

Ceannard **DIURON 80DF**

**For Control of Many Annual and Perennial
Grasses and Herbaceous Weeds**

ACTIVE INGREDIENT:	% BY WT.
Diuron: (3-(3,4-dichlorophenyl)- 1,1-dimethylurea)	80.0%
OTHER INGREDIENTS:	20.0%
TOTAL:	100.0%

EPA Reg. No. 58035-16

EPA Est. No. 75396-CHN-001

**KEEP OUT OF REACH OF
CHILDREN
CAUTION**

See inside label booklet for complete Precautionary
Statements and Directions for Use.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed. Causes moderate eye irritation.
Avoid contact with eyes or clothing.

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 by cleaning
of equipment or disposal of wastes. Do not apply when
weather conditions favor drift from areas treated. Cover
or incorporate spills.

Manufactured For:

Ceannard, Inc.

P.O. Box 2404, Gastonia, NC 28053

FIRST AID

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 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 the poison
control center or doctor. Do not give anything by
mouth to an unconscious person.

HOT LINE NUMBER: Have the product container or
label with you when calling a poison control center or
doctor, or going for treatment. You may also contact
1-800-424-9300 for emergency medical treatment
information.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store product in original
container only, away from other pesticides, fertilizer,
food, or feed.

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

CONTAINER DISPOSAL: Nonrefillable container.
Do not reuse or refill this container. Offer for
recycling, if available. Completely empty bag into
application equipment. Then dispose of empty bag in
a sanitary landfill or by incineration, or, if allowed by
State and local authorities, by burning. If burned,
stay out of smoke.

NET WEIGHT: 6 lbs.

25 lbs.

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P.O. Box 2404
Gastonia, NC 28053

NET WEIGHT: 6 lbs.  25 lbs. 

FIRST AID

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 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 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.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with 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.

All pilots, flaggers and groundboom applicators must wear:

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

All mixers, loaders, other applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical resistant gloves made of any waterproof material ≥ 14 mils
- NIOSH approved particulate filtering respirator with any N, R, or P class filter media. The respirator should have a NIOSH approval number prefix TC-84A.

- Chemical resistant apron when mixing, loading, or cleaning equipment or spills.

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

ENGINEERING CONTROLS

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)]. Flagger's supporting aerial applications must use an enclosed cab that meets the definition in the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(5)] for dermal protection. In addition, flaggers must wear long-sleeved shirt, long pants, shoes and socks.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE 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

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 by cleaning of equipment or disposal of wastes. Do not apply when weather conditions favor drift from areas treated. Cover or incorporate spills.

DIRECTIONS FOR USE

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

For use on plants in non-crop and non-timber areas only. Not for use on crops, timber, or other plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes.

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. Keep unprotected persons out of treated areas until sprays have dried. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Use of this product in certain portions of California, Oregon and Washington is subject to the January 22, 2004

Order for Injunctive Relief in **Washington Toxics Coalition et al vs EPA**, C01-132C (W.D. W.A.). For information, please refer to www.epa.gov/esspp/wtc/.

IMPORTANT: Read the entire Warranty Statement before using this product. If terms are not acceptable, return the unopened product container to the place of purchase at once. Use this product only in accordance with directions on this label. Ceannard, Inc. will not be responsible for losses or damages resulting from the use of this product in any manner not specifically directed by Ceannard, Inc. User assumes all risk associated with non-directed use.

PRODUCT INFORMATION

Do not use this product on turfgrass at residential sites (including homes, apartment complexes, condominium grounds, daycare facilities, schools, parks, recreational areas, and sports fields).

Ceannard Diuron 80DF is a dispersible granule to be mixed with water and applied as a spray for nonselective weed control on non-cropland areas. It is non-corrosive to equipment, non-flammable and non-volatile.

Ceannard Diuron 80DF may be applied to soil prior to emergence of weeds to control susceptible weed seedlings for an extended period of time. The degree of control and duration of effect will vary with the amount of chemical applied, soil texture, rainfall and other conditions. Soils high in clay or organic matter require higher dosages than soil low in clay or organic matter for equivalent herbicide performance. Moisture is required to activate the herbicide. Best results occur if rainfall (or sprinkler irrigation) occurs within 2 weeks of application.

