

PM 25

524-517

9-27-99

1 of 29



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

EPA Reg. Number:  
524-517

Date of Issuance:  
SEP 27 1999

NOTICE OF PESTICIDE:  
 Registration  
 Reregistration

Term of Issuance:  
Conditional

Name of Pesticide Product:  
Accord XL Herbicide

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Monsanto Company  
600 13 th Street, N.W. Suite 660  
Washington, DC 20005

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

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

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

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

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5), 3(g) or 4 when the Agency requires all registrants of similar products to submit such data.
2. Add the phrase "EPA Registration No. 524-517" before you release the product for shipment.
3. Submit three (3) copies of your final printed labeling before you release the product for shipment.

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

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

Signature of Approving Official:

Date:

9-27-99

The Agency has recently revised its recommended First Aid statements for pesticide products and intends to issue a PR Notice announcing the changes in the near future. In the interim we are encouraging registrants to begin using the new statements. The new statements were developed as part of the Consumer Labeling Initiative in close cooperation with poison control center personnel and other medical experts. While it is not mandatory that you revise your label at this time, you are strongly encouraged to substitute the revised statements (below) for those statements currently on the label at your next label printing:

FIRST AID

If swallowed:	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to by a poison control center or doctor.</li> </ul>
If in eyes:	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
If on skin:	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
If inhaled:	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>

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

view

3 of 29

**ACCORD XL™**  
Herbicide by Monsanto

The complete broad spectrum postemergence professional herbicide for utility rights-of-way weed control.

**Complete Directions for Use**

EPA Reg. No. 524-~~222~~ **LRT**

**AVOID CONTACT OF HERBICIDE WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS, DESIRABLE PLANTS AND TREES, BECAUSE SEVERE INJURY OR DESTRUCTION IS LIKELY TO RESULT.**

ACCORD XL is a trademark of Monsanto Company.

Read the entire label before using this product.

Use only according to label instructions.

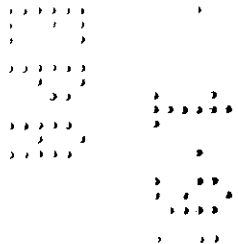
It is a violation of Federal law to use this product in any manner inconsistent with its labeling.

Not all products recommended on this label are registered for use in California. Check the registration status of each product in California before using.

Read the "LIMIT OF WARRANTY AND LIABILITY" statement at the end of the label before buying or using. If terms are not acceptable, return at once unopened.

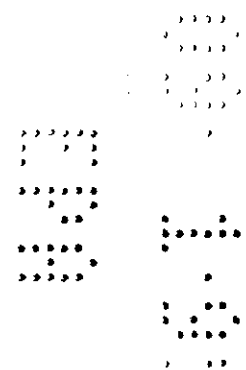
**THIS IS AN END-USE PRODUCT. MONSANTO DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION. CUSTOM BLENDING OF THIS PRODUCT IS PERMITTED. SEE INDIVIDUAL CONTAINER LABEL FOR REPACKAGING LIMITATIONS.**

Container Label Statement:  
**THIS IS AN END-USE PRODUCT. MONSANTO DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION. CUSTOM BLENDING OF THIS PRODUCT IS PERMITTED. IT IS INTENDED THAT REPACKAGING BE ONLY IN ACCORDANCE WITH A MONSANTO REPACKAGING OR TOLL REPACKAGING AGREEMENT.**



**CONTENTS**

- 1 1.0 INGREDIENTS**
- 2 2.0 IMPORTANT PHONE NUMBERS**
- 3 3.0 PRECAUTIONARY STATEMENTS**
  - 3.1 Hazards to Humans and Domestic Animals
  - 3.2 Environmental Hazards
  - 3.3 Physical or Chemical Hazards
- 4 4.0 STORAGE AND DISPOSAL**
- 5 5.0 GENERAL INFORMATION**
- 6 6.0 MIXING**
  - 6.1 Mixing with Water
  - 6.2 Tank Mixing Procedure
  - 6.3 Colorants or Dyes
  - 6.4 Drift Control Additives
- 7 7.0 APPLICATION EQUIPMENT, TECHNIQUES AND RECOMMENDATIONS**
  - 7.1 Aerial Equipment
  - 7.2 Ground Broadcast Equipment
  - 7.3 Hand-Held Directed Spray Equipment
  - 7.4 Cut Stump Application
  - 7.5 Injection and Frill Application
  - 7.6 Selective Equipment (Wipers, etc.)
  - 7.7 Injection Systems
- 8 8.0 SITE RECOMMENDATIONS**
  - 8.1 Utility Sites
- 9 9.0 WEEDS CONTROLLED**
  - 9.1 Woody Brush and Trees
  - 9.2 Perennial Weeds
  - 9.3 Annual Weeds
- 10 10.0 LIMIT OF WARRANTY AND LIABILITY**



5 of 29

**1.0 INGREDIENTS**

**ACTIVE INGREDIENT:**

\*Glyphosate, N-(phosphonomethyl)glycine, in the form of its isopropylamine salt ..... 41.0%

INERT INGREDIENTS (including surfactant):..... 59.0%

100.0%

\*Contains 480 grams per litre or 4 pounds per U.S. gallon of the active ingredient glyphosate, in the form of its isopropylamine salt.

