

58035-19

03-22-2012

1/13

**U.S. ENVIRONMENTAL PROTECTION  
AGENCY****Office of Pesticide Programs  
Registration Division (7505P)  
Ariel Rios Building  
1200 Pennsylvania Ave., NW  
Washington, D.C. 20460**

EPA Reg. Number:

**58035-19**

Date of Issuance:

**MAR 22 2012****NOTICE OF PESTICIDE:**

☒ Registration  
☐ Reregistration  
(under FIFRA, as amended)

Term of Issuance: **Unconditional**

Name of Pesticide Product:

**Ceannard Bromacil 80 DF**

Name and Address of Registrant (include ZIP Code):

**Ceannard, Inc.  
c/o Pyxis Regulatory Consulting, Inc.  
4110 136<sup>th</sup> St. NW  
Gig Harbor, WA 98332**

**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 her 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.

The Basic Confidential Statement of Formula (CSF) dated 02/28/2012 is acceptable.

This product is registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration review/reregistration of your product when the Agency requires all registrants of similar products to submit data.
2. Make the following label revision:
  - a. Revise "EPA REG. NO. 58035-XX" to "EPA REG. NO. 58035-19." Assure that the establishment number and net contents are also added to the final printed label
3. Submit one (1) copy of the revised final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

If you have any questions regarding this notice, please contact Maggie Rudick of my staff at 703-347-0257 or [rudick.maggie@epa.gov](mailto:rudick.maggie@epa.gov).

Signature of Approving Official:

Date:

**MAR 22 2012**

Kable Bo Davis  
Project Manager 25  
Herbicide Branch  
Registration Division (7505P)



# Ceannard Bromacil 80DF

**ACTIVE INGREDIENT:**

Bromacil: 5-bromo-3-sec-butyl-6-methyluracil..... 80.0%

**OTHER INGREDIENTS:**..... 20.0%

**TOTAL:** ..... 100.0%

## KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
<b>If swallowed:</b>	<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 do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If on skin or clothing:</b>	<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>
<b>If in eyes:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If inhaled:</b>	<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 by mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 seven days a week, 6:30 am to 4:30 pm Pacific Time or your poison control center at 1-800-222-1222.	

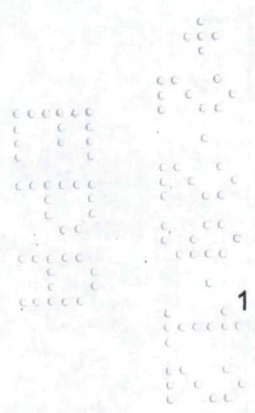
EPA Reg. No. 58035-xx19

Manufactured for:  
Ceannard, Inc.  
P.O. Box 2404  
Gastonia, NC 28053

**ACCEPTED**  
  
MAR 22 2012  
  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under  
EPA Reg. No. 58035-19

EPA Est. No.

Net Weight:





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

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

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

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

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, made of any waterproof material such as polyethylene or polyvinylchloride
- Shoes plus socks

**Mixers and loaders must wear:**

- A non-powered air purifying respirator equipped with a N, R, or P series filter (NIOSH approved number prefix 84A) for mixing and loading. Respirator wearers must be fit tested, and trained in the proper use, care, cleaning, inspection, and storage of the respirator.

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

**ENGINEERING CONTROL STATEMENT**

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

**USER SAFETY RECOMMENDATIONS**

**Users should:**

- Wash 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**

This pesticide is toxic to fish and aquatic invertebrates. 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 cleaning equipment or disposing of equipment washwaters or rinsate. Bromacil is known to leach through soil and has been found in ground water as a result of normal field use. Users are advised not to apply in areas where soils are permeable, particularly where ground water is used for drinking water. Consult with the pesticide state lead agency for information regarding soil permeability and aquifer vulnerability in your area.

**PRODUCT INFORMATION**

Ceannard Bromacil 80DF is to be mixed in water and sprayed on non-cropland areas for non-selective control of weeds and brush and for selective control of weeds in citrus and pineapple. Ceannard Bromacil 80DF controls many annual weeds at the lower label rates and many perennial weeds and brush at the highest label rates. Perennial grass control with Ceannard Bromacil 80DF is a key strength of the product.