Ceannard Diuron 80DF applied before emergence of weeds, is an effective procedure because susceptible weeds are controlled in an early, vulnerable seedling stage. With favorable moisture conditions, Ceannard Diuron 80DF continues to control weeds for some time. Should weed seedlings begin to break through the preemergence treatment in significant numbers, secondary weed control procedures should be implemented; these include cultivation and postemergence herbicide application.

Ceannard Diuron 80DF may also be used to control emerged weeds. Results vary with rate applied and environmental conditions. Best results are obtained on succulent weeds growing under conditions of high humidity and temperatures of 70°F or higher. Addition of a surfactant to the spray (where recommended) increases contact effects of Ceannard Diuron 80DF.

Weed species vary in susceptibility to Ceannard Diuron 80DF and they may be more difficult to control when under stress. Combinations of Ceannard Diuron 80DF with other herbicides (as registered) increase the number of weed species controlled. Consult labels of the companion product for this and other information. Observe all precautions and limitations on labeling of all products used in mixtures.

Since the effect of Ceannard Diuron 80DF varies with soils, uniformity of application and environmental conditions, it is suggested that growers limit their first use to small areas.

IMPORTANT PRECAUTIONS

Injury to or loss of desirable trees or other plants may result from failure to observe the following: Draining or flushing 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 may injure these plants. Do not use on home plantings of trees, shrubs, or herbaceous plants or lawns, walks, driveways, tennis courts or similar areas. Prevent drift of dry powder or spray to desirable plants. Do not contaminate any body of water. Do not mix/load or use near wells, including abandoned wells, drainage wells, and sink holes. Avoid storage of pesticides near well sites. Calibrate sprayers only with clean water, away from well sites.

Thoroughly clean all traces of Ceannard Diuron 80DF from application equipment immediately after use. Flush tank, pumps, hoses and boom with several changes of water after removing nozzle tips and screens (clean these parts separately).

CHEMIGATION STATEMENT: Do not apply through any type of irrigation system.

RESISTANCE MANAGEMENT

Biotypes of certain weeds listed on this label are resistant to this product and other herbicides with the same mode of action, even at exaggerated application rates. Biotypes are naturally occurring individuals of a species that are identical in appearance but have slightly different genetic compositions; the mode of action of an herbicide is the chemical interaction that interrupts a biological process necessary for plant growth and development. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action.

If weed control is unsatisfactory, it may be necessary to retreat the problem areas using a product with a different mode of action.

If resistant weed biotypes are suspected or known to be present, use a combination of tillage, retreatment, tank-mix partners, and/or sequential herbicide applications with Ceannard Diuron 80DF to help control these biotypes, or use a planned herbicide rotation program where other herbicides having different modes of action are used.

SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making application 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 $3/4$ 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 must be observed.

The applicator should be familiar with and take into account the information covered in the [Aerial Drift Reduction Advisory Information](#) below.

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 Surface Temperature Inversions) sections 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 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 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.
- **Applications** – 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 cross-wind, 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 wind speed. Applications 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 application 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

Application 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 a surface 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).

NON-CROP WEED CONTROL

Use Ceannard Diuron 80DF on plants in the following non-crop and non-timber areas: uncultivated non-agricultural areas (airports; highway, utility and railroad rights-of-way, switch yards, and storage areas; roadsides; sewage disposal areas); uncultivated agricultural areas (non-crop producing farmyards, fuel storage areas, fence rows, barrier strips); outdoor industrial sites (lumberyards, pipeline and tank farms).

Ceannard Diuron 80DF is an effective herbicide for the control of listed weeds. The degree of control and duration of effect will vary with amount of chemical applied, soil texture, rainfall and other conditions. Ceannard Diuron 80DF may be used as a preemergence treatment at any time of the year except when ground is frozen, provided adequate moisture is supplied by rainfall or artificial means to activate the herbicide. Best results are obtained if applied shortly before weed growth begins. If dense growth is present, remove tops and spray the ground.

Increased contact activity on established weeds may be obtained by the addition of a non-ionic surfactant. Apply as a drenching spray to actively growing weeds during warm weather when daily temperature will exceed 70°F.

Use a fixed-boom power sprayer properly calibrated to ensure a constant rate of application. Mix proper amount of Ceannard Diuron 80DF into volume of water necessary to obtain uniform coverage. If surfactant is used, dilute with ten parts of water and add as last ingredient to nearly full tank. Ceannard Diuron 80DF must be kept in suspension at all times. Agitate by mechanical or hydraulic means in the spray tank. If bypass or

return line is used, it should terminate at bottom of tank to minimize foaming. Use 50 mesh screen or larger.