This product is protected by U.S. Patent No. 4,405,531 and by U.S. Patent No. 5,750,468. No license granted under any non-U.S. patent(s).

**2.0 IMPORTANT PHONE NUMBERS**

- 1. FOR PRODUCT INFORMATION OR ASSISTANCE IN USING THIS PRODUCT, CALL TOLL-FREE,

1-800-332-3111

- 2. IN CASE OF AN EMERGENCY INVOLVING THIS PRODUCT, OR FOR MEDICAL ASSISTANCE, CALL COLLECT, DAY OR NIGHT,

(314)-694-4000

**3.0 PRECAUTIONARY STATEMENTS**

**3.1 Hazards to Humans and Domestic Animals**

Keep out of reach of children.

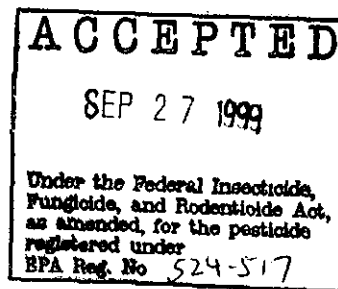
**CAUTION!**

CAUSES EYE IRRITATION

Do not get in eyes or on clothing

**FIRST AID: IF IN EYES,** flush with plenty of water. Get medical attention if irritation persists.

**DOMESTIC ANIMALS:** This product is considered to be relatively nontoxic to dogs and other domestic animals; however, ingestion of this product or large amounts of freshly sprayed vegetation may result in temporary gastrointestinal irritation (vomiting, diarrhea, colic, etc.). If such symptoms are observed, provide the animal with plenty of fluids to prevent dehydration. Call a veterinarian if symptoms persist for more than 24 hours.



**Personal Protective Equipment (PPE)**

**Applicators and other handlers must wear:** long-sleeved shirt and long pants, shoes plus socks. Follow manufacturer's instructions for cleaning/maintaining Personal Protective Equipment (PPE).

If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

**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.

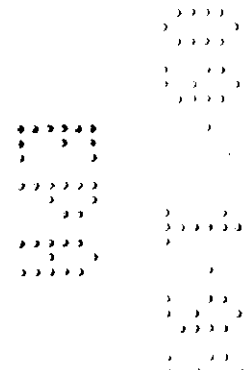
**3.2 Environmental Hazards**

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.

**3.3 Physical or Chemical Hazards**

Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers.

DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.



**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in any 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 regulations.

Keep people and pets off treated areas until spray solution has dried to prevent transfer of this product onto desirable vegetation.

**4.0 STORAGE AND DISPOSAL**

Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

See container label for STORAGE AND DISPOSAL instructions.

Container Label Statements:

(ALL CONTAINERS)

Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state, or local procedures.

Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

(FOR REFILLABLE PORTABLE CONTAINERS)

Do not reuse this container except for refill in accordance with a valid Monsanto Repackaging or Toll Repackaging Agreement. If not refilled or returned to the authorized repackaging facility, triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(FOR BULK CONTAINERS)

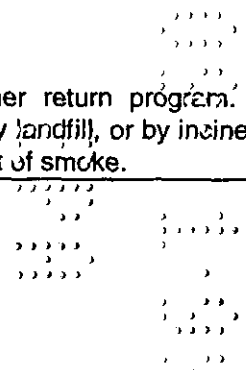
Triple rinse emptied bulk container. Then offer for recycling or reconditioning, or dispose of in a manner approved by state and local authorities.

(FOR PLASTIC 1-WAY CONTAINERS & BOTTLES)

Do not reuse container. Triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(FOR DRUMS)

Do not reuse container. Return container per the Monsanto container return program. If not returned, triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.



**5.0 GENERAL INFORMATION**

**Product Description:** This product is a postemergent, systemic herbicide with no soil residual activity. It gives broad spectrum control of many annual weeds, perennial weeds, woody brush and trees. It is formulated as a water-soluble liquid containing surfactant and no additional surfactant is needed or recommended.

