DMA salt rapidly dissociated to parent acid in the environment. The typical half-life of the resultant 2,4-D acid ranged from a few days to a few weeks.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

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

Container Handling and Disposal:

Plastic Bottles and Non-Returnable Plastic Drums: Do not reuse empty container. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Returnable/Refillable Containers: After use, return the container to the point of purchase or designated locations. The container must only be refilled with this product. DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Prior to refilling, inspect thoroughly for damage such as cracks, punctures, abrasions and damaged or worn out threads on closure devices. Do not refill or transport damaged or leaking containers. Check for leaks after refilling and before transportation. If the container is not being refilled, return it to the point of purchase.

14. TRANSPORTATION INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this MSDS.

DOT

< 25 gallons per complete package
Non Regulated

> 25 gallons per complete package
RQ ENVIRONMENTALLY HAZARDOUS SUBSTANCES,
LIQUID, N.O.S. (2,4-D SALT), 9, UN3082, III

See 49 CFR 173.132(b)(3) & 172.101 Appendix A

IMDG

Non Regulated – See IMDG 2.6.2.1.3

IATA

Non Regulated – See IATA 3.6.1.5.3

15. REGULATORY INFORMATION**U.S. Federal Regulations:**

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):

Immediate, Delayed

Section 313 Toxic Chemical(s):

Acetic Acid, (2,4-Dichlorophenoxy)- (CAS No. 94-75-7), 38.9% equivalent by weight in product

Reportable Quantity (RQ) under U.S. CERCLA:

Acetic Acid, (2,4-Dichlorophenoxy)- (CAS No. 94-75-7) 100 pounds

RCRA Waste Code:

Acetic Acid, (2,4-Dichlorophenoxy)- (CAS No. 94-75-7) U240

State Information:

Other state regulations may apply. Check individual state requirements.

California Proposition 65: Not Listed**16. OTHER INFORMATION**

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Nufarm Americas Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Nufarm Americas Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

Weedar is a registered trademark of Nufarm Americas Inc.

Specimen Label



Vista[®]

Specialty Herbicide

®Trademark of Dow AgroSciences LLC

For selective postemergence control of annual and perennial broadleaf weeds and woody brush in:

- Non-cropland areas including industrial sites, non-irrigation ditch banks, and rights-of-way such as electrical power lines, communication lines, pipelines, roadsides and railroads including grazed areas within these sites
- Pine plantations

Not for Sale, Distribution, or Use in Nassau and Suffolk Counties, New York.

Active Ingredient(s):

| | |
|---|--------|
| fluroxypyr 1-methylheptyl ester: ((4-amino-3,5-dichloro-6-fluoro-2-pyridinyl)oxy) acetic acid, 1-methylheptyl ester | 26.2% |
| Other Ingredient(s) | 73.8% |
| Total Ingredients | 100.0% |

Contains petroleum distillates.

Acid Equivalent: fluroxypyr: 4-amino-3,5-dichloro-6-fluoro-2-pyridyloxyacetic acid - 18.2% - 1.5 lb/gal

EPA Reg. No. 62719-308

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.)

Precautionary Statements

Hazards to Humans and Domestic Animals

Causes Substantial But Temporary Eye Injury • Harmful If Swallowed Or Absorbed Through The Skin

Do not get in eyes or on clothing. Avoid contact with skin.

Personal Protective Equipment (PPE)

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

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as Barrier Laminate or Viton
- 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.

Engineering Controls Statements

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.
- 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.

First Aid

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

If swallowed: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

Note to Physician: May pose an aspiration pneumonia hazard. Probable mucosal damage may contraindicate the use of gastric lavage.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

Environmental Hazards

This product is toxic to fish. Drift or runoff from treated areas may be hazardous to aquatic organisms and non-target plants. 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 cleaning equipment or disposing of equipment washwaters.

Physical or Chemical Hazards

Do not use or store near heat or open flame.

