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34704-746

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OCT 10 1996

Ms. Glenda Haage
Platte Chemical Co.
P.O. Box 667
Greeley, CO 80632-0667

Dear Ms. Haage:

Subject: Amendment Changing Plant Back Timing
Balan Dry Flowable
EPA Reg. No. 34704-746
Your submission dated Sept. 20, 1996

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable and a stamped copy is enclosed for your records.

Sincerely yours,

Robert J. Taylor
Product Manager 25
Fungicide-Herbicide Branch
Registration Division (7505C)

Enclosure

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BALAN DF



A selective herbicide for preemergence control of annual grasses and broadleaf weeds

ACTIVE INGREDIENT:
N-butyl-N-ethyl- α,α,α -trifluoro-2,6-dinitro-p-toluidine 60%
INERT INGREDIENTS: 40%
Total 100%
Contains 0.6 pounds active ingredient per pound

KEEP OUT OF REACH OF CHILDREN CAUTION

See Additional Precautionary Statements Below.
Notice: Read the entire label. Use only according to label directions. Before buying or using this product, read NOTICE at end of label.

EPA REG. NO. 34704-746
EPA EST. NO. 464-MI-1 (Lot number begins MM)
EPA EST. NO. 37429-GA-1 (Other lot number)
NET WEIGHT 12.5 LBS. (5.67 KG)

Trademark of DowElanco
IHT EXPO9Y96

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful If Swallowed, Inhaled Or Absorbed Through The Skin.
Avoid breathing dust or spray mist. Avoid contact with skin, eyes, or clothing.

Personal Protective Equipment:
Applicators and other handlers must wear: long-sleeved shirt and long pants, waterproof gloves and shoes plus socks.
Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

USER SAFETY RECOMMENDATIONS

Users should:
Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

FIRST AID

If in eyes: Flush with plenty of water. Get medical attention if irritation develops.
If swallowed: Do not induce vomiting. Call a physician or Poison Control Center. If available, administer activated charcoal (6-8 heaping teaspoons) with a large quantity of water. Do not give anything by mouth to unconscious person. Immediately transport to a medical care facility.
If on skin: Wash with plenty of soap and water. Get medical attention if irritation develops.
If inhaled: Remove individual to fresh air. If breathing difficulty occurs, get medical attention.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply when conditions favor runoff, or drift from the target area. Do not contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry intervals. 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.
Exception: If the product is soil-injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.
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 and shoes plus socks.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.
Storage: Store in original container only. Do not store in direct sunlight. Do not store at temperatures above 120°F. If stored above 120°F, BALAN DF could lose some of its dispersing properties, resulting in difficult application, poor weed control or crop injury. In case of leak or spill, contain material and dispose as waste.
Pesticide Disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.
Plastic Container Disposal. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

GENERAL INFORMATION

BALAN DF is a preemergence herbicide for control of annual grasses and broadleaf weeds. Incorporation of BALAN DF is required to assure effective season long weed control. BALAN DF may be applied in liquid sprays of water or liquid fertilizer. BALAN DF controls weeds as they germinate. BALAN DF does not control established weeds.

GENERAL USE PRECAUTIONS

When applied according to use directions and under normal growing conditions, BALAN DF will not harm the treated crop. Over-application can result in crop injury, delayed emergence or soil residue. Uneven application or improper soil incorporation of BALAN DF can result in erratic weed control or crop injury. Seedling disease, cold weather, deep planting, excessive moisture, high salt concentration or drought may weaken crop seedlings and

ACCEPTED
with COMMENTS
In EPA Letter Dated
OCT 10 1996
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
Registration for the pesticide
registered under EPA Reg. No.
34704-746

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increase the possibility of damage from BALAN DF. Under these conditions, delayed crop development or reduced yields may result. In and, irrigated areas of the Western United States-Arizona, California, Idaho, Montana, Nevada, Oregon, Utah, Washington and Wyoming-certain crops are susceptible to injury when planted in soil previously treated with BALAN DF. To avoid such injury, do not plant wheat, barley, oats, rye, other grasses, onions, corn, milo (grain sorghum), spinach, red beets, sugar beets, or other root crops for 10 months following an application of BALAN DF.

BALAN DF should not be applied to soils that are wet or subject to prolonged periods of flooding as poor weed control may result.

Chemigation: Do not apply BALAN DF through any type of irrigation system.

SOIL TEXTURE GUIDE FOR APPLICATION RATES

BALAN DF application rates are based on soil texture. A fine textured clay soil will require a higher application rate than a coarse textured sandy soil. Application rates for BALAN DF are determined by "soil textured groupings" (coarse, medium, or fine) which correspond to the various field soil textures to be treated. Using the table below, determine if the field soil to be treated is coarse, medium, or fine and use the application rate recommended for that soil texture grouping.

