

56077-62

10-19-2000

1/16

**ACCEPTED**

OCT 19 2000

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under  
EPA Reg. No. 56077-62



# Premerge 3.3

## Herbicide

For the control of most annual grasses and certain broadleaf weeds in cotton, dry bulb onions, dry bulb shallots, edible beans, field corn, forage legumes, garlic, grain sorghum, nonbearing fruit, nut crops and vineyards, peanuts, potatoes, rice, soybeans, sunflowers, sweet corn, sweet lupines, and tobacco.

**ACTIVE INGREDIENT:**

N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzamine ..... 37.4%

INERT INGREDIENTS\*: ..... 62.6%

TOTAL ..... 100.0%

1 gallon contains 3.3 pounds of pendimethalin.

\*Contains aromatic naphtha

EPA Registration No. 56077-62

EPA Establishment No.

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

**KEEP OUT OF REACH OF CHILDREN****CAUTION / ¡PRECAUCION!****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 a poison control center or doctor.</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 mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>

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

**NOTE TO PHYSICIAN:**

Because of increased risk of chemical pneumonia or pulmonary edema caused by aspiration of the hydrocarbon solvent, vomiting should be induced only under professional supervision.

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

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

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicators and other handlers must wear:

- long-sleeved shirt and long pants
- chemical-resistant gloves such as barrier laminate or viton
- shoes plus socks

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

**USER SAFETY RECOMMENDATIONS**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

**ENVIRONMENTAL HAZARDS**

This product 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 adjacent aquatic sites. DO NOT contaminate water when disposing of equipment washwaters.

**AGRICULTURAL CHEMICAL**  
**DO NOT SHIP OR STORE WITH FOOD, FEEDS,**  
**DRUGS, OR CLOTHING**

**FOR CHEMICAL EMERGENCY (SPILL, LEAK, FIRE, OR EXPOSURE) CALL CHEMTREC: 1-800-424-9300**  
**FOR 24 HOUR INFORMATION CALL CEDAR CHEMICAL: 1-870-572-3701**

2/16

## DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

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

- coveralls
- chemical-resistant gloves such as barrier laminate or viton
- shoes plus socks

### STORAGE AND DISPOSAL

**STORAGE:** Do not contaminate water, food, or feed, by storage or disposal. Open dumping is prohibited. **DO NOT** store this product near fertilizers, seeds, insecticides, or fungicides. Store at temperatures above 40°F. Extended storage at temperatures below 40°F can result in the formation of crystals on the bottom of the container. If crystallization does occur, store the container on its side at room temperature, (approximately 70°F) and rock or roll occasionally until crystals re-dissolve. Containers should not be stacked more than six (6) high. Reclose all partially used containers by thoroughly tightening screw cap. Damaged or leaking containers which cannot be used immediately should be transferred to suitable sound containers and properly marked. Absorb any spill with a suitable clay absorbent and dispose as indicated under "Pesticide Disposal".

For safety and prevention of unauthorized use, all pesticides should be stored in locked facilities.

To prevent accidental misuse, different pesticides should be stored in separate areas with enough distance between to provide clear identification.

Opened, partially used pesticides should be stored in original labeled containers when possible. When transfer to another container is necessary because of leakage or damage, carefully mark, and identify contents of the new container.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** For 5 gallon containers and under, triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. If burned, stay out of smoke.

For bulk and mini-bulk, return empty container to point of purchase for repackaging or recycling.

### WHERE TO USE

CEDAR CHEMICAL'S PREMERGE 3.3 is a selective soil applied

herbicide for preemergence control of most annual grasses and certain broadleaf weeds as they germinate in:

- Cotton
- Corn (Field and Sweet)
- Dry Bulb Onions
- Dry Bulb Shallots
- Edible Beans
- Forage Legumes
- Garlic
- Grain Sorghum
- Nonbearing Fruit, Nut Crops and Vineyards
- Peanuts
- Potatoes
- Rice
- Soybeans
- Sunflowers
- Sweet Lupines
- Tobacco

### GENERAL INFORMATION

#### Use Precautions

Apply this product only as specified on this label.

CEDAR CHEMICAL'S PREMERGE 3.3 is formulated as an emulsifiable concentrate containing 3.3 pounds of active Pendimethalin per gallon.

PREMERGE 3.3 is a selective soil applied herbicide for preemergence control of most annual grasses and certain broadleaf weeds as they germinate, but it will not control established weeds. Established weeds should be controlled before applying Premerge 3.3 or by use of an appropriate postemergence herbicide, tank mix combination treatment.

PREMERGE 3.3 may be tank mixed with any product having the same crop use and restrictions allowing co-application. PREMERGE 3.3 treatments may be followed by any registered herbicide for additional weed control.

Follow PREMERGE 3.3 label directions carefully. Over-application can result in crop stand loss, crop injury, or excessive soil residues. Uneven application, improper soil incorporation, or soil incorporation deeper than recommended can decrease weed control and/or cause crop injury.

Seedling diseases, cold weather, excessive moisture, shallow or deep planting, low or high soil pH, high soil salt concentration, or drought can weaken seedlings and plants and increase the possibility of crop damage and/or reduced crop yields from PREMERGE 3.3.

To assure uniform application, mix the prescribed amount of PREMERGE 3.3 with a sufficient volume of water to provide thorough coverage of target area. Follow the recommendations given in the "APPLICATION" section of this label.

PREMERGE 3.3 used according to label directions under normal growing conditions allows for crop rotation. However, various environmental and/or agronomic factors may cause some risk to rotational crops from prior use of PREMERGE 3.3. See "Plant Back Restrictions" for additional information.

Naturally occurring biotypes of some of the weeds listed on this label may not be effectively controlled by this and/or other mitotic inhibiting products. Other herbicides with the mitotic inhibiting mode of action include other dinitroaniline herbicides such as trifluralin, and Sonalan®. To control these biotypes, tank mix PREMERGE 3.3 with other herbicide products having another mode of activity and registered for use to control that weed pest in that crop.

#### MIXING

PREMERGE 3.3 readily mixes with water and most liquid fertilizers.

Always check compatibility of PREMERGE 3.3 with liquid fertilizers and other herbicides before full scale application mixing is attempted.

When applying PREMERGE 3.3 alone in water or liquid fertilizer, the spray mixture should be prepared by first placing 1/2 of the application water or liquid fertilizer into the mix tank. Start agitation and add the required amount of PREMERGE 3.3. Add remainder of application water or liquid fertilizer. Keep agitating the solution throughout application.

When tankmixing with other pesticide products, use the following guidelines:

1. Check compatibility of tankmix components.
2. Fill mix or spray tank 1/2 full with clean water (or liquid fertilizer).
3. Begin agitation.
4. Add wettable powder formulations to tank (first pre-slurry in water if applying in liquid fertilizer).
5. Add dry flowable formulations to tank (first pre-slurry in water if applying in liquid fertilizer).
6. Add liquid flowable formulations to tank.
7. Add emulsifiable concentrate formulations to tank.
8. Add PREMERGE 3.3 to tank.
9. Add remainder of water for application.
10. Maintain constant agitation until all of mixture is sprayed.