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

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

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 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 such as Barrier Laminate or Viton
- 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 allow people (other than applicator) or pets on treatment area during application. Do not enter into treated areas until sprays have dried.

Storage and Disposal

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

Pesticide Storage: Store above 10°F or warm and agitate before use.

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 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.

Nonrefillable containers 5 gallons or less:

Container Reuse: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable containers larger than 5 gallons:

Container Reuse: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

Nonrefillable containers larger than 5 gallons:

Container Reuse: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Use Directions for Broadleaf Weed and Woody Plant Control in Non-Cropland and Pine Plantations

GENERAL INFORMATION

Vista® herbicide is a selective postemergence product for control of annual and perennial broadleaf weeds and woody brush in:

- Non-crop areas including industrial sites, non-irrigation ditch banks, and rights-of-way such as electrical power lines, communication lines, pipelines, roadsides and railroads including grazed areas within these sites
- Pine plantations

Use Precautions and Restrictions

- Do not contaminate irrigation ditches or water used for domestic purposes.
- **Maximum Application Rate:** Do not apply more than 2 2/3 pints per acre of Vista per year.
- **Grazing restrictions:** There are no grazing restrictions for livestock, including lactating or non-lactating dairy animals.
- **Harvest restrictions:** Do not harvest grass for hay or silage from treated areas within 7 days of application.
- **Slaughter restrictions:** Meat animals must be withdrawn from treated forage at least 2 days before slaughter.
- **Chemigation:** Do not apply this product through any type of irrigation system.
- **In Arizona:** The state of Arizona has not approved this product for use on plants grown for agricultural/commercial production; such as on designated grazing areas.
- **Management of Kochia Biotypes:** Research has suggested that many biotypes of kochia can occur within a single population. While kochia biotypes can vary in their susceptibility to Vista, all will be suppressed or controlled at 1 1/3 pint per acre provided application timing and growing conditions are optimal. Application of Vista at rates of less than 2/3 pint per acre can result in a shift to more tolerant biotypes within a population.
- Avoid applications where proximity of susceptible plants or other desirable plants is likely to result in exposure to spray or spray drift.

Avoiding Drift and Run-off to Surface Water or Adjacent Land

This product should be used strictly in accordance with the run-off and drift precautions on this label in order to minimize off-site exposure and potential effects on aquatic organisms and non-target plants.

Avoiding Runoff: Under certain conditions, this product may have a potential to run-off to surface water or adjacent land. Use of vegetation filter strips or treatment setbacks is recommended along rivers, creeks, streams, wetlands, etc or on the downhill side of treated areas where run-off could occur to minimize water runoff.

Avoiding Injury to Non-Target Plants

Spray drift produced during application is the responsibility of the applicator and care should be taken to minimize off-target movement of spray during application. A drift control agent suitable for agricultural use may be used with this product to aid in reducing spray drift but the first choice should be a coarser spray category nozzle set-up. If used, follow applicable use directions and precautions on the manufacturer's label.

Do not apply where drift may be a problem due to proximity to susceptible crops or other non-target broadleaf plants. Do not apply or otherwise permit this product or sprays containing this product 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 trees, ornamentals, shade trees or other susceptible broadleaf plants. Do not permit spray mist or drift containing this product to contact susceptible plants because even very small quantities of the spray, that may not be visible, can cause severe injury during either active or dormant periods. Do not use in or around greenhouses.

Ground Application: To minimize spray drift, apply Vista in a total spray volume of 5 or more gallons per acre using spray equipment designed to produce coarse or larger droplets per ASAE S-572 standard. Refer to the spray equipment manufacturer's recommendations for detailed information on nozzle types, arrangement, spacing and operating height and pressure. Operate equipment at spray pressures no greater than is necessary to produce a uniform spray pattern. Operate the spray boom no higher than is necessary to produce a uniformly overlapping pattern between spray nozzles. Do not apply with hollow cone-type insecticide nozzles or other nozzles that produce a fine-droplet spray.