**Environmental Fate:** When this product comes in contact with the soil it is bound to soil particles. When used in accordance with label directions, once this product is bound it is not available for plant uptake and will not harm off-site vegetation where roots grow into the treatment area or if the soil is transported off-site. The strong affinity of this product to soil particles prevents this product from leaching out of the soil profile and entering ground water. The affinity between this product and soil particles remains until this product is degraded, which is primarily a biological degradation process carried out under both aerobic and anaerobic conditions by soil microflora.

**Stage of Growth:** Annual weeds are easiest to control when they are small. Apply to actively growing woody brush and trees after full leaf expansion and before fall color, leaf drop or frost. Best control of most perennial weeds, brush and trees is obtained after they reach the seedhead or flower formation stage of growth. For non-flowering plants, best results are obtained when the plants reach a mature stage of growth. In many situations, treatments are required prior to these growth stages. Under these conditions, use the higher application rate within the recommended range.

In arid areas, best results are obtained when applications are made in the spring to early summer when brush species are at high moisture content and are flowering.

Always use the higher rate of this product per acre within the recommended range when vegetation growth is heavy or dense and growing in undisturbed areas.

**Time to Symptoms:** This product moves through the plant from the point of foliage contact to and into the root system. Visible effects on most annual weeds occur within 2 to 4 days, but on most perennial weeds may not occur for 7 days or more. Symptoms on woody plants and trees may not occur for 30 days or more. Symptoms may not appear prior to frost or senescence with fall treatments. Extremely cool or cloudy weather following treatment may slow activity of this product and delay development of visual symptoms. Visible effects are a gradual wilting and yellowing of the plant which advances to complete browning of above-ground growth and deterioration of underground plant parts.

**Mode of Action in Plants:** The active ingredient in this product inhibits an enzyme found only in plants that is essential to formation of specific amino acids.

**Cultural Considerations:** Reduced control may result when applications are made to annual or perennial weeds, woody brush and trees that have been disturbed through tillage, mowing, grazing, or cutting. After any site disturbance, allow sufficient regrowth of weeds, brush and trees to recommended stage of growth for treatment before making foliar treatments.

Reduced control may result under poor growing conditions such as drought stress, disease or insect damage. Reduced results may also occur when treating vegetation heavily covered with dust.

Allow 7 or more days after application before tillage, mowing or removal of herbaceous weeds. Allow 4 to 6 weeks after application before mowing or mechanical removal of treated brush and trees.



**Rainfastness:** Heavy rainfall soon after application may wash this product off of the foliage and a repeat application may be required for adequate control.

**No Soil Activity:** Weeds must be emerged at the time of application to be controlled by this product. Weeds germinating from seed after application will not be controlled. Unemerged plants arising from unattached underground rhizomes or root stocks of perennials will not be affected by the herbicide.

**Volatility:** Accord XL herbicide is non-volatile. Therefore, it cannot move as a vapor after application to affect nearby vegetation.

**Toxicology:** Exposure to workers and other applicators generally is expected to pose minimal risks based on results of short-term toxicity studies. Glyphosate has been thoroughly tested and determined not to cause cancer or other adverse long-term health effects.

**Tank Mixing:** This product does not provide residual weed control. For subsequent residual weed control, follow a label-approved herbicide program. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used. Use according to the most restrictive label directions for each product in the mixture.

**Grazing Restrictions:** This product may be used to treat undesirable vegetation in utility rights-of-way that pass through pastures, rangeland and on forestry sites that are being grazed. For tank mix applications, comply with all restrictions appearing on the tank mix product label.

There are no grazing restrictions for the following labeled applications of this product:

- Where the spray can be directed onto undesirable woody brush and trees, such as in handgun spray-to-wet or low volume directed spray treatments.
- For tree injection or frill applications and for cut stump treatments.

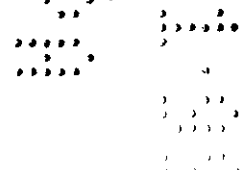
For broadcast applications, observe the following restrictions:

- For application rates of greater than 6 but not to exceed 10 quarts per acre, no more than 15 percent of the available grazing area may be treated.
- For application rates that do not exceed 6 quarts per acre, no more than 25 percent of the available grazing area may be treated.
- All restrictions outlined above apply to lactating dairy animals. No other restrictions apply to lactating dairy animals.

These recommendations do not apply to rangeland outside of utility rights-of-way.

**Custom Blending:** This product may be custom blended as a service for use according to the following limitations: (1) the blend is prepared to the order of the customer and is not held in inventory by the blender, (2) the blend is to be used on customer's property, including easements, leased or rented land, (3) the pesticide(s) used bear Directions which do not prohibit production of such a blend, (4) blend is prepared from registered pesticides, (5) blend is delivered to the customer along with end-use labeling of all products blended and a statement of the composition of the blend.