Check crop use directions in this label for additional tank mix information.

Always check other pesticide labels for additional mixing information and prohibitions.

#### **APPLICATION EQUIPMENT AND SPRAY VOLUME**

**Ground:** Apply PREMERGE 3.3 in 10 or more gallons of water (20 or more gallons of liquid fertilizer) per acre with conventional spray equipment. Increase spray volumes when treating dense weed foliage or fields containing excessive crop residues to increase penetration and coverage.

Band applications should be equivalent to the broadcast rate and application volume per acre.

**Air:** Apply PREMERGE 3.3 in a minimum of 5 gallons of water per acre with aerial equipment. Increase spray volumes when treating dense weed foliage or applying during periods of low humidity.

**DO NOT** apply PREMERGE 3.3 if wind velocity is high enough to cause drift of the application spray off the target site or irregular spray patterns. **DO NOT** apply during periods of temperature inversions. The presence of a temperature inversion can be determined with smoke. If a smoke layer forms near the ground surface, application should be postponed until the air is stable.

Choose spray nozzles capable of producing spray droplets able to maintain good foliage coverage and weed control. Avoid using nozzles and excessive spray boom pressure that may increase the formation of fine droplets most likely to drift. Orienting spray nozzles away from the air stream prevents shear from also producing fine droplets.

Check for local aerial application restrictions.

#### **APPLICATION WITH DRY FERTILIZERS**

PREMERGE 3.3 may be applied via dry fertilizers impregnated with PREMERGE 3.3.

Absorb onto a minimum of 200 pounds of dry fertilizer to be applied per acre the recommended amount of PREMERGE 3.3 to be applied to that same acre.

Follow all label requirements regarding rates per acre, timing of application, incorporation, etc. and precautions in the same manner as if the PREMERGE 3.3 were applied by spray equipment.

Coated ammonium nitrate and limestone do not absorb PREMERGE 3.3 and therefore impregnation with these materials should not be attempted.

#### **APPLICATION THROUGH IRRIGATION SYSTEMS**

#### **(CHEMIGATION)**

PREMERGE 3.3 may be applied through sprinkler irrigation systems in Cotton, Field Corn, Grain Sorghum, Peanuts, Potatoes, Soybeans and Sunflowers. Follow all label recommendations for these crops regarding rates per acre, timing of application, special instructions, and precautions.

Apply PREMERGE 3.3 only through a sprinkler including center pivot, lateral move, end tow, side (wheel) roll traveler, big gun, solid set, or hand move irrigation systems. **DO NOT** apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or excessive (illegal) pesticide residues in the crop can result from nonuniform distribution of treated water.

Calibrate the system with water first to ensure that the amount of PREMERGE 3.3 applied corresponds to the recommended rate per acre.

Apply PREMERGE 3.3 in 1/2 to 3/4 inches of water during the first sprinkler set. When application is complete, flush the system with water.

Contact State Extension Service specialists, equipment manufacturers, or other experts for additional use information or assistance in system calibration.

#### **Application Through Irrigation Systems (Chemigation) Connected to Public Water Systems**

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

2. Chemical application through irrigation (Chemigation) systems connected to public water systems must contain functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

3. All chemical application through irrigation (Chemigation) systems connected to public water systems must also follow restrictions listed in the following "Special Precautions for Application Through Irrigation Equipment (Chemigation)" section.

#### **Special Precautions for Application Through Irrigation Equipment (Chemigation)**

1. **DO NOT** connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.

2. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

3. The system must be free of leaks and clogged nozzles.

4. The pesticide must be supplied continuously for the duration of the aqueous application. An uneven application may cause injury to the crop or poor weed control.

5. Agitation must be maintained in the nurse tank.

6. The sprinkler-chemigation system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

7. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.

8. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

9. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

10. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when due water pressure decreases to the point where pesticide distribution is adversely affected.
11. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
12. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

### **RATES**

Follow the recommended rates as directed in the specific crop sections of this label. Use higher label rates when heavy weed populations are anticipated or excessive crop litter remain in the field prior to seedbed preparation or application.

Some rates are dependant upon the different growing conditions found in the United States. Use rates for some crops may vary between Southern and Northern States, check specific crop sections of this label for rate in area treatment is to be made.

**Southern States:** Southern States are defined as Alabama, Arizona, Arkansas, California, Florida, Georgia, Hawaii, Louisiana, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and the eastern seaboard counties of Delaware, Virginia and Maryland.

**Northern States:** Northern States are defined as Colorado, Connecticut, Delaware (except seaboard counties), Idaho, Indiana, Illinois, Iowa, Kansas, Kentucky, Maryland (except seaboard counties), Maine, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Dakota, Ohio, South Dakota, Oregon, Pennsylvania, Rhode Island, Utah, Vermont, Virginia (except seaboard counties), Washington, West Virginia, Wisconsin, and Wyoming.

### **INCORPORATION** (General Mechanical Incorporation Information)

Work fields until soil is smooth and clod free before a preplant incorporated application. Check specific crop sections of this label for additional incorporation information and restrictions.

PREMERGE 3.3 should be incorporated prior to planting and within 7 days of application. When PREMERGE 3.3 is applied to row crop fields or over seed beds, mechanical incorporation should thoroughly and uniformly blend PREMERGE 3.3 into the top 1 or 2 inches of soil. When PREMERGE 3.3 is applied to soil that will later be formed into seedbeds, mechanical incorporation should thoroughly and uniformly blend PREMERGE 3.3 into the top 2 or 3 inches of soil. It is important for desired weed control that incorporation be thorough to provide contact of PREMERGE 3.3 treated soil with germinating weed seeds.

Closely follow incorporation equipment manufacturer's instructions on proper use to achieve desired soil incorporation.

Exercise care when planting, or if beds must be reshaped prior to planting, to prevent bringing untreated soil to the surface or expose untreated soil in the seedbed or in the furrow.

Exercise care when forming seedbeds that treated soil to prevent bringing up untreated soil to the surface.

### **PLANT BACK RESTRICTIONS**

Other crops may be planted in land treated with PREMERGE 3.3 the following year. See restrictions below for winter wheat, winter barley, sugar beets, red beets, and spinach.

#### **1. Winter wheat, winter barley**

Winter wheat and winter barley may be planted in the fall 4 months after a PREMERGE 3.3 application in any registered crop. Winter wheat and winter barley may be planted in the fall 3 months after a PREMERGE 3.3 postemergence incorporated application in irrigated field corn or grain sorghum. The treated crop must be grown to maturity and harvested before planting winter wheat or winter barley. In areas where irrigation is

necessary to produce the crop treated with PREMERGE 3.3, **DO NOT** plant winter wheat or winter barley after field corn or grain sorghum if crop failure/destruction occurs and land is fallowed during the summer as crop injury may result.

**DO NOT** plant winter wheat or winter barley after field corn or grain barley if land was treated with 4.8 pints or higher until the next growing season.

