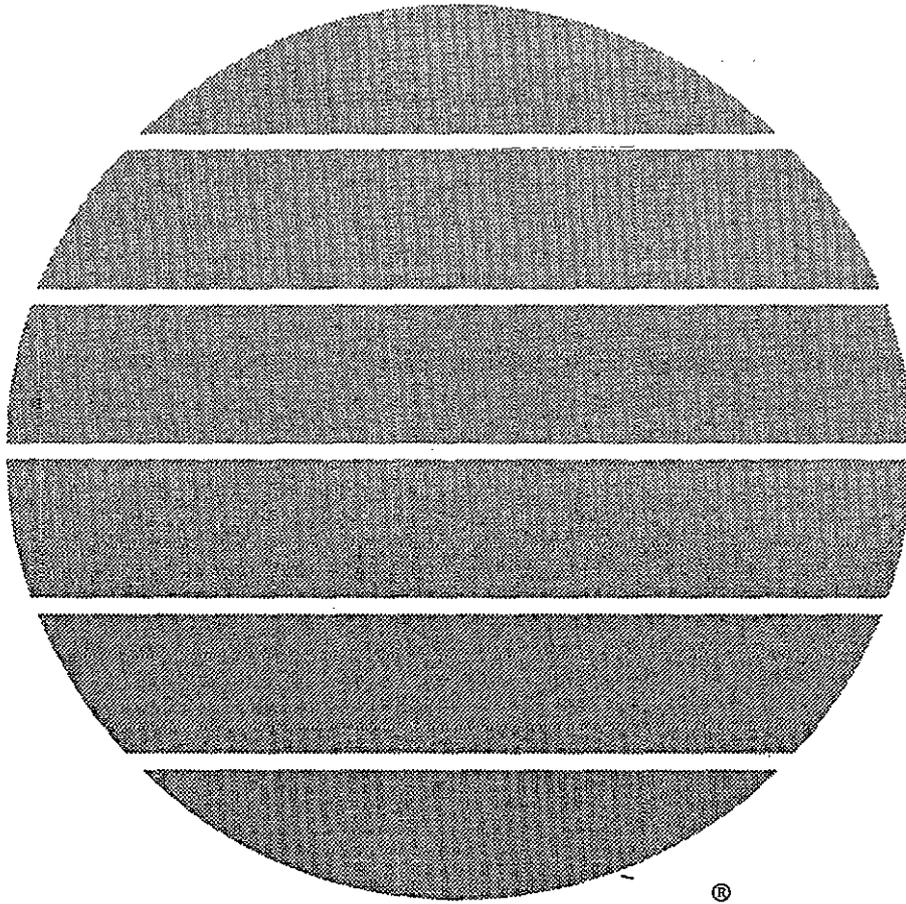




# UpBeet™

herbicide

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*“..... A Growing Partnership With Nature”*

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**"UPBEET" HIGHLIGHTS**

For selective control of broadleaf and grass weeds in sugar beets, including those grown for seed. "See Weeds Controlled."

For best results, use *UpBeet* with Betamix<sup>1</sup> in a tank mix. Use two sequential applications separated by 5-10 days. See "Rate."

May be applied by ground (broadcast or band) or air. In ground applications, use a minimum of 10 gallons of water at 20-40 psi. Use flat fan nozzles in broadcast applications and even fan nozzles in band applications. "See Application Equipment And Spray Drift."

Apply to actively growing seedling and small weeds. *Upbeet* can be safely applied to sugar beets anytime after planting. See "Crop Stage" and "Weed Stage."

Certain environmental conditions affect the performance of *UpBeet*. See "Environmental Conditions."

Conveniently packaged in 10 - 4 oz jugs per carton.

Consult label text for complete instructions. Always read and follow label directions for use.

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**ACCEPTED**

JUL - 3 1996

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under  
EPA Reg. No. 352-569



# UpBeet™

## herbicide

*Dry Flowable*

*For Weed Control in Sugar Beets Only*

UpBeet is recommended for selective postemergence control, or partial control, of broadleaf and grass weeds in sugar beets.