The blender, buyer and all users are responsible for checking the compatibility and long-term stability of mixtures of this product with herbicides or other materials. Incompatibility, layering or poor stability of mixtures of this product may cause handling problems and reduce performance.



Buyer and all users are responsible for all loss or damage in connection with the use or handling of mixtures of this product with herbicides or other materials that are not expressly recommended in this label. Mixing this product with herbicides or other materials not recommended on this label may result in reduced performance.

**Annual Maximum Use Rate:** This product has no herbicidal or residual activity in the soil. If repeat treatments are necessary the combined total of all treatments must not exceed 10.6 quarts of this product per acre per year.

**ATTENTION**

**AVOID CONTACT OF HERBICIDE WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS, DESIRABLE PLANTS AND TREES, BECAUSE SEVERE INJURY OR DESTRUCTION MAY RESULT.**

**AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS.**

Do not allow the herbicide solution to mist, drip, drift or splash onto desirable vegetation since minute quantities of this product can cause severe damage or destruction to the crop, plants or other areas on which treatment was not intended. The likelihood of injury occurring from the use of this product increases when winds are gusty, as wind velocity increases, when wind direction is constantly changing or when there are other meteorological conditions that favor spray drift. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or fine particles (mist) which are likely to drift. **AVOID APPLYING AT EXCESSIVE SPEED OR PRESSURE.**

**NOTE:** Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences. Keep container closed to prevent spills and contamination.

**6.0 MIXING**

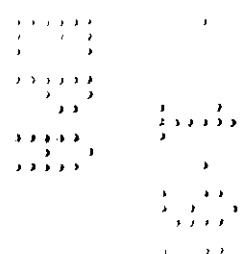
Clean sprayer parts after using this product by thoroughly flushing with water.

**NOTE:** REDUCED RESULTS MAY OCCUR IF WATER CONTAINING SOIL IS USED, SUCH AS VISIBLY MUDDY WATER OR WATER FROM PONDS AND DITCHES THAT IS NOT CLEAR.

**6.1 Mixing with Water**

This product mixes readily with water. Mix spray solutions of this product as follows: Fill the mixing or spray tank with the required amount of water. Add the recommended amount of this product near the end of the filling process and mix well. Use caution to avoid siphoning back into the carrier source. Use approved anti-back-siphoning devices where required by state or local regulations. During mixing and application, foaming of the spray solution may occur. To prevent or minimize foam, avoid the use of mechanical agitators, terminate by-pass and return lines at the bottom of the tank and, if needed, use an approved anti-foam or defoaming agent.

**6.2 Tank Mixing Procedure**



When tank mixing, read and carefully observe label directions, cautionary statements and all information on the labels of all products used. Add the tank-mix product to the tank as directed by the label. Maintain agitation and add the recommended amount of this product.

Maintain good agitation at all times until the contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation may be required to re-suspend the mixture before spraying is resumed.

Keep by-pass line on or near the bottom of the tank to minimize foaming. Screen size in nozzle or line strainers should be no finer than 50 mesh.

Always predetermine the compatibility of labeled tank mixtures of this product with water carrier by mixing small proportional quantities in advance.

Refer to the "Tank Mixing" section of "GENERAL INFORMATION" for additional precautions.

### 6.3 Colorants or Dyes

Agriculturally-approved colorants or marking dyes may be added to this product. Colorants or dyes used in spray solutions of this product may reduce performance, especially at lower rates or dilution. Use colorants or dyes according to the manufacturer's recommendations.

### 6.4 Drift Control Additives

Drift control additives may be used. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label.

## 7.0 APPLICATION EQUIPMENT, TECHNIQUES AND USE RECOMMENDATIONS

APPLY THESE SPRAY SOLUTIONS IN PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING DESIRED VOLUMES.

### ■ SPRAY DRIFT MANAGEMENT ■

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS.

Do not allow the herbicide solution to mist, drip, drift or splash onto desirable vegetation since *minute quantities of this product can cause severe damage or destruction to the crop, plants or other areas on which treatment was not intended.*

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.

GROUND APPLICATION: Apply recommended rates of this product in 10 to 60 gallons of water per acre as a broadcast spray. For optimum spray distribution and coverage, use flat fan or low-volume flood nozzles. When using flood nozzles, space them no more than 40 inches apart and ensure double overlap of spray pattern. Refer to the manufacturer's recommendations for correct pressure.

and nozzle height above the target canopy. Avoid pressure and nozzles which produce fine droplets or mist.

Use appropriate marking devices to ensure uniform spray coverage and best results from this product.

**AERIAL APPLICATION:** Apply the recommended rates of this product in 10 to 30 gallons of water per acre as a broadcast spray. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.

### ■ AERIAL SPRAY DRIFT MANAGEMENT ■

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops.