**DO NOT** feed forage or graze livestock for 75 days after planting wheat or barley in treated land.

#### **2. Sugar beets, red beets, spinach**

To avoid crop injury, **DO NOT** plant sugar beets, red beets or spinach for 12 months following a PREMERGE 3.3 application. To insure thorough mixing of soil, land should be plowed using a moldboard plow to a depth of 12 inches prior to planting these crops.

#### **3. Tank mix applications**

When PREMERGE 3.3 is used in tank-mix or sequential combinations, refer to the labels of ALL other herbicides used on field for additional plant back restrictions.

PREMERGE 3.3 used according to label directions under normal growing conditions allows for crop rotation. However, various environmental and/or agronomic factors may cause some risk to rotational crops from prior use of PREMERGE 3.3.

## **FIELD CORN**

### **USE PRECAUTIONS**

PREMERGE 3.3 treatments in field corn may be made in fields using conventional, minimum or no-till techniques as a Preemergence, Early Postemergence or Postemergence Incorporated application.

PREMERGE 3.3 may be applied in a tank mix with Accent<sup>®</sup>, Accent plus Beacon<sup>®</sup>, atrazine, atrazine plus Bladex<sup>®</sup>, Banvel<sup>®</sup>, Banvel plus Bladex, Beacon, Bicep<sup>®</sup>, Bicep II, Bladex, Buctril<sup>®</sup> plus atrazine, Bullet<sup>®</sup>, Dual<sup>®</sup>, Dual II, Extrazine<sup>®</sup> II, Frontier<sup>®</sup>, Guardsman<sup>®</sup>, Harness<sup>®</sup> Plus, Lariat<sup>®</sup>, Lasso<sup>®</sup>, Marksman<sup>®</sup>, Marksman plus Bladex, Surpass<sup>®</sup> or Surpass 100. Refer to the tank mix companion label for weeds controlled in addition to those controlled by PREMERGE 3.3.

When applying tank mixtures or sequential applications with PREMERGE 3.3, always read the companion product label(s) to determine application timing, specific use rate, and weed species controlled. In addition, follow all precautions and restrictions that apply to each product used. Always follow the most restrictive label.

**DO NOT APPLY PREMERGE 3.3 AS A PREPLANT INCORPORATED TREATMENT** as serious corn injury can result.

**DO NOT** exceed the maximum PREMERGE 3.3 labeled rate for any soil type.

PREMERGE 3.3 is **NOT** recommended for use on peat or muck soils.

**DO NOT** apply PREMERGE 3.3 in no-till field corn in California.

Unless minimum till or no-tillage cultivation techniques (see below) plant into a seed bed that is firm, smooth and free of clods and litter. Use only where adequate tillage is practiced to provide good soil coverage of the corn seed. **CORN MUST BE PLANTED AT LEAST 1 1/2 INCHES DEEP** to avoid spray contact with seed and crop damage.

Field Corn seed beds should be properly prepared to insure that they are firm, smooth and free of clods and litter. Adequate tillage should be practiced to provide good soil coverage of the corn seed. **FIELD CORN MUST BE PLANTED AT LEAST 1 1/2 INCHES DEEP AND COMPLETELY COVERED WITH SOIL** to avoid spray contact with seed and crop damage.

Best results in controlling weeds are achieved when PREMERGE 3.3 or PREMERGE 3.3 tank-mix combination treatments receive adequate rainfall

or overhead irrigation within 7 days after application. Soil crusting, soil compaction or weed germination before rain or irrigation may require cultivation, if so, use shallow tillage (such as rotary hoe), and make certain Field Corn seeds are below the tilled area.

If Field Corn planting is lost due to weather conditions in fields treated only with PREMERGE 3.3, Field Corn or any other crop found on the PREMERGE 3.3 label allowing preplant incorporated use, can be replanted the same year without adverse effects. If Field Corn is replanted, seeding depth must be below retilled area or crop injury may occur.

### **FIELD CORN GROWN USING MINIMUM TILL OR NO-TILL TECHNIQUES**

PREMERGE 3.3 alone and PREMERGE 3.3 tank mixtures may be used in field corn grown using minimum till or no-tillage techniques. PLANT FIELD CORN AT LEAST 1½ INCHES DEEP, CORN SEED MUST BE COMPLETELY COVERED WITH SOIL. The use of no-till planters under conditions which do not allow good soil coverage of the corn seed can result in reduced crop stand or injury if the PREMERGE 3.3 contacts the germinating corn seed. Check equipment to ensure good seed coverage with soil.

### **TIMING**

**Preemergence-** Apply PREMERGE 3.3 and applicable tank mixes after planting, but before weeds and crop emerge. Best results are achieved by applying PREMERGE 3.3 as soon as possible after planting to allow maximum opportunity for PREMERGE 3.3 contact with germinating weed seeds.

**Early Postemergence-** Apply PREMERGE 3.3 and applicable tank mixes Postemergence according to Corn height and weed size specified on the label(s) of the herbicide(s) used in combination with PREMERGE 3.3. PREMERGE 3.3 alone will not control emerged weeds. PREMERGE 3.3 controls weeds as their seeds germinate. Maximum efficacy can be achieved by waiting at least 7-10 days before cultivating Early Postemergence tank mix treatments.

**Postemergence Incorporated-** Apply PREMERGE 3.3 alone when corn is at least 4 inches tall until layby (last cultivation). Apply PREMERGE 3.3 plus atrazine as directed in the tank mix section. PREMERGE 3.3 alone will not control emerged weeds. Remove emerged by cultivation prior to treatment with PREMERGE 3.3. Cultivate to remove emerged weeds prior to application. Use a sweep type or rolling cultivator in a manner that will cover the bases of corn plants with at least 1 inch of soil to prevent contact of corn root brace with PREMERGE 3.3 spray. Complete incorporation of treatment uniformly into soil via a sweep type or rolling cultivator or via irrigation or rainfall as soon as possible following application (before 7 days). Mechanical cultivation will provide best results during periods of low rainfall or soil moisture. See PREMERGE 3.3 postemergence incorporated use rates in table below.

**DO NOT APPLY PREPLANT INCORPORATED** or serious corn injury can result from possible contact of treated soil with corn seed.

### **USE RATES IN FIELD CORN**

**Preemergence or Early Postemergence Broadcast** rates per acre of PREMERGE 3.3 in Field Corn (Pints per Acre). Use the higher rate when using PREMERGE 3.3 alone. Use the higher rates (unless otherwise directed in the specific tank mix information below) in tank mixes when heavy infestations are expected or excessive crop residue remains in no-till or minimum till fields.

Soil Texture	<1.5% Organic Matter	1.5 -3.0% Organic Matter	>3.0% Organic Matter
Coarse	1.8 to 2.4 pts.	2.4 to 3.6 pts.	3.6 pts.
Medium	2.4 to 3.6 pts.	3.6 pts.	3.6 to 4.8 pts.
Fine	2.4 to 3.6 pts.	3.6 to 4.8 pts.	3.6 to 4.8 pts.

**Postemergence Incorporated** rates per acre of PREMERGE 3.3 in Field Corn (Pints per Acre).

Soil Texture	Southern States	Northern States
Coarse	1.2 to 1.8 pts.	1.8 to 2.4 pts.
Medium	1.8 to 2.4 pts.	2.4 to 3.6 pts.
Fine	1.8 to 3.6 pts.	2.4 to 3.6 pts.