This product is a water dispersible granule containing 50% active ingredient by weight.

<i>Active Ingredient</i>	<i>By Weight</i>
Triflurosulfuron methyl: Methyl 2-[[[4-(dimethylamino)-6-(2,2,2-trifluoroethoxy)-1,3,5-triazin-2-yl]-amino]carbonyl]amino]sulfonyl]-3-methylbenzoate	50%
<i>Inert Ingredients</i>	50%
TOTAL	100%

EPA Reg. No. 352-569

U.S. Patent 5,090,993

**KEEP OUT OF REACH OF CHILDREN**

### CAUTION

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

#### STATEMENT OF PRACTICAL TREATMENT

**If in eyes:** Flush eyes with plenty of water. Call a physician if irritation persists.

**If on skin:** Wash with plenty of soap and water. Get medical attention if irritation persists.

#### PRECAUTIONARY STATEMENTS

##### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION!** Avoid contact with skin, eyes and clothing. In case of contact with eyes, immediately flush with plenty of water. Get medical attention if irritation persists.

For medical emergencies involving this product, call toll free 1-800-441-3637.

#### PERSONAL PROTECTIVE EQUIPMENT

*Applicators and other handlers must wear:*

Long-sleeve shirt and long pants.

Waterproof gloves.

Shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### USER SAFETY RECOMMENDATIONS

**USERS SHOULD:** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

#### 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 washwater.

Mantengase fuera del alcance de los niños, animales domesticos y alimentos.

### PRECAUCION

**Precaución!** Evítese el contacto con la piel, los ojos y la ropa. En caso de haber contacto, lávese la piel y los ojos con agua abundante. Si la irritación persiste, consulte un médico. Lávese con abundante agua y jabón después de haber usado el producto. La ropa contaminada debe cambiarse y lavarse.

**Para emergencias médicas con este producto, llame gratis 1-800-441-3637.**

Precauciones para la protección del medio ambiente. Evite el contacto del producto con lagos, corrientes o lagunas. No contaminar el agua de uso doméstico o regadío al limpiar el equipo o deshacerse de desperdicios.

**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.

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.  
 Waterproof gloves.  
 Shoes plus socks.

**FOR USE ONLY ON SUGAR BEETS INCLUDING THOSE GROWN FOR SEED**

**APPLICATION INFORMATION RATE**

The maximum use rate per year is 1.5 ounces *UpBeet* per acre.

**Broadcast Applications**

For best control of the broadest spectrum of weeds, use a minimum of 2 sequential applications of *UpBeet* tank mixed with "Betamix". Apply *UpBeet* at a broadcast rate of 1/2 to 1 ounce product per acre in a tank mix with "Betamix" at 1 1/2 to 3 pints per acre to sugar beets for control or partial control of the weeds listed below.  
 Applications should be made 5 to 10 days apart or as weeds germinate. The total ounces applied must not exceed the maximum use rate per year.

*UpBeet* may be applied at a broadcast rate of 1/2 to 1 ounce per acre with an adjuvant to control some weeds (see "Weeds Controlled"). Use a minimum of 2 sequential applications 5 to 10 days apart or as weeds germinate for best results. The total ounces applied must not exceed the maximum use rate per year.

**Band Applications**

See DuPont guide - "Application Accuracy Row Banders." Refer to the tank mix partner label for any applicable band rate charts.  
 See the Broadcast Application section of this label for additional application information.

**CROP STAGE AT APPLICATION**

*UpBeet* can be safely applied to sugar beets any time after planting. Apply *UpBeet* during weed emergence.

Chlorosis may be observed following an application of *UpBeet*. This effect is temporary.

Apply no later than 60 days before harvest. Tank mix partners will vary in their preharvest intervals. Always refer to the mix partner label and use the most restrictive interval.