Aerial Application

Non-Cropland Areas, Including Rights-of-Way (Helicopter Only): In non-cropland, do not apply this product with fixed-wing aircraft.

Pine Plantations: Both fixed wing and helicopter equipment may be used to apply this product on pine plantations, but fixed wing aircraft require additional drift mitigation measures.

To minimize spray drift, apply Vista in a total spray volume of 3 or more gallons per acre using spray. Drift potential is lowest between wind speeds of 2 to 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 potential for temperature inversion. Spray drift from aerial application can be minimized by applying a coarse spray as per USDA-ARS/PAASS or nozzle manufacturer's guidelines or by using straight-stream nozzles directed straight back. Do not operate using a spray boom longer than 75% of wing span or 85% of rotor width. For fixed wing aircraft, maximum speed during application is limited to 140 mph and application height above the vegetation canopy should not exceed 10 ft.

Do not store or handle other agricultural chemicals with the same containers used for this product. Do not apply other agricultural chemicals or pesticides with equipment used to apply this product unless equipment has been thoroughly cleaned (see Sprayer Cleanup under Mixing Instructions).

Spray Drift Management (Aerial Application)

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed 75% the length of the wingspan or 85% of rotor width.
2. Nozzles must always point backward parallel with the air stream and must be coarse or coarser per ASAE S-572 standard; see USDA-ARS/PAASS or nozzle manufacturer's guidelines.

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 following Aerial Drift Advisory Information section.

Aerial Spray Drift Advisory Information

Importance of 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 Inversion section of this label).

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**-Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use 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 backwards, parallel to the airstream will produce larger droplets than other orientations. Significant deflection from the 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 larger droplets than other nozzle types.
- **Boom Length**-For some use patterns, reducing the effective boom length to less than 65% of the wingspan or rotor length may further reduce drift without significantly reducing swath width.
- **Application**-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 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 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 connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards 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).

Mixing Instructions

Vista Alone

Fill spray tank with water equal to 1/2 to 3/4 of the required spray volume. Add the required amount of Vista, then finish filling the tank. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

Tank Mixing

This product may be applied in tank mix combination with labeled rates of other products provided (1) the tank mix product is labeled for the timing and method of application for the use site to be treated; and (2) tank mixing is not prohibited by the label of the tank mix product.

Tank Mixing Precautions:

- Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels.
- Do not exceed recommended application rates. Do not tank mix with another pesticide product that contains the same active ingredient as this product unless the label of either tank mix partner specifies the maximum dosages that may be used.
- For other products packaged in water soluble packaging, do not tank mix with products containing boron or mix in equipment previously used to apply a product mixture containing boron unless the tank and spray equipment has been adequately cleaned. (See instructions for Sprayer Clean-Out.)
- Always perform a (jar) test to ensure the compatibility of products to be used in tank mixture.
- Undiluted Vista and 2,4-D amine concentrates are not compatible and cannot be mixed together in the same supply tank when using injection equipment. Combinations of Vista and 2,4-D ester are compatible for this purpose.

Tank Mix Compatibility Testing: A jar test is recommended prior to tank mixing to ensure compatibility of Vista and other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour. If the mixture balls-up, forms flakes, sludges, jets, oily films or layers, or other precipitates, it is not compatible and the tank mix combination should not be used.

Tank Mixing Instructions

Fill spray tank with water to 1/4 to 1/3 of the required spray volume. Start agitation. Add different formulation types in the order indicated, allowing time for complete mixing and dispersion after addition of each.

1. Add dry flowables; wettable powders; aqueous suspensions, flowables or liquids.
2. Maintain agitation and fill spray tank to 3/4 of total spray volume and then add Vista and other emulsifiable concentrates and any solutions.

Finish filling the spray tank. Maintain continuous agitation during mixing, final filling and throughout application. If spraying and agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. Settled materials must be resuspended before spraying is resumed. A sparger agitator is particularly useful for this purpose. Settled material may be more difficult to resuspend than when originally mixed.