### **Early Postemergence Application Restrictions**

Observe the following early postemergence restrictions to avoid serious crop injury:

• **DO NOT** apply PREMERGE 3.3 plus Bladex 90DF or PREMERGE 3.3 plus Extrazine II DF if the 5th corn leaf is visible.

• **DO NOT** use Bladex 4L or Extrazine II 4L postemergence on corn.

• **DO NOT** apply PREMERGE 3.3 plus Bladex 90DF or PREMERGE 3.3 plus Extrazine II DF under extended cold (below 50°F), wet weather conditions, or when cold, wet conditions are predicted. Bladex or Extrazine injury can occur under these conditions.

• **DO NOT** apply in liquid fertilizer.

• **DO NOT** exceed the maximum PREMERGE 3.3 labeled rate for any soil type.

### **TANK MIXES**

PREMERGE 3.3 may be applied to Field Corn in combination with one or more of the following herbicides for added control:

Observe all directions, precautions, and restrictions found on labeling of the products used in the tank mix. Follow most restrictive.

Herbicide	Timing	Recommended Rates
Accent or Accent SP	Preemergence Early Postemergence	⅓ to ⅔ oz/A
acetochlor (i.e. Harness or Surpass)	Preemergence	Surpass 1.0 to 3.75 pts. A Harness 1.25 to 3.0 pts. A
acetochlor + atrazine (i.e. Harness Xtra or Surpass 100)	Preemergence	Surpass 100 1.6 to 3.3 pts./A Harness Xtra 1.8 to 2.3 pts./A
alachlor (i.e. Lasso)	Preemergence Early Postemergence	1.5 to 4.0 lbs. ai/A (Lasso 1.5 to 4.0 qts./A)
alachlor + atrazine (i.e. Lariat or Bullet)	Preemergence Early Postemergence	2.0 to 4.5 qts./A
atrazine	Preemergence Early Postemergence	1.0 to 2.0 lbs. ai/A
atrazine	Postemergence Incorporated	See PREMERGE 3.3 + atrazine Postemergence Incorporated table.
Banvel	Preemergence Early Postemergence	0.5 to 0.75 pts./A
Beacon	Early Postemergence	0.38 to 0.76 oz/A
Bicep or Bicep II	Preemergence Early Postemergence	1.5 to 3.0 qts./A
Buctril + atrazine	Early Postemergence	1.5 to 2.0 pts./A

Dual or Dual II	Preemergence	1.5 to 2.0 pts./A
Frontier	Preemergence Early Postemergence	13 to 25 oz/A
Guardsman	Preemergence Early Postemergence	2.5 to 5.0 pts./A

#### Additional Tank Mix Information

- ALWAYS CONSULT ALL TANK MIX COMPONENTS LABELS FOR ADDITIONAL USE DIRECTIONS, RESTRICTIONS, AND PRECAUTIONS.
- **DO NOT** exceed the maximum PREMERGE 3.3 labeled rate for any soil type.
- Tank mixtures may be applied via irrigation equipment **ONLY** if the labeling of ALL herbicides in tank mix allow application via irrigation equipment.
- Make applications containing alachlor (Lasso) within 5 days of last preplant tillage.
- **DO NOT** graze or feed forage treated with any atrazine containing product for 21 days following application.
- **DO NOT** apply Bicep II Postemergence.
- When tankmixing PREMERGE 3.3 with Bicep, add PREMERGE 3.3 to the mix/spray tank before adding the Bicep.
- **DO NOT** treat furrow irrigated Corn with any mixture containing dicamba (i.e. Banvel).
- **DO NOT** apply any mixture containing dicamba (i.e. Banvel) to sandy, sandy loamy soils or fine or medium texture soils containing less than 2% organic matter.
- **DO NOT** apply any mixture containing dicamba (i.e. Banvel) by air.
- Tank mixtures containing dicamba (i.e. Banvel) should only be used on level Corn fields.
- Check all product labeling for restrictions regarding their use in California.

#### PREMERGE 3.3 + ATRAZINE POSTEMERGENCE INCORPORATED USE RATES (per acre)

Soil Texture	Southern States	Northern States
	PREMERGE 3.3 - atrazine	PREMERGE 3.3 + atrazine
Coarse	1.2 to 1.8 pts + 0.5 to 1.2 lbs. ai	1.8 to 2.4 pts + 0.5 to 1.2 lbs. ai
Medium	1.8 to 2.4 pts + 0.5 to 1.2 lbs. ai	2.4 to 3.6 pts + 0.5 to 1.2 lbs. ai
Fine	1.8 to 3.6 pts + 0.5 to 1.2 lbs. ai	2.4 to 3.6 pts + 0.5 to 1.2 lbs. ai

#### Premerge 3.3 + Atrazine Postemergence Incorporated Use Information

- Postemergence Incorporated treatments of PREMERGE 3.3 plus Atrazine will control most late season annual grasses and certain broadleaf weeds found in field corn.
- Postemergence Incorporated treatments of PREMERGE 3.3 plus Atrazine should be applied when corn is at least 4 inches tall but before

corn reaches 12 inches in height.

- Cultivate to remove emerged weeds prior to application. Use a sweep type or rolling cultivator in a manner that will cover the bases of corn plants with at least 1 inch of soil to prevent contact of corn root brace with PREMERGE 3.3 spray.
- Complete incorporation of treatment uniformly into soil via a sweep type or rolling cultivator or via irrigation or rainfall as soon as possible following application (before 7 days). Mechanical cultivation will provide best results during periods of low rainfall or soil moisture.
- If cultivation is required again after application and treatment, restrict depth of cultivation cut to that originally used.
- **DO NOT** apply more than 1.2 lbs ai/A of Atrazine Postemergence Incorporated.
- **DO NOT** graze treated area or feed treated forage to livestock for 21 days after application.
- Follow all instructions and restrictions on the Atrazine label.

#### SWEET CORN

PREMERGE 3.3 may be used on Sweet Corn in Alabama, Arizona, California, Florida, Georgia, Idaho, Illinois, Minnesota, Montana, New York, Oregon, Texas, Washington and Wisconsin.

#### INSTRUCTIONS FOR USE IN SWEET CORN

**DO NOT** apply PREMERGE 3.3 Preplant Incorporated to Sweet Corn. Serious crop injury may result.

Sweet Corn (all varieties) grown in Arizona, California, Montana, Texas should only be treated with Preemergence applications.

Sweet Corn (processing varieties only) grown in Idaho, Illinois, Minnesota, New York, Oregon, Washington and Wisconsin should only be treated with Preemergence or Early Postemergence applications.

Sweet Corn grown in Alabama, Florida, and Georgia should only be treated early Postemergence with PREMERGE 3.3 in combination with Atrazine.

Sweet Corn seed bed should be properly prepared to insure that it is firm, smooth and free of clods and crop litter. Adequate tillage should be practiced to provide good soil coverage of the corn seed. **SWEET CORN MUST BE PLANTED AT LEAST 1 1/4 INCHES DEEP AND COMPLETELY COVERED WITH SOIL** to avoid PREMERGE 3.3 contact with Sweet Corn seed and crop damage.