Moisture is necessary to move Ceannard Bromacil 80DF into the root zone of susceptible weeds and brush. Application to moist soil or to soil where moisture is supplied from rainfall or sprinkler irrigation within 14 days of application will provide the best control. Symptoms of control will be slow to appear



4/13

because the product must first move into the root zone of susceptible plants. The level and length of weed and brush control will be dependent upon the amount of herbicide applied, soil texture, amount of moisture applied and other soil and water management practices.

### USE PRECAUTIONS AND RESTRICTIONS

If you plan to use Ceannard Bromacil 80DF for selective weed control in citrus and pineapple or for non-selective weed and brush control in non-crop areas, adhere to the following:

- Do not use in any recreational areas or around homes.
- To prevent injury or loss to desirable plants and trees:
  - Do not apply except as specified by this label.
  - Thoroughly clean all traces of Ceannard Bromacil 80DF from application equipment – tank, pump, hoses, etc. – immediately after use by thoroughly washing/rinsing with several changes of water immediately after use.
  - Remove nozzle tips and screens and clean these parts separately.
  - Do not drain or clean equipment near desirable trees or other plants, or onto areas where roots of desirable trees and plants may extend onto areas where Ceannard Bromacil 80DF may be washed or moved into contact with roots of desirable trees and plants.
  - Do not use on lawns, walks, driveways, tennis courts, or similar areas.
  - Prevent spray drift and product from contacting desirable plants as injury may occur.
  - Do not store and handle this product around fertilizers, insecticides, fungicides, or seeds.
- Do not apply Ceannard Bromacil 80DF through any type of irrigation system.
- Do not graze cattle in treated areas.
- Only citrus and pineapple may be planted into treated areas and only after one year after the last application.
- Other crops may not be planted until 2 years after the last application.
- Do not apply 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.

### MIXING

Sprayers should be properly calibrated with clean water only and checked regularly during operation. It is important to accurately measure Ceannard Bromacil 80DF and to only mix enough spray mixture for job at hand. The spray tank should not be over-filled. Excess spray mixture should be diluted and applied at labeled rates/uses. It should never be discharged at a single location in the field/grove or at the mixing/loading location. Do not store or mix near well site.

### TANK MIXTURES

Ceannard Bromacil 80DF may be tank mixed with other suitable herbicides registered for agricultural and non-agricultural use. Refer to the tank mixture partner label(s) for any additional use information or restrictions. Follow the label guidelines that are most restrictive.

NOTE: Be sure that Ceannard Bromacil 80DF is fully suspended in the spray tank carried (water, liquid fertilizer) before other herbicides or adjuvants are added. A compatibility test should be performed if the applicator has no prior experience with the particular tank-mix combination. Additional instructions are provided in the label section ADDITIONAL INSTRUCTIONS FOR AG AND NON-AG USES. When using Ceannard Bromacil 80DF alone or in combination, thoroughly agitate and re-suspend the tank contents if allowed to settle.

### CROP ROTATION BIOASSAY

In arid climates (10 inches of rainfall or less) or areas where drought conditions have prevailed for one or more years, a field bioassay should be completed prior to planting any desired crop(s). The results from this bioassay may require the two-year crop rotation interval to be extended. A successful field bioassay means growing to maturity a test strip of the crop(s) intended for production. The test strip should cross the entire field including knolls and low areas.



## RESISTANCE

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in the field. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area, using a product affecting a different site of action.

To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to change cultural practices within and between crop seasons such as using a combination of tillage, retreatment, tank-mix partners and/or sequential herbicide applications that have a different site of action. Weed escapes that are allowed to go to seed will promote the spread of resistant biotypes.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread in dispersal of resistant biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative cultural practices or herbicide recommendations available in your area.

## INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants, or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

## SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interactions 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.

**AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.**

## IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets (>150-200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. **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 – General Techniques

- **Volume** – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets. Apply as a medium or coarser spray (ASAE standard 572).
- **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 A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.**
- **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.

### Controlling Droplet Size – Aircraft

- **Number of Nozzles** – Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- **Nozzle Orientation** – Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations.



- **Nozzle Type** – Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.