Sprayer Cleanup

To avoid injury to or exposure of nontarget crops, thoroughly clean and drain spray equipment used to apply this product after use. Cleaning should occur as soon as possible after application. Spray equipment should be cleaned by the following procedure:

1. Drain any remaining spray mixture from the spray tank and dispose of according to label disposal instructions.
2. Hose down the interior surfaces of the tank. Flush tank, hoses, boom, and nozzles with clean water for 10 minutes. Fill the tank with water and recirculate for 15 minutes. Spray part of the mixture through the hoses, boom, and nozzles and drain the tank. All rinse water must be disposed of in compliance with local, state, and federal guidelines.
3. Remove the nozzles and screens and clean separately.
4. If the spray equipment will be used on crops other than those labeled for this product, repeat steps 1 and 2 and thoroughly wash the outside of spray tank and the boom.

Application Instructions

Application Timing

Apply to actively growing weeds. Extreme growing conditions such as drought or near freezing temperatures prior to, at and following time of application may reduce weed control and increase the risk of non-target plant injury. **Only weeds that are emerged at the time of application will be affected.** Foliage that is wet at the time of application may decrease control. Applications of Vista are rain-fast within 1 hour after application.

Effect of Temperature on Herbicidal Activity

Herbicidal activity of Vista is influenced by weather conditions. Optimum activity requires active plant growth. The temperature range for optimum herbicidal activity is 55°F to 85°F. Reduced activity will occur when temperature is below 45°F. Frost before application (3 days) or shortly after (3 days) may reduce weed control.

Application Rate Ranges

Generally, application rates at the lower end of the recommended rate range will be satisfactory for young, succulent growth of sensitive weed species. For less sensitive species, perennials, and under conditions where control is more difficult (plant stress conditions such as drought or extreme temperatures, dense weed stands and/or larger weeds) the higher rates within the rate range will be needed. Weeds growing in the absence of competition from other vegetation generally require higher rates to obtain satisfactory control or suppression.

Spray Coverage

Apply in a spray volume of 3 or more gallons per acre by air or 5 or more gallons per acre by air or ground equipment. Use sufficient spray volume to provide thorough coverage and a uniform spray pattern. Inadequate spray volume and coverage may result in decreased weed control. As canopy and weed density increase, spray volume should be increased to obtain equivalent weed control. Use larger nozzle tips or decrease spraying speed to increase spray volume rather than increasing boom pressure. Refer to manufacturer's recommendations for information on relationships between spray volume, and nozzle size and arrangement.

Spot Treatments

Spot treatments may be applied with a calibrated boom or with hand sprayers according to directions provided below.

Hand-Held Sprayers: Hand-held or backpack sprayers may be used for spot applications of Vista if care is taken to apply the spray uniformly and at a rate equivalent to a broadcast application. Application rates in the table are based on an area of 1,000 sq ft. The amount of Vista (fl oz or ml) in the table should be mixed with 1 gallon or more of water and applied to an area of 1,000 sq ft. To calculate the amount of product required for larger areas, multiply the table value (fl oz or ml) by the area to be treated in "thousands" of square feet, e.g., if the area to be treated is 3,500 sq ft, multiply the table value by 3.5 (Calculation: 3,500 ÷ 1,000 = 3.5). An area of 1000 sq ft is approximately 10.5 X 10.5 yards in size.

| Amount of Vista to Equal Specified Broadcast Rate (Mix with 1 Gallon or More of Water and Apply to 1,000 sq ft) | | | | |
|--|-----------------------|------------------------|-----------------------|----------------------|
| 2/3 pt/ acre | 1 pt/acre | 1 1/3 pt/ acre | 2 pt/acre | 2 2/3 pt/ acre |
| 0.25 fl oz (7.25 ml) | 0.37 fl oz (11 ml) | 0.5 fl oz (14.5 ml) | 0.74 fl oz (22 ml) | 1.0 fl oz (30 ml) |