Best results in controlling weeds are achieved when PREMERGE 3.3 or PREMERGE 3.3 tank-mix combination treatments receive adequate rainfall or overhead irrigation within 7 days after application. Soil crusting, soil compaction or weed germination before rain or irrigation may require cultivation, if so, use shallow tillage (such as rotary hoe), and make certain Sweet Corn seeds are below the tilled area.

If Sweet Corn planting is lost due to weather conditions in fields treated only with PREMERGE 3.3, Sweet Corn or any other crop found on the PREMERGE 3.3 label allowing Preplant Incorporated use, can be replanted the same year without adverse effects. If Sweet Corn is replanted, seeding depth must be below retilled area or crop injury may occur.

**DO NOT** exceed the maximum PREMERGE 3.3 labeled rate for any soil type.

PREMERGE 3.3 is NOT recommended for use on peat or muck soils.

#### TIMING

7/16

**Preemergence-** Apply PREMERGE 3.3 and applicable tank mixes after planting, but before weeds and crop emerge. Best results are achieved by applying PREMERGE 3.3 as soon as possible after planting to allow maximum opportunity for PREMERGE 3.3 contact with germinating weed seeds.

**Early Postemergence-** Apply PREMERGE 3.3 and applicable tank mixes Postemergence according to Sweet Corn height and weed size specified on the label(s) of the herbicide(s) used in combination with PREMERGE 3.3. PREMERGE 3.3 alone will not control emerged weeds. PREMERGE 3.3 controls weeds as their seeds germinate. Maximum efficacy can be achieved by waiting at least 7-10 days before cultivating Early Postemergence tank mix treatments.

**DO NOT APPLY PREPLANT INCORPORATED** or serious corn injury can result from possible contact of treated soil with Sweet Corn seed.

#### USE RATES IN SWEET CORN

Preemergence or Early Postemergence Broadcast rates per acre of PREMERGE 3.3 in Sweet Corn (Pints per Acre). Use the higher rate when using PREMERGE 3.3 alone.

Soil Texture	<1.5% Organic Matter	1.5 -3.0% Organic Matter	>3.0% Organic Matter
Coarse	1.8 to 2.4 pts.	2.4 to 3.6 pts.	3.6 pts.
Medium	2.4 to 3.6 pts.	3.6 pts.	3.6 to 4.8 pts.
Fine	2.4 to 3.6 pts.	3.6 to 4.8 pts.	3.6 to 4.8 pts.

#### Early Postemergence Application Restrictions

Observe the following early postemergence restrictions to avoid serious crop injury:

- **DO NOT** apply PREMERGE 3.3 after PREMERGE 3.3 has already been applied preemergence.
- **DO NOT** apply PREMERGE 3.3 to Sweet Corn in liquid fertilizer.
- **DO NOT** exceed the maximum PREMERGE 3.3 labeled rate for any soil type.

#### TANK MIXES

PREMERGE 3.3 may be applied to Sweet Corn in combination with one or more of the following herbicides for added control:

Herbicide	Recommended Rates
alachlor (i.e. Lasso)	1.5 to 4.0 lbs ai/A (Lasso 1.5 to 4.0 qts/A)
atrazine	1.0 to 2.0 lbs ai/A
metolachlor (i.e. Dual or Dual II)	1.25 to 2.5 lbs ai/A (Dual 1.25 to 2.5 pts ai/A)
Bicep or Bicep II	1.5 to 3.0 qts/A
Bullet or Lariat	2.0 to 4.5 qts/A

Observe all directions, precautions, and restrictions found on labeling of the products used in the tank mix. Follow most restrictive.

#### Additional Tank Mix Information

- Make applications containing alachlor (Lasso) within 5 days of last

preplant tillage.

- **DO NOT** graze or feed forage treated with any atrazine containing product for 21 days following application.
- **DO NOT** apply Bicep II postemergence.
- When tankmixing PREMERGE 3.3 with Bicep, add PREMERGE 3.3 to the mix/spray tank before adding the Bicep.
- **DO NOT** exceed the maximum PREMERGE 3.3 labeled rate for any soil type.

#### COTTON

##### GENERAL INFORMATION

PREMERGE 3.3 treatments in cotton may be made to conventional, minimum till, no-till, or stale seedbed techniques as a Preplant, Preplant Incorporated, or Preemergence application.

Rhizome johnsongrass may be controlled with PREMERGE 3.3 if used as directed in "Rhizome Johnsongrass Control" section below.

Best results are achieved when surface and preemergence treatments receive rainfall or irrigation within 7 days of application. If soil crusting, soil compaction, or weeds begin to germinate, shallow cultivation (above cotton seeds) is recommended. Otherwise, a postemergence herbicide may be required to control weed escapes.

If Cotton planting is lost due to weather conditions in fields treated only with PREMERGE 3.3, Cotton or any other crop found on the PREMERGE 3.3 label allowing preplant incorporated use, can be replanted the same year without adverse effects. **DO NOT** rework the soil deeper than the original treatment zone.

**DO NOT** exceed the maximum labeled rate for any soil type.

**DO NOT** feed treated forage or graze treated cotton fields.

PREMERGE 3.3 is NOT recommended for use on peat or muck soils.

**DO NOT** apply PREMERGE 3.3 to no-till cotton in California.

##### TIMING

**Preplant:** PREMERGE 3.3 may be applied to the soil surface up to 15 days before planting.

**Preplant Incorporated:** PREMERGE 3.3 may be applied up to 60 days before planting. Treatment must be incorporated within 7 days of application. Preplant Incorporated applications may be followed by a Preemergence application at planting or within 2 days after planting.

**Preemergence:** PREMERGE 3.3 may be applied at planting or up to 2 days after planting. Preemergence applications may follow a Preplant Incorporated treatment.

**Autumn Treatment:** Cotton fields in Arizona, California, Louisiana, New Mexico, Mississippi, Oklahoma, and Texas may be treated in the fall, after October 15, for fall weed control. Use the low "No-Till" rate for the Cotton field's soil texture.

**DO NOT** apply more than the maximum allowable rate for field's soil texture when following a Preplant Incorporated treatment with a Preemergence treatment.

8/16

#### USE RATES IN COTTON (pints/acre)

Soil Texture	Conventional, Stale Seedbed, or Minimum Till	No-Till	Autumn Treatment
Coarse	1.2 to 2.4 pts.	1.8 to 2.4 pts.	1.8 pts.
Medium	1.8 to 2.4 pts.	2.4 to 3.6 pts.	2.4 pts.
Fine	2.4 to 3.6 pts.	3.6 to 4.8 pts.	3.6 pts.

Use the higher rate of PREMERGE 3.3 if heavy weed populations are expected or if heavy crop residues remain in the field.