#### **BOOM LENGTH AND HEIGHT**

- **Boom Length (aircraft)** – The boom length must not exceed  $\frac{3}{4}$  of the wing length, using shorter booms decreases drift potential. For helicopters use a boom length and position that prevents droplets from entering the rotor vortices.
- **Boom Height (aircraft)** - Application more than 10 ft. above the canopy increases the potential spray drift.
- **Boom Height (ground)** – Setting the boom at the lowest height which provides uniform coverage reduces the exposure of droplets to evaporation and wind. The boom should remain level with the crop and have minimal bounce. Apply using a nozzle height of no more than 4 feet above the ground or crop canopy in ground applications.

#### **WIND**

Apply only when wind speed is less than or equal to 10 mph . Drift potential increases at wind speeds of less than 3 mph (due to variable direction and inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. **AVOID APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS.**

**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 hot and dry conditions set up equipment to produce larger droplets to reduce effects of evaporation.

#### **SURFACE TEMPERATURE INVERSIONS**

Drift potential is high during a surface temperature inversion. Do not make any type of application into temperature inversions. Surface inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Surface inversions are characterized by increasing temperature 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.

#### **SHIELDED SPRAYERS**

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

#### **SENSITIVE AREAS**

The pesticide must 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).

#### **SPRAY TANK CLEAN OUT**

Thoroughly clean all traces of this product from application equipment immediately after use. Flush the tank, pump, hoses, and boom with several changes of water after removing nozzle tips and screens (clean these parts separately). Dispose of the equipment wash water by applying it to a use-site listed on this label.

#### **Additional requirements for aerial applications:**

- Do not apply by air if drift can occur to sensitive nontarget crops or plants that are within 100 feet of the application site.
- Do not release spray at a height greater than 10 feet above the ground or crop canopy.
- The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.



- When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Ceannard Bromacil 80DF should only be used in accordance with recommendations on this label. 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 USES

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

### APPLICATION INFORMATION

Apply Ceannard Bromacil 80DF using a properly calibrated fixed-boom power sprayer. All use rates of this product are expressed for broadcast treatments. For band treatments, use proportionately less.

Use sufficient spray volume (minimum of 10 gallons per acre) to provide uniform coverage of the treated area and allow proper dispersion and suspension of the product in the spray tank. Continuous agitation in the spray tank is required to keep the product in suspension. Agitate spray tank contents by mechanical or hydraulic means. If a by-pass or return line is used, it should terminate at the bottom of the tank to minimize foaming. Do not use air agitation.

Spray booms must be shut off while starting, turning, slowing or stopping as injury to the crop or successive crops may result. Nozzle screens should be 50 mesh or larger.

### WEEDS CONTROLLED (annuals)

Barnyardgrass	<i>Echinochloa crus-galli</i>
Crabgrass	<i>Digitaria</i> spp.
Crowfootgrass	<i>Dactyloctenium aegyptium</i>
Henbit	<i>Lamium amplexicaule</i>
Lambsquarter, common	<i>Chenopodium album</i>
Mullien, turkey	<i>Eremocarpus setigerus</i>
Mustard	<i>Brassica</i> spp.
Natalgrass (red top)	<i>Rhynchelytrum repens</i>
Panicum, Texas	<i>Panicum texanum</i>
Puncturevine, common	<i>Tribulus terrestris</i>
Purslane, common	<i>Portulaca oleracea</i>
Purslane, horse	<i>Trianthema portulacastrum</i>
Pusley, Florida	<i>Richardia scraba</i>
Sandbur (sandspur)	<i>Cenchrus</i> spp.
Sedge, annual	<i>Cyperus compressus</i>



Sprangletop	<i>Leptochloa</i> spp.
-------------	------------------------

**WEEDS CONTROLLED (perennials)**

Bahagrass	<i>Paspalum notatum</i>
Bermudagrass	<i>Cynodon dactylon</i>
Johnsongrass	<i>Sorghum halepense</i>
Nutsedge	<i>Cyperus</i> spp.
Pangolagrass	<i>Digitaria decumbens</i>
Paragrass	<i>Panicum purpurascens</i>
Torpedograss	<i>Panicum repens</i>

NOTE: Repeat applications of this product are usually necessary to control perennials. To improve control of perennials, cultivate prior to treatment. After treatment with Ceannard Bromacil 80DF, avoid cultivation as long as weed control is holding.