Soil Texture Class	Soil Classification
Coarse (Light) Soils	Sand, loamy sand, sandy loam
Medium soils	Loam, silty clay loam †, silt loam, silt, sandy clay loam †
Fine (Heavy) Soils	Clay, clay loam, silty clay loam †, silty clay, sandy clay, sandy clay loam †

† Silty clay loam and sandy clay loam soils are transitional soils and may be classified as either medium or fine textured soils. If silty clay loam or sandy clay loam soils are predominately sand or silt, they are usually classified as medium textured soils. If they are predominately clay, they are usually classified as fine textured soils.

SOIL PREPARATION

Avoid applying BALAN DF to soils that are wet, cloddy, contain excessive plant residue or that are subject to prolonged periods of flooding as poor weed control or crop injury may result.

MIXING DIRECTIONS

BALAN DF-Alone

BALAN DF may be applied in water and liquid fertilizer materials. Prior to mixing BALAN DF in liquid fertilizer, refer to the label section entitled "Testing for Compatibility in Liquid Fertilizers" for test procedures to determine compatibility with the fertilizer product to be used.

Equipment Requirements: Vigorous continuous agitation is required for BALAN DF. Agitation should be sufficient to create a rippling or rolling action at the liquid surface. Centrifugal pumps are preferred and should have sufficient capacity to provide good bypass volume at all times. Screens placed on the suction side of the pump should be at least 16 mesh or coarser. Use 50 mesh or coarser screens between the pump and boom and when required at the nozzles. Line screens in the tank should be no finer than 50 mesh (100 mesh is finer than 50 mesh). Before mixing, be sure equipment is clean and does not contain oily residues from emulsifiable concentrates.

If bypass return volume is restricted (i.e., partial plugging of screen on suction side, or bypass return valve being used to regulate system pressure) poor dispersion or settling of BALAN DF may occur, causing erratic or poor weed control and/or crop injury.

A premix slurry of BALAN DF and water will help assure good initial dispersion if insufficient agitation exists. Refer to the premix portion of this label.

Start with a clean spray tank. Fill the sprayer to 1/4 of the required spray volume. Start agitation. Add the required amount of BALAN DF in a controlled fashion to allow gradual wetting of the product and prevent clogging of screens and outlet parts. Continue agitation and fill spray tank to required spray volume. Maintain continuous agitation from mixing through application.

Precaution: Do not allow the mixture to back siphon into the water source.

BALAN DF in Tank Mix Combinations

BALAN DF may be tank mixed with other products when applied with water

or liquid fertilizer materials. Prior to mixing BALAN DF and another product in liquid fertilizer, refer to the tank mix product manufacturer's label to determine if application in liquid fertilizer is recommended. Also refer to the section in this label entitled "Testing for Compatibility in Liquid Fertilizer" for testing procedures to determine tank mix compatibility with the liquid fertilizer product to be used. Read and follow all label instructions for each material to be added to the spray tank.

Vigorous continuous agitation is required for all tank mixtures. Sparger pipe agitators generally provide the best agitation in spray tanks. To prevent foaming in the spray tank during filling, keep the end of the fill pipe below the surface of the water. This prevents air from being stirred or splashed into the mixture.

Mixing Order: Add BALAN DF to spray tank according to mixing directions for "BALAN DF-Alone." Fill the spray tank to 90% of the final spray volume. Add different tank mix formulation types in the following order: dry flowables (DF); wettable powders (WP); aqueous suspensions (AS); flowables (F); liquids (L); solutions (S), and emulsifiable concentrates (EC, LC). Allow time for complete mixing and dispersion after addition of each product. Allow extra mixing and dispersion time for dry flowable products. Continue agitation and fill tank to final spray volume.

Maintain continuous agitation during mixing, final filling and throughout application. If spraying and agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. Settled materials must be resuspended before spraying is resumed. A sparger or jet agitator is particularly useful for this purpose. Settled materials may be more difficult to resuspend than when originally mixed. The addition of a suspending agent such as FLOZINE (Loveland Industries, Inc., Greeley, CO) will aid in better dispersion and resuspension of BALAN DF if settling has occurred.

Premixing: When tank mixing, initial mixing and dispersion of certain dry flowable or wettable powder products may be improved by premixing with water (slurrying). Where recommended, follow product label instructions for each material. Adding the slurred material to the spray tank through a 20 to 35 mesh wetting screen will help assure good initial dispersion.