#### TANK MIXES

PREMERGE 3.3 may be applied to Cotton in combination with the following herbicides for added control:

Herbicide	Recommended Rates
fluometuron (i.e. Flo-Met <sup>®</sup> , Cotoran <sup>®</sup> )	0.8 to 2.0 lbs ai/A
diuron (i.e. Karmex <sup>®</sup> )	0.5 to 1.6 lbs ai/A
Zorial <sup>®</sup> Rapid 80 or Zorial 80WP	1.25 to 2.5 lbs/A
prometryn (i.e. Caparol <sup>®</sup> )	1.2 to 2.4 lbs ai/A

Observe all directions, precautions, and restrictions found on labeling of the products used in the tank mix. Follow most restrictive.

#### Additional Tank Mix Information

- Tank mixes containing fluometuron may only be applied Preemergence. **DO NOT** apply tank mixes of fluometuron plus PREMERGE 3.3 in Arizona, California, New Mexico, Oklahoma, and Texas. Fluometuron may be applied Preemergence as an overlay to Cotton already treated Preplant Incorporated with PREMERGE 3.3. Check fluometuron label for specific restrictions and use directions.

- Diuron may only be applied Preemergence as an overlay to Cotton already treated Preplant Incorporated with PREMERGE 3.3. Check diuron product label for specific restrictions and use directions.

- Use of prometryn (i. e. Caparol) on Cotton is restricted to certain states. Check prometryn product label for specific restrictions and use directions. Follow directions closely to avoid crop injury.

- Prometryn may only be applied as a Preplant Incorporated treatment in Arizona, California, New Mexico, Oklahoma, and the Upper and Lower Rio Grande Valley of Texas. Follow prometryn product label directions closely to avoid crop injury.

- In certain areas of Oklahoma and Texas, prometryn may be applied to the soil surface Preplant or Preemergence. Follow prometryn product label directions closely to avoid crop injury.

- **DO NOT** use Zorial in Arizona, California, New Mexico, Oklahoma, and Texas. Check diuron product label for specific restrictions and use directions.

#### RHIZOME JOHNSONGRASS CONTROL (Specific Instructions)

Applying PREMERGE 3.3 Preplant Incorporated for two consecutive growing seasons will provide control of rhizome johnsongrass. Rhizome johnsongrass growth will be suppressed during the first year of application.

Best results in controlling rhizome johnsongrass are obtained through proper field preparation. Use a chisel plow to bring rhizomes to the field surface. Disk the plowed field 4 to 6 inches deep, twice, in different directions to chop the rhizomes into small pieces.

Apply PREMERGE 3.3 Preplant Incorporated. PREMERGE 3.3 should be incorporated within 7 days of application, sooner is better. Insure incorporation is thorough to contact rhizomes and achieve control. Thorough incorporation can be accomplished via disk harrow set to cut 4 to 6 inches deep and operated in two different directions or via PTO driven cultivators, tillers, hoes, etc. set to cut 3 to 4 inches deep.

#### USE RATES IN COTTON FOR RHIZOME JOHNSONGRASS CONTROL (pints/acre)

Soil Texture	PREMERGE 3.3
Coarse	2.4 pts.
Medium	3.6 pts.
Fine	4.8 pts.

- This technique for control of rhizome johnsongrass is not recommended for soil containing more than 3% organic matter.

#### EDIBLE BEANS

Edible Beans are Dry (Navy, Great Northern, Red Kidney, Black Turtle, Cranberry and others), Lima, Snap, Chickpeas (Garbanzo beans), Southern Peas (Cowpeas, Blackeyed Peas) and Sweet Lupines.

#### GENERAL INFORMATION

Only Preplant Incorporated treatments of PREMERGE 3.3 may be used in Dry beans, Lima beans, Snap beans, Chickpeas and Southern Peas.

Sweet Lupines may be treated Preplant Incorporated or Preemergence.

If Edible Bean planting is lost due to weather conditions in fields treated only with PREMERGE 3.3, Edible Beans or any other crop found on the PREMERGE 3.3 label allowing Preplant Incorporated use, can be replanted the same year without adverse effects. **DO NOT** rework the soil deeper than the original treatment zone.

**DO NOT** exceed the maximum labeled rate for any soil type.

**DO NOT** feed treated forage or graze treated Sweet Lupine fields.

PREMERGE 3.3 is NOT recommended for use on peat or muck soils.

#### TIMING

**Preplant Incorporated:** PREMERGE 3.3 may be applied up to 60 days before planting. Treatment must be incorporated within 7 days of application.

**Preemergence:** PREMERGE 3.3 may **ONLY** be applied to Sweet Lupines at planting or up to 2 days after planting.

#### USE RATES IN EDIBLE BEANS (pints/acre)

Soil Texture	Southern States	Northern States	
		<3% Organic Matter	>3% Organic Matter
Coarse	1.2 to 1.8 pts.	1.2 to 2.4 pts.	2.4 pts.
Medium	1.8 to 2.4 pts.	1.8 to 3.0 pts.	3.0 to 3.6 pts.
Fine	1.8 to 3.6 pts.	2.4 to 3.6 pts.	3.6 pts.
Heavy Clay Soils	3.6	3.6	

Use the higher rate of PREMERGE 3.3 if heavy weed populations are



9/16

expected or if heavy crop litter remains in the field.

### TANK MIXES

PREMERGE 3.3 may be applied in combination with the following herbicides for added control in certain Edible Beans:

Herbicide	Bean Type	Application & Rates
EPTC 7# EC (i.e. Eptam*)	Dry, Snap	2.5 to 4.0 lbs ai/A Preplant Incorporated
metolachlor (i.e. Dual)	Dry, Lima, Snap, Chickpeas, & Southern Peas	1.5 to 3.0 lbs ai/A Preplant Incorporated
alachlor (i.e. Lasso)	Dry beans, West of Mississippi River	2.5 to 3.0 lbs ai/A Preplant Incorporated

Observe all directions, precautions, and restrictions found on labeling of the products used in the tank mix. Follow most restrictive label.

See Additional Tank Mix Information below.

### Additional Tank Mix Information

- **DO NOT** exceed 3.5 pints of EPTC 7E per acre in small white beans on coarse textured soil.
- **DO NOT** feed treated forage or graze treated fields treated with EPTC in tankmix.
- Closely follow incorporation instructions on EPTC label.
- Use 4.5 pints of EPTC 7E for nutsedge control.
- **DO NOT** use tank mixes containing alachlor in California.
- **DO NOT** feed treated forage or graze treated fields treated with metolachlor in tankmix.

### FORAGE LEGUMES

Forage Legumes used for a cover crop in Federal Set-Aside or Conservation Reserve Program (CRP) areas may be treated with PREMERGE 3.3.

### GENERAL INFORMATION

Some stand reduction may occur due to use of PREMERGE 3.3.

Consult with ASC committee regarding type of cover crop to be planted and later disposition or use.

If cover crop is lost due to weather conditions in fields treated only with PREMERGE 3.3, Forage Legumes or any other crop found on the PREMERGE 3.3 label allowing Preplant Incorporated use, can be replanted the same year without adverse effects. **DO NOT** rework the soil deeper than the original treatment zone.