**WEED STAGE AT APPLICATION**

The growth stage of weeds at application is very important for satisfactory control. For best results, apply to small, emerged weeds between the cotyledon and four true leaf stage (less than 1 inch tall or across). Weeds should be actively growing and not under stress. Use sequential tank mix applications to control new weed flushes.

Since *UpBeet* has little to no soil activity, only weeds that have emerged above the soil surface will be controlled.

Applications made to larger weeds or to weeds under stress may result in unsatisfactory control.

**WEEDS CONTROLLED**

**with the tankmix of *UpBeet* and "Betamix"**

Buckwheat, wild .....	<i>Polygonum convolvulus</i>
Burclover, California (a) .....	<i>Medicago polymorpha</i>
Chickweed, common .....	<i>Stellaria media</i>
Dock, curly .....	<i>Rumex crispus</i>
Fiddleneck, coast .....	<i>Amsinckia intermedia</i>
Goosefoot, nettleleaf (a) .....	<i>Chenopodium murale</i>
Groundcherry, Wright (a) .....	<i>Physalis wrightii</i>
Knotweed, silversheath (b) .....	<i>Polygonum argyrocoleon</i>
Kochia (c) .....	<i>Kochia scoparia</i>
Lambsquarters, common .....	<i>Chenopodium album</i>
London rocket (a) .....	<i>Sisymbrium irio</i>
Mallow, little (a) .....	<i>Malva parviflora</i>
Mustard, black (a) .....	<i>Brassica nigra</i>
Mustard, wild (a) .....	<i>Brassica kaber</i>
Nightshade, black .....	<i>Solanum nigrum</i>
Nightshade, hairy (seedling only) .....	<i>Solanum sarrachoides</i>
Radish, wild .....	<i>Raphanus sativus</i>
Pigweed, prostrate (b) .....	<i>Amaranthus blitoides</i>
Pigweed, redroot (b) .....	<i>Amaranthus retroflexus</i>
Ragweed, common .....	<i>Ambrosia artemisiifolia</i>
Shepherd's-purse (a) .....	<i>Capsella bursa-pastoris</i>
Smartweed, Pennsylvania .....	<i>Polygonum pennsylvanicum</i>
Sowthistle, annual (a) .....	<i>Sonchus oleraceus</i>
Velvetleaf (a) (b) .....	<i>Abutilon theophrasti</i>

- (a) In California "*UpBeet*" + adjuvant will control these weeds.
- (b) Minimum of 2 applications at higher rates needed for acceptable control in CA.
- (c) See "Information on Resistant Weeds".

**PARTIAL CONTROL\*\***

**with the tankmix of UpBeet and "Betamix"**

Foxtail, green .....	<i>Setaria viridis</i>
Foxtail, yellow .....	<i>Setaria glauca</i>
Junglerice .....	<i>Echinochloa colonum</i>
Purslane, common .....	<i>Portulaca oleracea</i>
Smartweed, ladysthumb .....	<i>Polygonum persicaria</i>

\*\*Partial control: A visual reduction of weed competition (reduced population or size) as well as a significant loss of vigor for individual weed plants.

**TANK MIX OPTIONS**

Read all label precautions for tank mix partners prior to use. Follow all manufacturer's label recommendations for the companion herbicide. If these recommendations conflict with this label, do not use in a tank mix with *UpBeet*.

A surfactant or other spray adjuvant may be added to *UpBeet* tank mixes unless the tank mix partner label prohibits it.

**"Betamix"**- Use 1 1/2 to 3 pints with *UpBeet* in two sequential applications to provide the broadest spectrum of weed control. See Rate section of this label.

*UpBeet* + "Betamix" may be tank mixed with other suitable registered herbicides, such as Stinger<sup>®</sup> or H273<sup>®</sup>, to control weeds in addition to those listed. Use sequential applications.

Velvetleaf and wild radish control may be reduced when *UpBeet* is mixed with "Betamix".

"H273"-Tank mixes with *UpBeet* + "Betamix" should be used in areas where crop tolerance to "H273" is acceptable or crop injury may result.