TESTING FOR COMPATIBILITY IN LIQUID FERTILIZERS

BALAN DF alone or in combination with other products may be mixed with liquid fertilizer. Vigorous continuous agitation is always required when BALAN DF is applied in liquid fertilizer. In some cases, BALAN DF or tank mixes containing BALAN DF may not combine properly with some liquid fertilizer materials. Small quantities of such mixtures should always be tested before full-scale mixing. Use the procedure provided below to determine if a compatibility agent is needed or which available agent performs best with the mixture being applied. The compatibility agents listed at the end of this section have been thoroughly tested. Other surfactant materials available may not be suitable for use with liquid fertilizers. Individual state regulations relating to liquid fertilizer mixing, registration, labeling and application are the responsibility of the individual and/or company offering the fertilizer and chemical mixture for sale. The combination of BALAN DF with solution and suspension-type fertilizers provides annual weed control equal to BALAN DF applied in water.

Testing Procedure

1. Add 1 pint of liquid fertilizer to a 1 quart glass jar.
2. Add equal amounts (1 to 4 teaspoonfuls depending on application rate) of BALAN DF and other products to be tank mixed in the liquid fertilizer. Add materials in the order recommended in the "Mixing Directions" section of this label. Mix until evenly dispersed after addition of each formulation. If dry flowable or wettable powder formulations do not disperse well, it may be necessary to slurry the materials in a small amount of water before addition to the liquid fertilizer.
3. Observe the jar for about 10 minutes. If materials rise to the surface and form a thick layer (oil curds) which will not disperse when agitated, a compatibility agent is needed. If the mixture is easily dispersed to its original state with slight agitation, no compatibility agent is needed; however, good agitation must be provided to maintain dispersion in the spray tank from mixing through application.
4. If the need for a compatibility agent is demonstrated in step 3, it may be tested as follows: Using a clean, clear plastic or glass container, start at step 1, above. Add 1/2 teaspoonful of the compatibility agent to the liquid fertilizer, mix well, then repeat steps 2 and 3.

An effective compatibility agent will cause the mixture to remain uniformly mixed with little or no separation or oil rising to the surface for 1/2 hour or longer. If slight separation does occur, 2 to 3 inversions of container should provide a uniform mixture. If oily curds form which will not disperse, try adding additional compatibility agent or test the effectiveness of an alternative compatibility agent using the procedure above. A clean jar should be used for each test.

Compatibility Agents

The phosphonate ester-type surfactants listed below are designed for use with liquid fertilizers and can be mixed at rates as low as 1 1/2 pints per ton of liquid fertilizer. They usually do not work as well as compatibility agents for tank mixes in plain water. Add the compatibility agent just before adding

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herbicides. Read and follow the label directions for the compatibility agent.

1. SPONTO® 168D (Witco Corp., Houston, TX)
2. UNITE® (IACO, Inc., Madison, WI)
3. T-MULZ® 734-2 (Harcros Chemicals Inc., Kansas City, KS)
4. E-Z MIX® (Loveland Industries Inc., Greeley, CO)

APPLICATION AND INCORPORATION DIRECTIONS

Application

For best results, apply and incorporate BALAN DF within three weeks prior to planting. Apply in 5 to 40 gallons of water or liquid fertilizer per acre (broadcast basis). For band application, apply proportionately less. Use any properly calibrated low pressure sprayer that will apply the spray uniformly. As the amount of spray volume decreases, the importance of accurate calibration and uniform application increases. Avoid boom overlaps that will increase rates above those recommended. Check the sprayer daily to insure proper calibration and uniform application.

Incorporation

Before planting, BALAN DF must be incorporated one time within 4 to 8 hours after application. A second incorporation is required with most equipment (see "Incorporation Equipment," below, for specific instructions). If BALAN DF is applied to a wet, warm soil surface or if the wind velocity is consistently greater than 10 mph, variable weed control may result. Variable weed control may also result if incorporation is delayed more than 8 hours in the eastern United States or 4 hours in the western United States. Operate equipment to mix BALAN DF into the top 2 to 3 inches of the final seedbed. Generally, incorporation equipment will mix BALAN DF approximately half as deep as equipment is operated. For example, operating equipment 4 inches deep will mix BALAN DF into approximately the upper 2 inches of the seedbed.

Special Note: In the western United States, extremely high temperatures and intense sunlight may be present at the time of application. Under such conditions, BALAN DF should be incorporated within 4 hours after application to prevent loss of herbicidal activity.

Incorporation Equipment

Use equipment that thoroughly mixes BALAN DF into the soil. Shallow incorporation less than 2 inches deep in the final seedbed may result in erratic weed control. Use of equipment not listed below may result in poor or erratic weed control and/or crop injury. The following types of equipment are recommended:

- Tandem disc: Set equipment to cut 4 to 5 inches and operate at 4 to 6 mph. Two incorporation passes in different directions are required. A single incorporation pass with a tandem or double disc does not provide adequate soil mixing.
- P.T.O. driven equipment (tillers, cultivators, hoes): Set equipment to operate 2 to 4 inches deep and operate no more than 4 mph. Only one incorporation pass is necessary with this type of equipment.