**CITRUS**

This product may be used in citrus for control of annual and perennial weeds. Applications can be made any time of the year provided rainfall or overhead irrigation is available to activate herbicide, preferably just before or after weeds have germinated. Best results are obtained if moisture is supplied by rainfall or sprinkler irrigation within 14 days after application. Multiple applications may improve control of "hard-to-kill" weeds. The degree and duration of control will vary with the amount of herbicide applied, soil texture, rainfall and other conditions. It is non-corrosive to equipment, non-flammable and non-volatile.

Apply Ceannard Bromacil 80DF as a band or broadcast treatment beneath and/or between trees. Avoid contact of foliage and fruit with spray or mist. Temporary yellowing of citrus leaves may occur following treatment.

- Do not use on soils with less than 1% organic matter.
- Do not use on poorly drained soils, gravelly soils or thinly covered or exposed subsoils.
- Do not treat trees planted in irrigation furrows.
- Do not treat diseased or stressed trees.
- Do not use in citrus groves inter-planted with other desirable trees or plants or in areas where roots of desirable trees or plants may extend as injury to desirable trees or plants may result.
- Do not use in home citrus plantings.
- Do not apply more than 8 pounds (6.4 pounds active ingredient) per acre per year inclusive of all bromacil formulations.
- This product may be applied at any time of the year provided rainfall or overhead irrigation is available to activate the herbicide, preferably just before or just after weeds have germinated.
- Do not apply at less than 60 day intervals when making multiple applications.
- Do not graze cattle in treated areas.
- Do not allow spray to contact citrus foliage or fruit.

**FLORIDA**

Apply Ceannard Bromacil 80DF as a band treatment only in Florida citrus groves. Do not apply trunk to trunk. The use of this product is prohibited for weed control in non-bedded citrus groves located on any permeable, better drained soil identified in the intended site of application. Permeable, better drained soils which occur in citrus producing areas of the state include soils unnamed and characteristic of quartzipsamments, and the following soil series classifications.

Adamsville	Archbold	Astatula
Bahia Honda	Broward	Canaveral
Candler	Cocoa	Dade
Florahome	Fort Meade	Gainseville
Lake	Lakewood	Neilhurst
Orlando	Orsino	Palm Beach



9/13

Paola	Satellite	St. Augustine
St. Lucie	Tavares	

Use sufficient spray volume (minimum of 10 gallons per acre) to provide uniform coverage of the treated area and to allow proper dispersion and suspension of the product in the spray tank. Continuous agitation in the spray tank is required to keep the product in suspension. Treated areas may be planted to citrus trees one year after the last Ceannard Bromacil 80DF application. Do not replant to other crops within two years after the last Ceannard Bromacil 80DF application as plant injury may result.

**Trees Established up to Three Years:** For control of annual weeds, apply 2-3 pounds of this product per treated acre as needed to maintain weed control. Do not apply more than 6 pounds per treated acre per year within any 6 month period, or more than 8 pounds per treated acre per year.

**Trees Established Three or More Years:** For control of annual weeds, apply 2-4 pounds of Ceannard Bromacil 80DF per treated acre as needed to maintain weed control. Do not apply more than 4 pounds per treated acre in any one application. Do not use more than 8 pounds per treated acre per year.

**Note:** Use the highest rates allowed by this label for best control of perennial weeds listed on this label. Partial control of perennial weeds can result with only a single treatment of Ceannard Bromacil 80DF. Repeat applications are required (in season and/or annually) for best control of the perennial weeds on this label. Control of perennials may be improved by cultivation prior to treatment, otherwise, avoid working the soil as long as weed control continues or else effectiveness of the treatment may be reduced.

#### TEXAS

For the control of the annual weeds listed above; apply 2 to 3 pounds of this product per acre. Use the lower rate for 1 to 2 year old trees and the higher rate for trees more than 2 years old. Do not apply more than 3 pounds of this product per acre per year. For best results in the control of perennial weeds make two applications, the first in the spring and the second in the summer.