¹ 1 fl oz = 29.6 (30) ml

Weeds Controlled or Suppressed

(Numbers in parentheses (-) refer to footnotes):

| Weeds Controlled | | | Weeds Suppressed (3) |
|---|--|---|--|
| 2/3 - 1 1/3 pt/acre | 1 1/3 pt/acre | 2 2/3 pt/acre | 2 2/3 pt/acre |
| bedstraw (cleavers) common purslane hairy buttercup hemp dogbane kochia (1), (2), (4) marshelder (2) sericea lespedeza (2) tropic croton | chickweed cocklebur coffeeweed, common ragweed curly dock cutleaf primrose dandelion dogfennel grape horseweed/ maretail morningglory prickly lettuce sunflower vetch velvetleaf venice mallow western ragweed white clover white cockle | blackberry catsear giant ragweed goldenrod henbane hop clover horsenettle ironweed lantana musk thistle wild carrot | buckhorn plantain common mullein cudweed field bindweed field horsetail field pennycress leafy spurge mustard narrowleaf plantain nightshade species spiny amaranth wild buckwheat yellow thistle |

- (1) Includes herbicide tolerant or resistant biotypes.
- (2) Use the higher rate in the range to control these weeds.
- (3) Suppression is expressed as a reduction in weed competition (reduction population or vigor) as compared to untreated areas. The degree of weed control and duration of effect may vary with weed size, density, application rate, coverage, and growing conditions before, during and after treatment.
- (4) The addition of a methylated seed oil surfactant (i.e. MSO or ESO) at the rate of 1-2 quarts per acre is recommended for control of kochia. For kochia infestations with larger plants at more advanced growth stages, increasing the rate of Vista herbicide to 1.5 to 2.0 pints or the addition of 1-2 quarts per acre of 2,4-D along with the 1-2 quarts per acre of methylated seed oil will improve control.

Specific Use Directions

Non-Cropland and Pine Plantations

(including industrial sites, non-irrigation ditch banks, and rights-of-way such as electrical power lines, communication lines, pipelines, roadsides and railroads including graze areas within these sites)

Precautions for Use in Pine Plantations:

Do not apply Vista to pine plantations as an over-the-top broadcast treatment during active terminal growth (from initiation of budbreak/growth flush until seasonal terminal growth has hardened off and over-wintering buds have formed). Directed spray applications may be made to pine plantations during periods of active growth, but care should be taken to avoid spray contact with actively growing foliage.

Do not apply Vista in tank mix combination to pine plantations unless the tank mix product is labeled for weed or brush control in pines by the application method being employed.

Apply at the broadcast rate of 2/3 to 2 2/3 pints per acre when weeds are small and/or actively growing. Split applications of Vista herbicide may be made during a single year, provided the total amount of Vista applied does not exceed the maximum-labeled rate of 2 2/3 pints per acre. See listing of Weeds Controlled or Suppressed at end of General Information Section.

Spot treatments should be applied at rates and spray volumes equivalent to broadcast application. See instructions for "Spot Application" above.

Brush Control: Vista may be tank-mixed with Garlon® 4 herbicide, Garlon 3A herbicide, Accord® SP herbicide, Accord XRT herbicide, Tordon® K herbicide or Tordon 101M herbicide at indicated rates to increase control of pine species, shingle oak, red maple, red oak and other woody species.

| Products in Tank Mix | Application Rates | Woody Plants Controlled |
|---|---|---|
| Vista Garlon 4 | 32 - 42 fl oz + 2 - 3 qt/acre | bay species black cherry dogwood water oak willow oak |
| Vista plus Garlon 3A | 32 - 42 fl oz + 3 - 4 qt/acre | bay species black cherry dogwood water oak willow oak |
| Vista plus Garlon 3A Tordon 101M | 32 - 42 fl oz + 2 - 4 qt/acre + 4 - 8 qt/acre | pine species red maple red oak shingle oak Virginia pine water oak |
| Vista plus Garlon 3A Tordon K | 32 - 42 fl oz + 4 qt/acre + 2 qt/acre | pine species red maple red oak shingle oak Virginia pine water oak |
| Vista plus Accord SP or Accord XRT herbicide | 32 - 42 fl oz + 4 - 6 qt/acre | dogwood gallberry pines wax myrtle |

Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

Warranty Disclaimer

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. All such risks shall be assumed by buyer.