Precaution: Use of P.T.O. equipment alone for incorporation in coarse (sandy) soils may result in an uneven distribution of BALAN DF. This occurs when soil containing BALAN DF is deposited into wheel tracks that are deeper than the operating depth of the tiller. This results in an excessive amount of BALAN DF in tractor wheel depressions and poor weed control in intervening areas containing less than the intended rate of BALAN DF.

Cultivation After Planting

Soil treated with BALAN DF may be shallowly cultivated or rotary hoed without loss of weed control activity. Do not cultivate deeper than the BALAN DF treated layer or untreated soil may be exposed resulting in loss of weed control. In bedded culture, if weeds germinate in the bottom of the furrow due to the removal of treated soil, these weeds should be controlled by cultivation.

**ANNUAL GRASSES AND BROADLEAF WEEDS
CONTROLLED BY BALAN* DF**

Annual Grasses

- Common Name**
annual bluegrass
barnyardgrass
(watergrass)
crabgrass
(large crabgrass)
(smooth crabgrass)
crowfootgrass
foxtails
(bottlegrass)
(bristlegrass)

- Scientific Name**
Poa annua
Echinochloa crus-galli

Digitaria spp.

Dactyloctenium aegyptium
Setaria spp.

- (giant foxtail)
(green foxtail)
(pigeongrass)
(robust white foxtail)
(yellow foxtail)
Johnsongrass
(seedling only)
jungle
panicum, fall
panicum, Texas
(buffalograss)
(Coloradograss)
ryegrass,
annual (Italian)
sandbur, field

- Sorghum halepense*

Echinochloa colonum
Panicum dichotomiflorum
Panicum texanum

Lolium multiflorum

Cenchrus incertus

Annual Broadleaf Weeds

- Common Name**
carpetweed
chickweed
Florida pusley
(Florida purslane)
(Mexican clover)
(pusley)
knotweed
lambsquarters, common
pigweeds
redroot pigweed
(carelessweed)
(rough pigweed)
prostrate pigweed
spiny amaranth
purslane, common
redmaids

- Scientific Name**
Mollugo verticillata
Stellaria media
Richardia scabra

Polygonum aviculare
Chenopodium album
Amaranthus spp.

Portulaca oleracea
Calandrinia caulescens

Weed control may be reduced in soils with greater than 5% organic matter.

APPROVED CROPS

ALFALFA, BIRDSFOOT TREFOIL, CLOVER
Apply and incorporate BALAN DF before seeding.

Broadcast Application Rates/Acre

Soil Texture	BALAN DF (pounds/acre)
Coarse	2.0
Medium	2.0
Fine	2.5

Incorporation Directions for Alfalfa:

Best soil incorporation and distribution of BALAN DF is achieved by disking in the herbicide with a tandem disk set 4-5 inches deep running 4-6 mph. This should be done after the field has been floated and borders have been made. A second pass utilizing gauge wheels set at 4-5 inches on tandem disk will help assure proper herbicide incorporation depth and product performance. Borders can be worked with a drag harrow so as to incorporate herbicide as well as possible. BALAN DF applications made prior to floating or bucking borders is not recommended and can result in uneven distribution of herbicide, resulting in poor weed control and possible crop injury.

LETTUCE

Apply and incorporate before seeding or transplanting.

Broadcast Application Rates/Acre

Soil Texture	BALAN DF (pounds/acre)
Coarse	2.0
Medium	2.0
Fine	2.5

NOTICE

PLATTE WARRANTS THAT THIS PRODUCT CONFORMS TO THE CHEMICAL DESCRIPTION ON THE LABEL THEREOF AND IS REASONABLY FIT FOR THE PURPOSES STATED ON SUCH LABEL ONLY WHEN USED IN ACCORDANCE WITH THE 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

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WHICH ARE BEYOND THE CONTROL OF PLATTE. IN NO CASE SHALL PLATTE 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. EXCEPT AS EXPRESSLY PROVIDED HEREIN, PLATTE MAKES NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND, EITHER EXPRESSED OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND PLATTE'S TOTAL LIABILITY, SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

AGRICULTURAL CHEMICAL

Do Not Ship or Store with Food, Feeds, Drugs, or Clothing.

For chemical emergency, spill, leak, fire, exposure or accident, call CHEMTREC -Day or Night 1-800-424-9300.

FORMULATED FOR
PLATTE CHEMICAL CO.

150 SO. MAIN STREET FREMONT, NEBRASKA 68025-5697