1. The distance of the outermost nozzles on the boom must not exceed  $\frac{3}{4}$  the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees. Where states have more stringent regulations, they should be observed.

#### 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 the **Wind, Temperature and Humidity, and Temperature Inversion** sections of this label).

#### Controlling droplet size

- **Volume:** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with the 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 protection. 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 height to less than ¾ of the wingspan or rotor length may further reduce drift without reducing swath width.
- **Application Height:** Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces the exposure of the droplets to evaporation and wind.

**Swath Adjustment**

When applications are made with a crosswind, the swath will be displaced downward. 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 droplets, etc.).

**Wind**

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

**Temperature and Humidity**

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

**Temperature Inversions**

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

**Sensitive areas**

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

**7.1 Aerial Equipment**





Eucalyptus  
Madrone  
Oak  
Reed, giant

Sweetgum  
Tan oak  
Willow

DO NOT MAKE CUT STUMP APPLICATIONS WHEN THE ROOTS OF DESIRABLE WOODY BRUSH OR TREES MAY BE GRAFTED TO THE ROOTS OF THE CUT STUMP. INJURY RESULTING FROM ROOT GRAFTING IS LIKELY TO OCCUR IN ADJACENT WOODY BRUSH OR TREES.

**7.5 Injection and Frill Application**

This product will control woody brush and trees by injection or frill applications. Apply this product using suitable equipment which must penetrate into the living tissue. Apply the equivalent of 1 ml of this product per each 2 to 3 inches of trunk diameter at breast height (DBH). This is best achieved by applying a 50 to 100 percent concentration of this product either to a continuous frill around the tree or as cuts evenly spaced around the tree below all branches. As tree diameter increases in size, better results are achieved by applying diluted material to a continuous frill or more closely spaced cuttings. Avoid application techniques that allow runoff to occur from frilled or cut areas in species that exude sap freely. In species such as this, make the frill or cuts at an oblique angle to produce a cupping effect and use a 100 percent concentration of this product. For best results, application should be made during periods of active growth and after full leaf expansion. Injection or frill applications of this product will control many woody brush and tree species, some of which are listed below:

Control  
Oak  
Poplar  
Sweetgum  
Sycamore

Partial Control  
Black gum  
Dogwood  
Hickory  
Maple, red

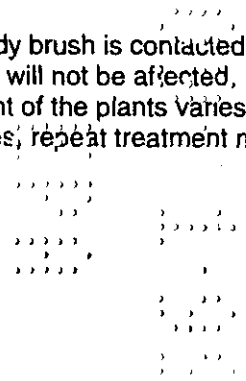
**7.6 Selective Equipment**

This product may be applied through recirculating spray systems, shielded applicators, hooded sprayers, wiper applicators or sponge bars after dilution and thorough mixing with water to listed weeds growing in any utility site specified on this label.

AVOID CONTACT OF HERBICIDE WITH DESIRABLE VEGETATION AS SERIOUS INJURY OR DEATH IS LIKELY TO OCCUR.

Applicators used above desired vegetation should be adjusted so that the lowest spray stream or wiper contact point is at least 2 inches above the desirable vegetation. Droplets, mist, foam or splatter of the herbicide solution settling on desirable vegetation is likely to result in discoloration, stunting or destruction.

Best results are obtained when the foliage of herbaceous weeds and woody brush is contacted by the herbicide solution. Vegetation not contacted by the herbicide solution will not be affected. Poor contact may occur in dense clumps, severe infestations or when the height of the plants varies so that not all of the undesirable plant foliage is contacted. In these instances, repeat treatment may be necessary.





**Shielded and hooded applicators**

Use nozzles that provide uniform coverage within the treated area. Keep shields on these sprayers adjusted to protect desirable vegetation. **EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF HERBICIDE WITH DESIRABLE VEGETATION.**

**Wiper applicators and sponge bars**

Equipment must be designed, maintained and operated to prevent the herbicide solution from contacting desirable vegetation. Operate this equipment at ground speeds no greater than 5 mph. Performance may be improved by reducing speed in areas of heavy weed infestations to ensure adequate wiper saturation. Better results may be obtained if 2 applications are made in opposite directions.

Avoid leakage or dripping onto desirable vegetation. Adjust height of applicator to ensure adequate contact with weeds. Keep wiping surfaces clean. Be aware that, on sloping ground, the herbicide solution may migrate, causing dripping on the lower end and drying of the wicks on the upper end of a wiper applicator.

Mix only the amount of solution to be used during a 1-day period, as reduced activity may result from use of leftover solutions. Clean wiper parts immediately after using this product by thoroughly flushing with water.