Limitation of Remedies

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used.

Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

TMTrademark of Dow AgroSciences LLC

**Produced for
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268**

Label Code: D02-114-008
Replaces Label: D02-114-007
LOES Number: 010-00097

EPA accepted 06/10/05

Revisions:

1. Updated Storage and Disposal
2. Removed the following pests: Carolina geranium, common mallow, knotweed, puncturevine, spotted knapweed, stinging nettle

MATERIAL SAFETY DATA SHEET



Emergency Phone: 800-992-5994
Dow AgroSciences LLC
Indianapolis, IN 46268

Effective Date: 22-May-07
Product Code: 64227
MSDS: 006301

VISTA* HERBICIDE

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT: Vista* Herbicide

COMPANY IDENTIFICATION:

Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268-1189

NOTE TO PHYSICIAN: The decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

2. HAZARDOUS IDENTIFICATIONS:

EMERGENCY OVERVIEW

Brown liquid with no odor. May cause eye irritation and corneal injury. May cause skin irritation, even a burn. Repeated contact may cause drying or flaking of the skin.
EMERGENCY PHONE NUMBER: 800-992-5994

5. FIRE FIGHTING MEASURES:

FLASH POINT: 145°F (63°C)
METHOD USED: PMCC

FLAMMABLE LIMITS

LFL: Not determined
UFL: Not determined

3. COMPOSITION/INFORMATION ON INGREDIENTS:

| COMPONENT | CAS NUMBER | W/W% |
|--------------------------|------------|------|
| Fluroxypyr | 81406-37-3 | 26.2 |
| 1-Methyl-2-Pyrrolidinone | 872-50-4 | 5.1 |
| Naphthalene | 91-20-3 | <5.4 |
| Balance | | 63.3 |

EXTINGUISHING MEDIA: Foam, CO₂, or dry chemical.

FIRE & EXPLOSION HAZARDS: Foam fire-extinguishing system is preferred because uncontrolled water can spread possible contamination. Toxic irritating gases and fumes will be formed.

4. FIRST AID:

EYES: Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist.

SKIN: Wash skin with plenty of water.

INGESTION: Do not induce vomiting. Call a physician and/or transport to emergency facility immediately.

INHALATION: Move person to fresh air. If not breathing, give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc.). If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

FIRE-FIGHTING EQUIPMENT: Wear positive pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES:

ACTION TO TAKE FOR SPILLS/LEAKS: Absorb small spills with dry material such as sand, ZORBALL, or dirt. Wash thoroughly after handling. Contain large spills by diking to keep out of sewers. Report large spills to Dow AgroSciences at 800-992-5994.

7. HANDLING AND STORAGE:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: See product label. Keep out of reach of children. Do not swallow. Avoid skin and eye contact. Avoid breathing mist or vapors. Store in original container with the lid tightly closed. Handle concentrate in ventilated area. Keep away from food, feedstuffs, and domestic water supplies. Wash thoroughly after handling.

*Trademark of Dow AgroSciences LLC

MATERIAL SAFETY DATA SHEET



Emergency Phone: 800-992-5994
Dow AgroSciences LLC
Indianapolis, IN 46268

VISTA* HERBICIDE

Effective Date: 22-May-07
Product Code: 64227
MSDS: 006301

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

These precautions are suggested for conditions where the potential for exposure exists. Emergency conditions may require additional precautions.