Note: Ceannard Diuron 80DF may be applied by either ground application equipment or by air application equipment (helicopter only) for the control of various weeds and grasses in rights-of-way sites including railroad rights-of-way, storage yards, switch yards, etc. and military installations. When making aerial applications, apply in sufficient water volume to ensure thorough coverage of the site to be treated; generally 5 to 15 gallons of water per acre are sufficient.

Do not exceed an application rate of 10 lbs. Ceannard Diuron 80DF/Acre (8 lbs. active ingredient/Acre) except in areas of high rainfall (more than 40 inches/year) or dense vegetation (more than 90% weed ground cover). In areas with high rainfall or dense vegetation, a maximum application of 15 lbs. Ceannard Diuron 80DF/Acre is allowed (12 lbs. active ingredient/Acre). Do not exceed 15 lbs. Ceannard Diuron 80DF/Acre per year (12 lbs. active ingredient/Acre/year). Do not make more than two applications per year. If Ceannard Diuron 80DF is used in a sequential application program, allow a minimum of 90 days between applications.

For use on plants in non-crop and non-timber areas only. Not for use on crops, timber or other plants being grown for sale or other commercial use or for commercial seed production or for research purposes.

Weed Control: To control most annual weeds for an extended period of time on non-crop and non-timber areas listed on this label, apply 5 to 15 lbs./Acre.

BROADLEAVES
5 to 15 Lbs./Acre

Ageratum	Groundcherry, Annual	Pineappleweed	Smartweed, Annual
Chickweed	Hawksbeard	Pokeweed	Sowthistle, Annual
Cocklebur	Horsenettle	Prickly Lettuce	Spanish Needles
Corn Speedwell	Horseweed	Prickly Sida (Teaweed)	Tansymustard
Corn Spurry	Knawel	Purslane	Velvetleaf (Buttonweed)
Dayflower	Kochia	Rabbit Tobacco	Wild Buckwheat
Dogfennel	Lambsquarter	Ragweed	Wild Lettuce
Fiddleneck (Amsinsckia)	Marigold	Sesbania	Wild Mustard
Flora's Paintbrush	Mexican Clover	Shepherdspurse	Wild Radish
Gromwell	Morningglory, Annual	Sicklepod	
	Pennycress		
	Pigweed		

GRASSES
5 to 8 Lbs./Acre

Barnyardgrass (Watergrass) Bluegrass, Annual Crabgrass Foxtail	Kyllinger (Kyllinga) Lovegrass, Annual Orchardgrass Peppergrass	Quackgrass Rattail Fescue Red Sprangletop Ricegrass Ryegrass, Annual Sandbur	Seedling, Johnsongrass Velvetgrass Vernalgrass, Sweet Annual
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8 to 15 Lbs./Acre

Guineagrass	Maidencane	Pangolagrass
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Irrigation and Drainage Ditches: Apply 5 to 15 lbs./Acre to control most annual weeds as shown above. Apply only when water is not in the ditch. For irrigation ditches, apply during the non-crop season and when the ditch is not in use. To avoid crop injury, it is essential to minimize movement of Ceannard Diuron 80DF in irrigation water. The herbicide must be fixed in the soil by moisture. Apply before expected seasonal rainfall, if possible when soil in the ditch is still moist. Following treatment, if rainfall has not totaled at least 4 inches, fill ditch with water and allow to stand for 72 hours. Drain off any waste water remaining before using ditch. Trees or other desirable plants whose roots extend into the ditch area may be injured.

Dry Application: Ceannard Diuron 80DF may be applied dry for control of the listed weeds on non-crop sites. Apply Ceannard Diuron 80DF granules using dry application (ground) equipment to distribute the granules uniformly to the target area.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store product in original container only, away from other pesticides, fertilizer, food, or feed.

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

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

WARRANTY STATEMENT

Notice: The statements on this label are believed to be true and accurate, but because conditions are beyond our control, Ceannard, Inc. does not make, nor does it authorize any agent or representative to make any oral, or written warranty, guarantee, or representation, express or implied, concerning this material or the use thereof beyond the statements of the label. To the extent consistent with applicable law, Ceannard, Inc. and the seller make no other warranty resulting in the handling, storage, or use of this material not in accordance with the written directions.

EPA 20111129