#### U.S. (EXCEPT FLORIDA and TEXAS)

##### Trees Established for Four Years or More

**Annual Weeds:** Apply this product at 2 to 4 pounds per acre any time of year when there is adequate moisture available. Time treatment to just before or just after weed growth begins. Weeds controlled include: barnyardgrass (watergrass), crabgrass, crowfootgrass, Florida pusley, henbit, lambsquarters, mustard, natalgrass (red top), puncturevine, purslane, sandspur, sedge (annual), sprangletop, Texas panicum (Colorado grass), and turkey mullein.

**Perennial Weeds:** Best results are obtained if application is made shortly before or shortly after weed growth begins; if dense growth is present, remove tops and spray the ground. Effects on perennial weeds are slow to appear, usually progressing over a period of several months.

Make a single application per year during the period from winter to early summer, use at the following rates:

Soil Texture	Pounds of Ceannard Bromacil 80DF
Sand, loamy sand	4 to 5
Sandy loam	5 to 6
Silt loam, clay loam	6 to 8

Alternatively, except for Texas, make two applications of 3-4 pounds of this product per acre per year. In Texas and Louisiana, apply in spring and summer; in California and Arizona, apply in fall and spring.

**Note:** Partial control usually occurs with a single treatment; repeat applications are required to control perennials.

#### Ceannard Bromacil 80DF controls the following:

Bermudagrass	All areas of U.S.
Johnsongrass	Texas
Nutsedge	Texas, California

Control of perennials may be improved by cultivation prior to treatment; otherwise, avoid working the soil as long as weed control continues or else effectiveness of the treatment may be reduced.



## PINEAPPLE

This product may be applied to pineapple grown in Hawaii, Florida, and Puerto Rico for control of seedling weeds.

**Hawaii and Florida:** For control of seedling weeds such as amaranthus, balsamapple, chloris, crabgrass, Floras paintbrush, foxtail, goosegrass (wiregrass), and Hialoa, apply 2 to 6 pounds per acre broadcast before the planting material begins to grow. Use the lower rates in low rainfall areas (5 to 10 inches annually) and on clean-culture fields; use the higher rates in high rainfall areas (above 10 inches annually) and for trashmulch fields. Follow with either 2 to 4 pounds per acre as a directed interline spray as needed prior to differentiation or apply 2 pounds per acre broadcast as needed up to differentiation. Do not apply more than 10 pounds total per acre per plant crop. For ratoon crop, apply 1 to 4 pounds per acre broadcast after harvesting plant crop but before differentiation. Do not apply more than 4 pounds total per acre per ratoon crop.

**Puerto Rico:** For control of seedling weeds such as crabgrass, goosegrass, jungle rice, pigweed, and purslane, apply 2 to 4 pounds per acre broadcast immediately after planting and before planting materials begins to grow.

## OTHER USE RESTRICTIONS

1. Treated areas may be planted to citrus or pineapple one year after the last application.
2. Do not replant to other crops within two years after the last application or injury may occur.
3. Do not apply at less than 60 day intervals when making multiple applications.

## NON-AGRICULTURAL USES

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Non-crop weed and brush control are not within the scope of the Worker Protection Standard.

Do not enter or allow others to enter the treated area until sprays have dried.

*[Note to Editor – The following is optional text that may appear on the Ceannard Bromacil 80DF final label: Ceannard Bromacil 80DF is 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.]*

## USE RESTRICTIONS – STATE OF FLORIDA

In the state of Florida, the use of Ceannard Bromacil 80DF is prohibited in the counties of Hardee, Highland, Polk, Orange, and Lake. For Non-Agricultural Usage in all other areas of the state, do not apply more than 8 pounds per acre per year of this product. This amount corresponds to 6.4 pounds of bromacil, the active ingredient in Ceannard Bromacil 80DF. The maximum allowable use rate for bromacil is 6.4 pounds per acre per year inclusive of all bromacil formulations.