EXPOSURE GUIDELINE(S):

1-Methyl-2-pyrrolidinone: AIHA WEEL is 10 ppm, Skin. Interim Dow AgroSciences Industrial Hygiene Guide is 500 ppm.
Naphthalene: ACGIH TLV is 10 ppm TWA, 15 ppm STEL, Skin, A4. OSHA PEL is 10 ppm TWA.
Fluroxypyr 1-methylheptyl ester: Dow AgroSciences Industrial Hygiene Guide is 10 mg/M³.

A 'skin' notation following the exposure guideline refers to the potential for dermal absorption of the material including mucous membranes and the eyes either by contact with vapors or by direct skin contact. It is intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize dermal exposure should be considered.

ENGINEERING CONTROLS: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required, use a NIOSH approved air-purifying or positive-pressure supplied-air respirator depending on the potential airborne concentration.

SKIN PROTECTION: When prolonged or frequently repeated contact could occur, use chemically protective clothing resistant to this material. Selection of specific items such as faceshield, gloves, boots, apron, or full-body suit will depend on the operation.

EYE/FACE PROTECTION: Use chemical goggles. If exposure causes eye discomfort, use a full-face respirator.

APPLICATORS AND ALL OTHER HANDLERS: Refer to the product label for personal protective clothing and equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES:

BOILING POINT: 182°F (202°C)
VAPOR PRESSURE: Not determined
DENSITY: 0.984-0.995 @ 20°C or 8.2-8.3 lbs/gal
SOLUBILITY IN WATER: Not determined
SPECIFIC GRAVITY: 0.99 g/mL @ 25°C or 8.24 lbs/gal
APPEARANCE: Dark brown liquid
ODOR: None
FREEZE POINT: -10°C
pH: 5.5 (as 1% aqueous sol)

10. STABILITY AND REACTIVITY:

STABILITY: (CONDITIONS TO AVOID) This product is stable under normal use and storage conditions.

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) Avoid acids, oxidizing and base materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Under fire conditions, oxides of nitrogen, hydrogen chloride, and hydrogen fluoride may be produced.

HAZARDOUS POLYMERIZATION: Not known to occur.

11. TOXICOLOGICAL INFORMATION:

POTENTIAL HEALTH EFFECTS: This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.

EYE: May cause moderate eye irritation. May cause slight corneal injury. Vapor may cause eye irritation experienced as mild discomfort and redness.

SKIN: Brief contact is essentially non-irritating to skin. Prolonged contact may cause skin irritation with local redness. Repeated contact may cause skin burns. Symptoms may include pain, severe local redness, swelling, and tissue damage. May cause drying and flaking of skin. Prolonged skin contact is unlikely to result in absorption of harmful amounts. The LD₅₀ for skin absorption in rabbits is >2,000 mg/kg. Did not cause allergic skin reactions when tested in guinea pigs.

*Trademark of Dow AgroSciences LLC

MATERIAL SAFETY DATA SHEET



Emergency Phone: 800-992-5994
Dow AgroSciences LLC
Indianapolis, IN 46268

Effective Date: 22-May-07
Product Code: 64227
MSDS: 006301

VISTA* HERBICIDE

INGESTION: Low toxicity if swallowed. The oral LD₅₀ for rats is 3,738 mg/kg (males) and 3,162 mg/kg (females). Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

INHALATION: No adverse effects are anticipated from single exposure to vapor. The LC₅₀ for rats is >6.2 mg/L for 4 hours. Excessive exposure to solvent may cause respiratory irritation and central nervous system depression. May cause nausea or vomiting.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Effects have been reported on the following organs: bone marrow, kidney, liver and respiratory tract.

CANCER INFORMATION: Fluroxypyr did not cause cancer in laboratory animals.

TERATOLOGY (BIRTH DEFECTS): 1-Methyl-2-pyrrolidinone caused toxic effects to the fetus in laboratory animals at high dose levels with either mild or undetectable maternal toxicity. Fluroxypyr did not cause birth defects; however, in laboratory animals, other toxic effects to the fetus have been seen.