Betanex<sup>®</sup>- Use 1 1/2 to 2 pints with *UpBeet* in two sequential applications.

**"Stinger"**- *UpBeet* may be tank mixed with "Stinger" at 1/4 pint/A for additional broadleaf weed control. However, if kochia is a target weed, *UpBeet* is not recommended in a tank mix as reduced kochia control is likely. Using *UpBeet* + "Betamix" + "Stinger" does not reduce kochia control.

**SPRAY ADDITIVES**

If *UpBeet* is to be applied alone, an adjuvant must be included. Use a DuPont approved non-ionic surfactant or crop oil.

**Non-ionic Surfactant**

Apply at the rate (concentration) of 0.25 % v/v (2 pts per 100 gal of spray solution.)

Use a surfactant from the DuPont recommended list.

**Crop Oils**

Apply at the rate (concentration) of 1 % v/v (1 gal in 100 gal of spray solution).

Use a crop oil concentrate or methylated seed oil on the DuPont recommended list.

**PESTICIDE HANDLING**

- Calibrate sprayers only with clean water away from the well site.
- Make scheduled checks of spray equipment.
- Assure accurate measurement of *UpBeet*.
- Mix only enough product for the job at hand.
- Avoid over-filling of spray tank.
- Dilute and agitate excess solution and apply at labeled rates/uses. Do not discharge excess material on the soil at a single spot in the field/grove or mixing/loading station.
- Avoid storage of pesticides near well sites.
- When triple rinsing the pesticide container, be sure to add the rinsate to the spray mix.

**MIXING INSTRUCTIONS**

**SPRAY CARRIER**

*UpBeet* is to be mixed only in water.

**SPRAY PREPARATION**

Pour the proper amount of *UpBeet* into the necessary volume of water in the spray tank with the agitator running. Continuous agitation is required for a uniform suspension and application. Triple rinse all empty containers at this time and add rinsate to spray tank.

**Tank Mix Application:** *UpBeet* must be dispersed in the spray tank before adding any tank mix partners or additives. If *UpBeet* is to be applied alone, adjuvant must be used. Adjuvants are added as the last tank mix partner.

**Note:** The presence of tank mix partners can interfere with the dispersion of *UpBeet*. When multiple tank loads of the same tank mix are being prepared, preslurry *UpBeet* in a dedicated container of clean water prior to adding to the next tank load.

Always spray immediately after preparing the spray solution.

**APPLICATION EQUIPMENT**

Other crops may be sensitive to *UpBeet*. All direct or indirect contact from physical drift with crops other than sugar beets should be avoided. Recommendations in this section should minimize the possibility of spray drift (See SPRAY DRIFT section of this label).

Since foliar absorption is the primary means of *UpBeet* uptake by plants, thorough spray coverage of weeds is essential. Select a spray volume and delivery system that will ensure thorough coverage and a uniform spray pattern.

Use 50 mesh or larger strainer screens. Continuous agitation is required to keep *UpBeet* in suspension.

Do not apply *UpBeet* through any type of irrigation equipment.

**Ground Application (See SPRAY DRIFT)**

Use a minimum of 10 gallons water per acre.

**Broadcast Application**

Under heavy weed pressure, dense crop foliage, or moisture stress conditions, increase volume an additional 5 gallons per acre. Change nozzle size to increase gallonage.

Use flat fan nozzles at 20-40 PSI.

For proper spray coverage, adjust the boom and nozzle height according to the specifications listed by the nozzle manufacturer.

**Band applications**

Use EVEN flat fan nozzles at 20-40 PSI.

Carefully follow the manufacturer's instructions for nozzle orientation, distance from crop and weeds, spray volumes, calibration and spray pressure. Follow instructions on other tank mix herbicide labels.

For additional information on row banders, see DuPont's bulletin, "Application Accuracy Row Banders".

**Aerial Application (See SPRAY DRIFT)**

Do not apply by air in California.

Use a minimum of 5 gallons carrier per acre by air.