## APPLICATION INFORMATION

Use this product for residual control of undesirable vegetation in non-crop areas such as but not limited to airports, railroads, highway, pipeline and utility rights-of-way, petroleum tank farms, lumberyards, storage areas, industrial sites, farmyards and fence rows. Do not apply this product to open water (such as lakes, reservoirs, rivers, streams, creeks, salt water bays or estuaries), fresh water wetlands while water is present (such as marshes, swamps, bogs or potholes), salt water marshes within tidal areas, ditches, banks along waterways or impervious substrates, or to areas near desirable plants where roots of these plants may extend. Applications should be made using sufficient spray volume to provide uniform coverage of the treated area and to allow proper dispersal and suspension of the product in the spray tank. Use a calibrated fixed-boom power sprayer with nozzles equipped with 50 mesh or larger screens to apply this product. Use rates provided below for Ceannard Bromacil 80DF are expressed for broadcast treatments. If band treatments are applied, then proportionately less Ceannard Bromacil 80DF should be used.

**Note:** Applications may also be made using a handgun sprayer. Use a spray volume of at least 40 gallons per acre to ensure uniform coverage. For small areas, a hand sprayer or sprinkling may be used.



## APPLICATION TIMING AND RATES

Apply Ceannard Bromacil 80DF as a preemergence spray prior to or during the rainy season when weeds are actively germinating or growing and there is plenty of moisture to move the product into the root zone of the weeds. For best preemergence weed control, apply this product prior to rainfall and weed germination. Apply at the rates provided below according to weed type. Short-term control of weeds can be expected with the lower rates of this product while higher rates provide longer-term control.

## WEEDS CONTROLLED

Ceannard Bromacil 80DF effectively controls the following broadleaf weeds and grasses when applied at the rates shown.

### Annual Broadleaf Weeds and Grasses: 3-6 pounds per acre

Brome, downy	<i>Bromus tectorum</i>
Cheat	<i>Bromus secalinus</i>
Crabgrass	<i>Digitaria</i> spp.
Foxtails	<i>Setaria</i> spp.
Lambsquarter, common	<i>Chenopodium album</i>
Mullein, turkey	<i>Eremocarpus setigerus</i>
Oat, wild	<i>Avena fatua</i>
Puncturevine, common	<i>Tribulus terrestris</i>
Ragweed, common	<i>Ambrosia artemisifolia</i>
Ryegrass, Italian	<i>Lolium multiflorum</i>

When applied just prior to or just after emergence of annuals, rates as low as 2 pounds per acre control many annual weeds and grass in low rainfall areas and gives short-term control in higher rainfall areas.

### Perennial Broadleaf Weeds and Grasses: 7-15 pounds

Bahiagrass	<i>Paspalum notatum</i>
Bermudagrass	<i>Cynodon dactylon</i>
Bluegrass	<i>Poa</i> spp.
Brome, smooth	<i>Bromus inermis</i>
Broomsedge	<i>Andropogon virginicus</i>
Carrot, wild	<i>Caudus carota</i>
Dandelion, common	<i>Taraxacum officinale</i>
Dogfennel	<i>Eupatorium capillifolium</i>
Goldenrod	<i>Solidago</i> spp.
Johnsongrass	<i>Sorghum halepense</i>
Natalgrass (redtop)	<i>Rhynchelytrum repens</i>
Nutsedge	<i>Cyperus</i> spp.
Plantain	<i>Plantago</i> spp.
Purpletop	<i>Verbena bonariensis</i>
Quackgrass	<i>Agropyron repens</i>

In low rainfall areas, rates as low as 5 pounds per acre control many perennial weeds and grasses. Where limited rainfall (usually less than 4 inches) occurs during the active growth period, such as some areas of the West, Ceannard Bromacil 80DF usually will not provide satisfactory control of hard-to-kill, deep-rooted perennial weeds such as johnsongrass.

**Note:** Use the higher label rates on adsorptive soils (those high in organic matter or carbon).

**Retreating:** If annual weeds and grasses re-establish on treated areas and retreatment is necessary, use 2 to 6 pounds of Ceannard Bromacil 80DF. Multiple applications are allowed as long as there is an interval of 60 days between applications and no more than 15 pounds of Ceannard Bromacil 80DF area applied per acre per location.