REPRODUCTIVE EFFECTS: Fluroxypyr did not interfere with reproduction in laboratory animal studies.

MUTAGENICITY: For the solvent, in-vitro genetic toxicity studies were negative in some cases and positive in other cases. For fluroxypyr, in-vitro and animal genetic toxicity studies were negative.

12. ECOLOGICAL INFORMATION:

ENVIRONMENTAL FATE:

ECOTOXICOLOGY:

Material is practically non-toxic to birds on an acute basis (LD₅₀ is >2,000 mg/kg in most sensitive species tested).

13. DISPOSAL CONSIDERATIONS:

DISPOSAL METHOD: If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION:

U.S. DEPARTMENT OF TRANSPORTATION (DOT) INFORMATION:

For non-bulk shipments by all modes of transportation:
This material is not regulated for transport.

For bulk shipments by all land, rail and vessel:
NA1993/COMBUSTIBLE LIQUID, N.O.S./(CONTAINS NAPHTHALENE)/COMBUSTIBLE LIQUID/PG III/
RQ(NAPHTHALENE)

*Trademark of Dow AgroSciences LLC

MATERIAL SAFETY DATA SHEET



Emergency Phone: 800-992-5994
Dow AgroSciences LLC
Indianapolis, IN 46268

VISTA* HERBICIDE

Effective Date: 22-May-07
Product Code: 64227
MSDS: 006301

15. REGULATORY INFORMATION:

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.

U.S. REGULATIONS

SARA 313 INFORMATION: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

| CHEMICAL NAME | CAS NUMBER | CONCENTRATION |
|--------------------------|------------|---------------|
| Naphthalene | 91-20-3 | 5.4% |
| 1-methyl-2-Pyrrolidinone | 872-50-4 | 5.1% |

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An immediate health hazard
A delayed health hazard

CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986:

This product contains a chemical(s) known to the State of California to cause cancer. The chemical is naphthalene (CAS # 91-20-3).

This product contains a chemical(s) known to the State of California to be a developmental toxin. The chemical is 1-methyl-2-Pyrrolidinone CAS # 872-50-4.

TOXIC SUBSTANCES CONTROL ACT (TSCA): All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

STATE RIGHT-TO-KNOW: The following product components are cited on certain state lists as mentioned. Non-listed components may be shown in the composition section of the MSDS.

| CHEMICAL NAME | CAS NUMBER | LIST |
|--------------------------|------------|-----------------|
| Naphthalene | 91-20-3 | NJ2 NJ3 PA1 PA3 |
| 1-methyl-2-Pyrrolidinone | 872-50-4 | NJ2 PA1 |

NJ2=New Jersey Environmental Hazardous Substance (present at > or = to 1.0%).

NJ3=New Jersey Workplace Hazardous Substance (present at > or = or equal to 1.0%).

PA1=Pennsylvania Hazardous Substance (present at > or = to 1.0%).

PA3=Pennsylvania Environmental Hazardous Substance (present at > or = to 1.0%).

OSHA HAZARD COMMUNICATION STANDARD: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, or SUPERFUND): This product contains the following substance(s) listed as "Hazardous Substances" under CERCLA, which may require reporting of releases:

| Chemical Name | CAS Number | RQ | % in Product |
|---------------|------------|----------|--------------|
| Naphthalene | 91-20-3 | 100 lbs. | 5.4 |

RCRA Categorization: USEPA Hazardous Waste #
Naphthalene = U165

16. OTHER INFORMATION:

MSDS STATUS: Revised Sections: 2, 3, 11, 12, 13, 15
Reference: DR-0328-2766
Replaces MSDS Dated: 6/3/04
Document Code: D03-114-005
Replaces Document Code: D03-114-004

The Information Herein Is Given In Good Faith, But No Warranty, Express or Implied, Is Made. Consult Dow AgroSciences for Further Information.

*Trademark of Dow AgroSciences LLC