Under heavy weed pressure, dense crop foliage, or moisture stress conditions, increase volume by selecting a different nozzle size.

**CULTIVATION**

Timely cultivation(s) can be used in addition to *UpBeet* tank mixes for optimum weed control in a sugar beet management program.

**ENVIRONMENTAL CONDITIONS AND BIOLOGICAL ACTIVITY**

*UpBeet* provides the best postemergence results when applied to young, actively growing weeds. Conditions that promote the activity of *UpBeet* are warm temperatures and adequate soil moisture before, during and immediately after application.

Treating large or stressed weeds may result in poor weed control. Delay application until stress passes and weeds begin to grow again. Best results are obtained when applications avoid:

- Cold, dry conditions
- Stress conditions due to frost, drought or water-saturated soil
- Disease or insect damage
- Injury from previous herbicide applications.

Rainfall within 6 hours may reduce weed control.

*UpBeet* is absorbed through foliage; therefore, thorough spray coverage of weeds is essential.

*UpBeet* rapidly stops growth of susceptible weeds. Weeds turn yellow 5-7 days after postemergence application, followed by death of the growing point. However, these symptoms may not be noticeable for 1-2 weeks after application.

A vigorously growing crop will aid weed control by shading and providing competition for weeds. Weeds may not be controlled in areas of thin stand or seeding skips.

**INFORMATION ON RESISTANT WEEDS**

Naturally occurring weed biotypes\* that are resistant to DuPont Harmony® Extra Herbicide or DuPont Express® Herbicide will also be resistant to *UpBeet*.

If resistant weed biotypes, such as kochia, are suspected or known to be present, spray *UpBeet* in tank mixtures with other broadleaf herbicides having a different mode of action\*\* such as "Betamix".

Adjust the use rate of the tank mix partner so that it alone will control the resistant biotypes.

Several strategies can delay the development of resistant weed biotypes:

- 1) The use of preplant incorporated or preemergence herbicides for weed control prior to postemergence use of *UpBeet*.
- 2) Application of *UpBeet* as a tank mix with another herbicide such as "Betamix".
- 3) The use of cultivation.
- 4) The use of handweeding to control escapes.

\* Biotypes are naturally-occurring individuals of the species which have a slightly different genetic makeup. Resistant biotypes may look exactly the same as susceptible biotypes. Herbicide-resistant biotypes are able to survive a use rate several times higher than needed to control susceptible biotypes.

\*\* Mode of action is the chemical interaction that disrupts plant growth and development.

**CROP ROTATION**

Any crop may be planted 14 days after the last application of *UpBeet*.

In a replanting situation, sugar beets may be planted anytime after application of *UpBeet*.

**GRAZING**

*UpBeet* has no restriction on grazing or feeding of crop residue to livestock. Tank mix partners may have grazing or feeding restrictions, therefore always refer to the label of the tank mix partner and follow the most restrictive label.

**SPRAYER PREPARATION AND CLEANUP**

It is important that spray equipment is cleaned and free of existing pesticide deposits before using *UpBeet*, and then, properly cleaned out following application.

Follow the cleanup procedures specified on the label of the product previously sprayed. If no cleanout procedure is provided, use the one that follows below.

To avoid subsequent injury to desirable crops, thoroughly clean all mixing and spray equipment immediately following applications of *UpBeet*.

**AT THE END OF THE DAY**

It is recommended when *UpBeet* will be applied over several days, at the end of each day, rinse the interior of the tank with fresh water, then partially fill the tank and flush the boom and hoses. This will prevent the buildup of dried pesticide deposits which are difficult to remove from application equipment.

### CLEANUP PROCEDURE

1. Drain tank and thoroughly hose down the interior surfaces. Flush the tanks, boom, and hoses with clean water. Loosen and physically remove any visible deposits.
2. Partially fill the tank with clean water and one gallon household ammonia\* (contains 3% active) for every 100 gallons of water. Flush the hoses, boom, and nozzles with the cleaning solution, then add more water to completely fill the tank. Circulate, with agitation, the cleaning solution through the tank and hoses for at least 15 minutes. Again flush the hoses, boom, and nozzles with the cleaning solution and drain the tank.
3. Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.
4. Repeat step 2
5. Rinse the tank, boom, and hoses with clean water.
6. The rinsate may be disposed of on site or at an approved waste disposal facility.