**For Rope or Sponge Wick Applicators--**Solutions ranging from 33 to 75 percent of this product in water may be used.

**For Porous-Plastic Applicators and pressure-feed systems--**Solutions ranging from 33 to 100 percent of this product in water may be used.

**7.7 Injection Systems**

This product may be used in aerial or ground injection spray systems. It may be used as a liquid concentrate or diluted prior to injecting into the spray stream. Do not mix this product with the undiluted concentrate of other products when using injection systems unless specifically recommended.

**8.0 SITE RECOMMENDATIONS**

Unless otherwise specified, applications of this product may be made for control or partial control of herbaceous weeds, woody brush and trees listed in the "WEEDS CONTROLLED" section of this label.

**8.1 UTILITY SITES**

In utilities, this product is recommended for use along electrical power, pipeline and telephone rights-of-way, and in other sites associated with these rights-of-way, such as substations, roadsides, railroads or similar rights-of-way that run in conjunction with utilities.

This product is also recommended for use in preparing or establishing wildlife openings within these sites, maintaining access roads and for side trimming along utility rights-of-way.

**TANK MIXTURES**

Tank mixtures of this product may be used to increase the spectrum of control for herbaceous weeds, woody brush and trees. When tank mixing, read and carefully observe the label claims, cautionary statements and all information on the labels of all products used. Use according to the most restrictive precautionary statements for each product in the mixture. Any recommended rate of this product may be used in a tank mix.

For control of herbaceous weeds, use the lower recommended tank mixture rates. For control of dense stands or tough-to-control woody brush and trees, use the higher recommended rates.

**NOTE:** For side trimming treatments, it is recommended that this product be used alone or in tank mixture with Garlon™ 4.

PRODUCT	BROADCAST RATE	USE SITES
Arsenal 2WSL	6 to 32 fl oz/acre	Utility Sites
Escort™	1 to 2 oz/acre	Utility Sites
Garlon™ 3A*, Garlon 4	1 to 4 qts/acre	Utility Sites/ Side Trimming
Oust™	1 to 4 oz/a	Utility Sites

PRODUCT	SPRAY-TO-WET RATES	USE SITES
Arsenal 2WSL	1/16% to 1/8% by volume	Utility Sites
Escort™	1 to 2 oz/acre	Utility Sites

PRODUCT	LOW VOLUME DIRECTED SPRAY RATES	USE SITES
Arsenal 2 WSL	1/8% to 1/2% by volume	Utility Sites
Escort™	1 to 2 oz/acre	Utility Sites

\* Ensure that Garlon 3A is thoroughly mixed with water according to label directions before adding this product. Have spray mixture agitating at the time this product is added to avoid spray compatibility problems.

**Bare Ground and Trim-and-edge**

This product may be used in utility sites and substations for bare ground, trim-and-edge around objects, spot treatment of unwanted vegetation and to eliminate unwanted weeds growing in established shrub beds or ornamental plantings. This product may be used prior to planting a utility site to ornamentals, flowers, turfgrass (sod or seed), or beginning construction projects.

Repeated applications of this product may be used, as weeds emerge, to maintain bare ground.

This product may be tank mixed with the following products. Refer to these products' labels for approved noncrop sites and application rates.

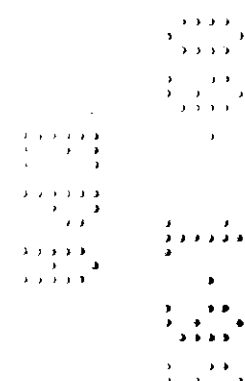
ARSENAL™	PLATEAU™
BANVEL	PRINCEP™DF
BARRICADE™ 65WG	PRINCEP™ LIQUID
DIURON	RONSTAR™ 50WP
ENDURANCE™	SAHARA™
ESCORT™	SIMAZINE
GARLON™ 3A	SURFLAN™

### 9.0 WEEDS CONTROLLED

When applied as recommended under the conditions described, this product-CONTROLS, or PARTIALLY CONTROLS most herbaceous weeds, woody brush and trees, some of which are listed below:

#### 9.1 Woody Brush and Trees

- Alder
- Ash\*
- Aspen, quaking
- Bearclover (Bearmat)\*
- Beech\*
- Birch
- Blackberry
- Blackgum
- Bracken
- Broom; French, Scotch
- Buckwheat, California\*
- Cascara\*
- Catsclaw\*
- Ceanothus\*
- Chamise\*
- Cherry; bitter, black, pin
- Coyote brush
- Deerweed
- Dogwood\*
- Elderberry
- Elm\*
- Eucalyptus
- Gallberry
- Gorse\*
- Hasardia\*
- Hawthorn
- Hazel
- Hickory\*
- Honeysuckle