**DO NOT** exceed the maximum labeled rate for any soil type.

**DO NOT** feed treated forage or graze treated legume cover crop fields.

### TIMING

**Preplant Incorporated:** PREMERGE 3.3 may be applied up to 60 days before planting. Treatment must be incorporated within 7 days of application.

**Preemergence:** PREMERGE 3.3 may be applied at planting or up to 2 days after planting.

### USE RATES IN FORAGE LEGUMES (pints/acre)

Soil Texture	PREMERGE 3.3
Coarse	1.2 to 1.8 pts.
Medium	1.8 to 2.4 pts.
Fine	2.4 to 3.0 pts.

### GARLIC, DRY BULB SHALLOTS, AND DIRECT-SEEDED AND TRANSPLANTED DRY BULB ONIONS

### GENERAL INFORMATION

If crop planting is lost due to weather conditions in fields treated only with PREMERGE 3.3, any crop found on the PREMERGE 3.3 label allowing Preplant Incorporated use, can be replanted the same year without adverse effects. **DO NOT** rework the soil deeper than the original treatment zone.

**DO NOT** exceed the maximum labeled rate for any soil type.

**DO NOT** feed livestock treated forage or graze treated fields.

**DO NOT** treat green (bunching) onions or leeks.

**DO NOT** apply within 45 days of harvest (60 days in California).

**DO NOT** mechanically incorporate PREMERGE 3.3 applied to Garlic, Onions, or Shallots except as directed for Dry Bulb Onions grown in Colorado and Texas High Plains.

See specific directions later in this label for use of PREMERGE 3.3 in Onions on muck soils.

### TIMING

#### GARLIC

**Preemergence:** Apply after planting but before Garlic emerges.

**Postemergence:** Apply when Garlic is in the 1 to 5 true leaf stage.

Application of PREMERGE 3.3 may be split between Preemergence and Postemergence timing. **DO NOT** exceed maximum use rates listed below.

### DRY BULB SHALLOTS, DIRECT SEEDED ONIONS, AND TRANSPLANTED ONIONS

**Postemergence:** Apply as a broadcast spray with air or ground equipment when onions and shallots have between 2 to 9 true leaves (2 to 6 true leaves in California).

Onions may be treated through irrigation equipment. Center pivot, solid set, or manually positioned irrigation equipment may be used to apply PREMERGE 3.3 in Onions. See "Application Through Irrigation Systems (Chemigation)" section for additional information on this method of application. **DO NOT** irrigate more than 0.5 inches water. Apply PREMERGE 3.3 after the 2<sup>nd</sup> true leaf but before the 9<sup>th</sup> true leaf stage (2 to 6 true leaf in California).

**Additional Use Methods for Colorado, Kansas, and Nebraska:** PREMERGE 3.3 treatments in Seeded Onions may be split into 2 applications. Apply first application at loop stage followed by the second (sequential) application made during the 2 to 9 true leaf stage. **DO NOT** treat Onions if heavy rains or severe weather is expected otherwise severe crop injury could result.

**Additional Use Methods for Colorado and Texas High Plains:** PREMERGE 3.3 may be applied to preformed beds and incorporated to a

10/16

shallow depth (2" or less) prior to transplanting Onions.

**Additional Use Methods for Idaho, Oregon, and Washington:**

Apply 3.6 to 4.8 pints of PREMERGE 3.3 per acre for dodder control on medium and fine textured soils. The 3.6 to 4.8 pint rate for dodder control may not be applied through irrigation equipment.

Furrow areas of fields prepared in the fall for planting Dry Bulb Onion seed the following spring may be treated with PREMERGE 3.3 as a banded application at rates based on soil texture. Band application width should be approximately 1/2 the width of the space between rows. Keep PREMERGE 3.3 spray off areas where seed will be planted. Cut off with a harrow the tops of the seed beds prior to planting. Row areas may be later treated with a band application at the appropriate rate according to soil texture when Onions have reached flag leaf stage.

**Additional Use Methods for Michigan:**

Follow directions for use of PREMERGE 3.3 on muck soils when applying to soil having an organic matter content greater than 10%.

**USE RATES IN GARLIC, ONIONS, AND SHALLOTS (pints/acre)**

Soil Texture	PREMERGE 3.3
Coarse	1.2 to 1.8 pts.
Medium	1.8 to 2.4 pts.
Fine	1.8 to 3.6 pts.

**DO NOT** exceed 3.6 pints per acre except in Idaho, Oregon, and Washington.

**DIRECTIONS FOR USE ON ONIONS GROWN IN MUCK SOILS (except California)**

Sequential Preemergence and Postemergence broadcast spray applications of PREMERGE 3.3 may be made to Onions grown in Muck Soils.

**BROADCAST RATE FOR ONIONS GROWN IN MUCK SOILS**

Timing	Rate
Preemergence through loop leaf stage	2.4 to 4.8 pts.
Early Postemergence (2 to 6 leaf stage)	3.6 to 4.8 pts.
Late Postemergence (6 to 9 leaf stage)	3.6 to 4.8 pts.

**DO NOT** apply more than 14.4 pints of PREMERGE 3.3 per growing season on muck soils.

For maximum crop safety ensure good soil coverage during planting or transplanting. If possible, delay Preemergence applications and apply instead Postemergence after the loop stage.

**DO NOT** treat Onions before the loop stage if heavy rains or severe weather is expected otherwise severe crop injury could result. If irrigating immediately after a PREMERGE 3.3 application, limit irrigation to 1/2 inch of water.

If muck soil treated with more than 3.6 pints of PREMERGE 3.3, **DO NOT** plant sugar beets, red beets, spinach, winter wheat, or winter barley for at least 12 months from the time of the LAST application.

If crop planting is lost due to weather conditions in muck soil treated with PREMERGE 3.3, **DO NOT** replant that same year with any other crop but Onions. **DO NOT** rework the soil deeper than 2 inches.

**DO NOT** use on muck soils in California.

**GRAIN SORGHUM**

PREMERGE 3.3 or PREMERGE 3.3 tank mixed with atrazine may be applied as a Postemergence Incorporated treatment to Grain Sorghum in all states.

PREMERGE 3.3 tank mixed with atrazine may also be applied as an Early Postemergence treatment to Grain Sorghum grown in states east of the Mississippi River, Arkansas, the Missouri bootheel, Louisiana, and east Texas.

**GENERAL INFORMATION**

PREMERGE 3.3 or PREMERGE 3.3 tank mixed with atrazine applied to Grain Sorghum as a Postemergence Incorporated treatment will control most late season annual grasses and certain broadleaf weeds found in Grain Sorghum.

PREMERGE 3.3 treatments will not control established weeds. Weeds should be removed via cultivation prior to PREMERGE 3.3 application.

**DO NOT** apply PREMERGE 3.3 as a Preplant Incorporated or Preemergence treatment as serious crop injury will result.

**DO NOT** use PREMERGE 3.3 planted in double row beds. Double row bed plantings do not allow room for proper cultivation and coverage of Grain Sorghum plant base with soil.