**Small Areas:** 1/4 cupful of this product per 200 sq. ft. is approximately 15 pounds per acre.



**BRUSH CONTROL:** Apply Ceannard Bromacil 80DF in spring or summer as broadcast or basal (spot) treatment to control undesirable woody plants (brush) on non-cropland areas. Do not use where marketable timber or other desirable trees or shrubs are immediately adjacent to the treated area. For broadcast treatments, apply 7 to 15 pounds per acre to control plants such as oak, pine, sweet gum, and willow. The higher rates should be used on soils high in organic matter or carbon. For basal (spot) treatments mix 2 ½ pounds in 5 gallons of water and apply at the rate of 1 to 2 fl oz per stem 2" to 4" in basal diameter; wet the base of the stem to run-off. Ceannard Bromacil 80DF applied in this manner will control cottonwood, hackberry, maple, oak, poplar, red bud, sweet gum, wild cherry, willow, and winged elm.

## **SPECIAL USES**

### **UNDER ASPHALT AND CONCRETE PAVEMENT**

#### **APPLICATION INFORMATION**

This product can be used in combination with OUST® XP to control weeds under asphalt and concrete pavement, such as that used in parking lots, highway shoulders, median strips, roadways, and other industrial sites.

Ceannard Bromacil 80DF should only be used in an area that has been prepared according to good construction practices. Use sufficient water to ensure uniform coverage, generally 100 gallons per acre. Agitate the tank continuously to keep product in suspension.

#### **APPLICATION TIMING AND RATES**

Apply Ceannard Bromacil 80DF immediately before paving at 6 to 15 pounds per acre. The higher rate should be used for hard to control weeds and for longer residual control. Be sure that paving occurs soon after treatment so that there is no soil movement off target from rainfall or mechanical means.

#### **Important Precautions: Under Asphalt Only**

- Do not use Ceannard Bromacil 80DF under pavement in residential properties such as driveways, or in recreational areas, including jogging or bike paths, tennis courts, or golf cart paths.
- Desirable plants may be injured if their roots extend into treated areas or if planted in treated areas.

## **TANK MIXTURES**

To control a broader spectrum of weeds, or for an extended period of weed control, a tank mixture of Ceannard Bromacil 80DF at 6 to 15 pounds per acre plus OUST® or OUST® XP at 4 to 8 ounces per acre may be used.

## **ADDITIONAL INSTRUCTIONS FOR AG AND NON-AG USES**

### **SPRAY PREPERATION**

**Mixing in water:** Fill tank ½ full with water. Start agitation system, add Ceannard Bromacil 80DF and continue adding water. Add separately each additional component of any tank-mix while adding water. Continue agitation throughout.

**Mixing in liquid fertilizer (citrus only):** A fertilizer solution may be used in the spray mixture. Small quantities should be tested for compatibility by the following procedures before full scale mixing.

1. Put 1 pint fertilizer solution in a quart jar.
2. Mix 2 teaspoons Ceannard Bromacil 80DF with 2 tablespoons of water: mix thoroughly and add to fertilizer solution.
3. Close jar and shake well.
4. If other herbicides are used in the mixture, premix 2 teaspoonfuls of dry materials or 1 teaspoonful of liquids with 2 tablespoons of water; add to Ceannard Bromacil 80DF fertilizer solution mixture.
5. Close jar and shake well.
6. Watch mixture for several seconds; check again in 30 minutes.
7. If mixture does not separate, foam, gel or become lumpy, it may be used.

Provided the above procedure shows the mixture to be compatible, prepare the tank mixture as follows: add the fertilizer solution to the spray tank first, mix the required amount of Ceannard Bromacil 80DF with water to form a slurry with the agitator running, slowly add the slurry and mix thoroughly.



**Mixing with other herbicides:** Determine the tank mixture partner(s) compatibility with Ceannard Bromacil 80DF by following the directions above. For Step 1 above, use 1 pint of water instead of the liquid fertilizer. Provided the above procedure shows the mixture to be compatible, Ceannard Bromacil 80DF may be used in this tank mixture.

### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store product in original container only. Avoid storage of pesticides near well sites.

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

**CONTAINER DISPOSAL:** 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.

### CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Ceannard, Inc. or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Ceannard, Inc. and Seller harmless for any claims relating to such factors.

Ceannard, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Ceannard, Inc., and Buyer and User assume the risk of any such use. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, CEANNARD, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.**

To the extent consistent with applicable law, neither Ceannard, Inc. nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF CEANNARD, INC. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF CEANNARD, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

Ceannard, Inc. and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of Ceannard, Inc..

Oust® is a registered trademark of E.I. du Pont de Nemours and Company.

[EPA approval date]