- Hornbeam, American\*
- Kudzu\*\*
- Locust, black\*
- Madrone resprouts\*
- Manzanita\*
- Maple, red
- Maple, sugar
- Monkey flower\*
- Oak; black, white\*
- Oak, post
- Oak; northern, pin
- Oak, Scrub\*
- Oak; southern red
- Peppertree, Brazilian (Florida holly)\*
- Persimmon\*
- Pine
- Poison ivy\*\*
- Poison oak\*\*
- Poplar, yellow\*
- Redbud, eastern
- Rose, multiflora
- Russian olive\*
- Sage, black
- Sage, white\*
- Sage brush, California
- Salmonberry
- Saltcedar\*
- Sassafras\*
- Sourwood\*
- Sumac; laurel, poison, smooth, sugarbush,winged\*
- Sweetgum
- Swordfern\*
- Tallowtree, Chinese
- Tan oak resprouts\*
- Thimbleberry
- Tobacco, tree\*
- Toyon\*
- Trumpetcreeper
- Vine maple\*
- Virginia creeper
- Waxmyrtle, southern\*
- Willow
- Yerbasenta\*

\* Partial Control

\*\*Use a minimum of 4 quarts per acre

**9.2 Perennial Weeds**

- Alfalfa\*
- Alligatorweed\*
- Anise (fennel)

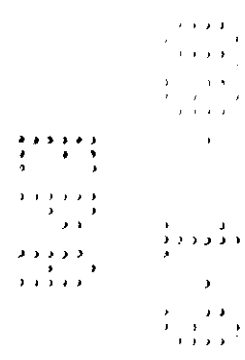


Thistle, artichoke  
Thistle, Canada  
Timothy  
Torpedograss\*  
Trumpet creeper\*  
Vaseygrass  
Velvetgrass  
Wheatgrass, western

\*Partial Control

9.3 Annual Weeds

Annoda, spurred  
Barley  
Barnyardgrass  
Bittercress  
Black nightshade  
Bluegrass, annual  
Bluegrass, bulbous  
Bassia, fivehook  
Brome, downy  
Brome, Japanese  
Browntop panicum  
Buttercup  
Carolina foxtail  
Carolina geranium  
Castor bean  
Cheatgrass  
Cheeseweed (*Malva parviflora*)  
Chervil  
Chickweed  
Cocklebur  
Copperleaf, hophornbeam  
Corn  
Corn speedwell  
Crabgrass  
Dwarf dandelion  
Eastern mannagrass  
Eclipta  
Fall panicum  
Falsedandelion  
Falseflax, smallseed  
Fiddleneck  
Field pennycress  
Filaree  
Fleabane, annual  
Fleabane, hairy (*Conyza bonariensis*)  
Fleabane, rough  
Florida pusley  
Foxtail  
Goatgrass, jointed  
Goosegrass





Virginia copperleaf  
Virginia pepperweed  
Wheat  
Wild oats  
Witchgrass  
Woolly cupgrass  
Yellow rocket

**10.0 LIMIT OF WARRANTY AND LIABILITY**

Monsanto Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label booklet ("Directions") when used in accordance with those Directions under the conditions described therein. **NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE.** This warranty is also subject to the conditions and limitations stated herein.

Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

Buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, application to or contact with desirable vegetation, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

This Company does not warrant any product reformulated or repackaged from this product except in accordance with this Company's stewardship requirements and with express written permission from this Company.

THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.

Upon opening and using this product, buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement. If terms are not acceptable, return at once unopened.

Oust is a trademark of E.I. DuPont de Nemours and Company.  
Garlon is a trademark of Dow Agrosciences.  
Arsenal is a trademark of American Cyanamid Company.



This product is protected by U.S. Patent No. 4,405,531.  
Other patents pending.  
No license granted under any non-U.S. patent(s).

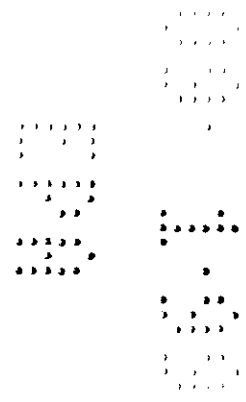
EPA Reg. No. 524-???

---

In case of an emergency involving this product,  
Call Collect, day or night, (314) 694-4000.

---

©MONSANTO COMPANY 1999  
MONSANTO COMPANY  
ST. LOUIS, MISSOURI, 63167 U.S.A.





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

26' of 29

SEP 27 1999

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Ms. Annette M. Kirk  
Monsanto Company  
600 13<sup>th</sup> Street, NW Suite #660  
Washington, DC 20005

Dear Ms. Kirk:

Subject: Accord XL Herbicide (Aerial Application In CA)  
EPA Registration No. 524-517  
Your Application Dated August 31, 1999

The labels referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended is acceptable provided you make the following change before you release the product for shipment.