\* Equivalent amounts of an alternate strength ammonia solutions may be used, or a tank cleaner recommended in the DuPont bulletin "Information on Cleaning Agents for Sprayer Cleanout of DuPont Sulfonylurea Herbicides".

#### Notes:

1. When *UpBeet* is tank mixed with other pesticides, all cleanout procedures should be examined and the most rigorous procedure should be followed.
2. In addition to this cleanout procedure, any pre-cleanout procedures for the next product to be sprayed should be examined and the most rigorous procedure should be followed.
3. Where routine spraying practices include shared equipment frequently being switched between applications of *UpBeet* and applications to crops other than sugar beets during the same spray season, it is recommended a sprayer be dedicated to *UpBeet* to further reduce the chance of crop injury.

### SPRAY DRIFT

#### CAUTION-AVOID SPRAY DRIFT

Avoid drifting spray from either ground or aerial equipment onto neighboring crops or land, as injury to other plants may occur. The minimization of pesticide drift and responsibility for plant injury caused by spray drift lies with the applicator. When spraying near adjacent to crops other than sugar beets, minimize the spray drift potential by following these practices:

- Stop spraying if wind speed becomes excessive. Do not spray if winds are gusty. If sensitive crops or plants are downwind, extreme caution must be used even in low wind conditions.
- High temperature, drought, and low relative humidity increase the possibility of spray drift. Regardless of wind speed, extreme caution must be used when these conditions are present and sensitive crops or plants are nearby.
- Do not apply when a temperature inversion exists. An inversion is characterized by low air movement and an increase in air temperature with an increase in altitude. 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. Smoke-producing devices on aircraft are recommended. If not sure whether inversion conditions are present, consult with local weather services before making an application.

To further reduce physical drift from aerial or ground equipment:

- 1) Use large-droplet size sprays to minimize drift. For aerial application, it is suggested that solid stream nozzles oriented straight back be used. Do not use nozzles that produce small droplets, such as Sprayfoil<sup>4</sup> or airblast-type nozzles.
- 2) Increase volume of spray mix per acre by using higher flow rate nozzles.
- 3) Reduce pressure (PSI).
- 4) Apply as close to target plants as possible while still maintaining a good spray pattern.

### IMPORTANT PRECAUTIONS

*UpBeet* should be used only in accordance with recommendations on this label or in separately published DuPont recommendations.

Injury to or loss of desirable trees or vegetation may result from failure to observe the following:

Do not apply, drain or flush equipment on or near desirable trees or other 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 lawns, walks, driveways, tennis courts or similar areas. Prevent drift of spray to desirable plants.

Do not contaminate any body of water.

Thoroughly clean application equipment immediately after use (refer to "Sprayer Preparation and Cleanup" section of this label).

*UpBeet* is non-corrosive, non-flammable, non-volatile, and does not freeze in storage.

### STORAGE AND DISPOSAL

**STORAGE:** Store product in original container only. Do not contaminate other pesticides, fertilizer, food or feed in storage.

**PRODUCT DISPOSAL:** Do not contaminate water, food, or feed by disposal, or cleaning of equipment. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. If wastes cannot be disposed of by use according to label instructions, contact your DuPont Field representative.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or 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.

**NOTICE TO BUYER:** Purchase of this material does not confer any rights under patents of countries outside of the United States.

**NOTICE OF WARRANTY**

DuPont warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. 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 such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of DuPont. In no case shall DuPont be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the buyer. **DU PONT MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.**

Registered Trademark of:

<sup>1</sup> NOR-AM Chemical Co.

<sup>2</sup> DowElanco

<sup>3</sup> Elf Attochem, North America

<sup>4</sup> Spray Air

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