-Add the phrase "EPA Registration No. 524-517" to your label.

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

A stamped copy of labeling is enclosed for your records.

Sincerely,

*James A. Tompkins*  
James A. Tompkins  
Product Manager 25  
Herbicide Branch  
Registration Division (7505C)

**SUPPLEMENTAL LABELING**

READ AND FOLLOW THE ENTIRE LABEL FOR ACCORD XL™ HERBICIDE BEFORE PROCEEDING WITH THE USE DIRECTIONS CONTAINED IN THIS SUPPLEMENTAL LABELING.

"Label" as used in this supplemental labeling refers to the label booklet for Accord XL Herbicide and this supplement.

**ACCORD XL™ HERBICIDE  
BY MONSANTO**

EPA Reg. No. 524-???

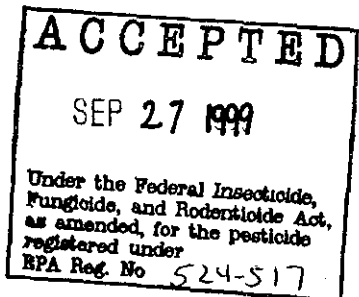
FOR AERIAL APPLICATION IN CALIFORNIA ONLY.

Keep out of reach of children.

**CAUTION!**

In case of emergency involving this product, call Collect, day or night, 314-694-4000.

Accord XL is a trademark of Monsanto Company.



**Directions for Use**

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

This label should be in the possession of the user at the time of the herbicide application.

See the label booklet for specific recommendations on the use of this product.

EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF THE SPRAY WITH FOLIAGE, GREEN STEMS, OR FRUIT OF DESIRABLE CROPS, PLANTS, TREES OR OTHER DESIRABLE VEGETATION, SINCE SEVERE DAMAGE OR DESTRUCTION MAY RESULT.

When applied as recommended under the conditions described, this product controls annual and perennial weeds and woody brush and trees listed in the label booklet. See the Weeds Controlled section of the label booklet for rate recommendations.

Aerial applications of this product are allowed in the following situations:

1. Prior to the emergence or transplanting of labeled crops
2. Aid to burning for establishment and maintenance of fuel breaks
3. Establishing fire perimeters and black lines
4. Aid to prescribed burning
5. Along fire roads
6. Range conversion
7. Habitat restoration and management

8. Wildlife food plots

---

AERIAL APPLICATIONS

---

Apply 1 to 5 quarts of this product in 5 to 15 gallons of water per acre using aerial (helicopter only) applications.

To broaden the spectrum of control, Garlon 4 may be tank mixed with this product at the rate of 0.5 to 2 quarts per acre. The rate of Garlon should not exceed 1/2 the rate of this product (e.g. 1 quart of Garlon to 2 quarts of this product) for best results.

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.

**AVOID DRIFT - DO NOT APPLY WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITION WHICH WILL ALLOW DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.**

Use the following guidelines when aerial applications are made near crops or desirable perennial vegetation after bud break and before total leaf drop, and/or near other desirable vegetation or annual crops.

1. Do not apply within 100 feet of any desirable vegetation or crop(s).
2. If wind up to 5 miles per hour is blowing toward desirable vegetation or crop(s), do not apply within a minimum of 500 feet of the desirable vegetation or crop(s).
3. Winds blowing from 5 to 10 miles per hour toward desirable vegetation or crop(s) may require buffer zones in excess of 500 feet.
4. Do not apply when winds are in excess of 10 miles per hour or when inversion conditions exist.
5. APPLY BY AIR ONLY TO NONRESIDENTIAL AREAS.

Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations which dispense spray as fine spray droplets. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure. Drift control additives may be used. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label.

**Ensure uniform application** - To avoid streaking, uneven, or overlapped application, use appropriate marking devices.

**PROLONGED EXPOSURE OF THIS PRODUCT TO UNCOATED STEEL SURFACES MAY RESULT IN CORROSION AND POSSIBLE FAILURE OF THE PART.** The maintenance of an organic coating (paint) which meets aerospace specification MIL-C-38413 may prevent corrosion. To prevent corrosion of exposed parts,

thoroughly wash aircraft after each day of spraying to remove residues of this product accumulated during spraying or from spills. Landing gear are most susceptible.

Read the "LIMIT OF WARRANTY AND LIABILITY" in the label booklet Accord XL herbicide before using this product. Those terms apply to this supplemental labeling and if those terms are not acceptable, return the product unopened at once.

Garlon is a trademark of Dow Agrosciences

©MONSANTO COMPANY 1999  
ST. LOUIS, MISSOURI 63167