For Early Postemergence and Postemergence Incorporated treatment with PREMERGE 3.3 or PREMERGE 3.3 tank mixed with atrazine, the Grain Sorghum seed beds should be properly prepared to insure that beds are firm, smooth and free of clods and trash. Adequate tillage should be practiced to provide good soil coverage of the Grain Sorghum seed. **GRAIN SORGHUM SEED MUST BE PLANTED AT LEAST 1 1/2 INCHES DEEP AND COMPLETELY COVERED WITH SOIL** to avoid PREMERGE 3.3 contact with Grain Sorghum seed and crop damage.

Best results in controlling weeds are achieved when Early Postemergence and Postemergence Incorporated treatment of PREMERGE 3.3 or PREMERGE 3.3 tank mixed with atrazine receive adequate rainfall or overhead irrigation within 7 days after application. Soil crusting, soil compaction or weed germination before rain or irrigation may require cultivation, if so, use shallow tillage (such as rotary hoe), and make certain Grain Sorghum seeds are below the tilled area.

**TIMING (PREMERGE 3.3 alone)**

**Postemergence Incorporated-** Apply PREMERGE 3.3 alone when Grain Sorghum is at least 4 inches tall until layby (last cultivation). Apply PREMERGE 3.3 plus atrazine when Grain Sorghum is at least 4 inches tall and before 12 inches tall. Remove emerged weeds by cultivation prior to treatment with PREMERGE 3.3. Use a sweep type or rolling cultivator in a manner that will cover the bases of Grain Sorghum plants with at least 1 inch of soil to prevent contact of Grain Sorghum root brace with PREMERGE 3.3 spray. Incorporate treatment uniformly into soil via a sweep type or rolling cultivator or via irrigation or rainfall as soon as possible following application (before 7 days). Mechanical cultivation will provide best results during periods of low rainfall or soil moisture. See PREMERGE 3.3 Postemergence Incorporated use rates in table below.

**USE RATES OF PREMERGE 3.3 IN GRAIN SORGHUM (pints/acre)**

Soil Texture	Northern States	Southern States
Coarse	1.8 to 2.4 pts.	1.2 to 1.8 pts.
Medium	2.4 to 3.6 pts.	1.8 to 2.4 pts.
Fine	2.4 to 3.6 pts.	1.8 to 3.6 pts.

### **TIMING (PREMERGE 3.3 Tank Mixed with atrazine)**

#### **Early Postemergence**

Grain Sorghum grown in states east of the Mississippi River, Arkansas, Missouri, bootheel, Louisiana, and east Texas may be treated with PREMERGE 3.3 tank mixed with atrazine applied Early Postemergence.

After Grain Sorghum has reached the 2 leaf stage yet weeds are no more than 1 inch tall, PREMERGE 3.3 tank mixed with atrazine may be applied using ground or aerial equipment.

#### **EARLY POSTEMERGENCE RATES OF PREMERGE 3.3 PLUS ATRAZINE IN GRAIN SORGHUM (pints/acre)**

Soil Texture	PREMERGE 3.3 + atrazine
Coarse	DO NOT Use
Medium	1.8 to 2.4 pts. + 1.0 to 1.2 lbs. ai
Fine	1.8 to 2.4 pts. + 1.0 to 1.2 lbs. ai

#### **Postemergence Incorporated**

Tank mix the rate of PREMERGE 3.3 recommended for the field's soil texture with 1 lb. ai/acre of atrazine. **DO NOT** use this tankmix on coarse soils.

Apply the PREMERGE 3.3 tankmix when Grain Sorghum is at least 4 inches tall but before reaching 12 inches in height.

- **DO NOT** feed treated forage or graze fields treated with atrazine in tankmix for 21 days following treatment.

### **NONBEARING FRUIT AND NUT CROPS AND VINEYARDS**

PREMERGE 3.3 applied to the following Nonbearing Almond, Apple, Apricot, Cherry, Citrus, Nectarine, Peach, Pear, Pistachio, Plum, Prune, and English Walnut orchards and Grape vineyards will provide Preemergence control of most late season annual grasses and certain broadleaf weeds.

#### **GENERAL INFORMATION**

PREMERGE 3.3 treatments are most effective if rainfall or irrigation is received within 21 days after application.

Using ground equipment, spray PREMERGE 3.3 onto the ground beneath the orchard. Avoid contact of spray with orchard foliage. Contact of spray with leaves, shoots, or buds may cause malformed plant tissues.

**DO NOT** apply to orchards of newly planted trees or grapevines until soil has settled without cracks.

Newly transplanted or grapevines less than 1 year old should only be treated when grapevines are dormant. Treating when buds have started to swell may cause malformed leaves.

#### **TIMING**

Premerger: Apply rate of PREMERGE 3.3 necessary for desired control in 20 gallons of water.

#### **BROADCAST USE RATE (qts./acre)**

Short Term Control (4 months)	2.4 quarts
Long Term Control (6 to 8 months)	4.8 quarts

### **TANK MIX APPLICATIONS**

PREMERGE 3.3 may be tank mixed for application to Nonbearing Fruit and Nut Crops and Vineyards with other herbicides also registered for use in Nonbearing Fruit and Nut Crops and Vineyards.

### **PEANUTS**

#### **GENERAL INFORMATION**

Peanuts may be treated with PREMERGE 3.3 Preplant Incorporated.

**DO NOT** use PREMERGE 3.3 on Peanuts grown in California.

If Peanut crop is lost due to weather conditions in fields treated only with PREMERGE 3.3, Peanuts or any other crop found on the PREMERGE 3.3 label allowing Preplant Incorporated use, can be replanted the same year without adverse effects. **DO NOT** rework the soil deeper than the original treatment zone.

#### **TIMING**

Preplant Incorporated: PREMERGE 3.3 may be applied up to 60 days before planting. Treatment must be incorporated within 7 days of application.

#### **RECOMMENDED USE RATES IN PEANUTS (pints/acre)**

Region	Rates
Texas, Oklahoma, and New Mexico	1.2 to 2.4 pts.
Other Peanut Growing States	1.8 to 2.4 pts.

For heavy weed infestations, especially Texas panicum, up to 3.6 pints of PREMERGE 3.3 can be applied in Georgia, Alabama, or Florida.

#### **TANK MIXES**

PREMERGE 3.3 may be applied to Peanuts in combination with the following herbicides for added control:

Herbicide	Recommended Rates
metolachlor (i.e. Dual)	1.25 to 2.0 lbs ai/A (1.25 to 2.0 pts/A)
Pursuit*	4 oz/A

Observe all directions, precautions, and restrictions found on labeling of the products used in the tank mix. Follow most restrictive.

- Tank mixes containing metolachlor may be applied 14 days before planting with incorporation within 7 days of application.
- **DO NOT** apply tank mixes containing Pursuit to Peanuts in Arizona, New Mexico, and West Texas.
- Tank mixes containing Pursuit may be applied 45 days before planting with incorporation within 7 days of application. If Peanuts will be planted in beds, apply and incorporate after beds are formed.

### **POTATOES**

#### **GENERAL INFORMATION**

Potatoes may be treated with PREMERGE 3.3 Preemergence, Preemergence Incorporated, or Early Postemergence.

Potato seed bed should be properly prepared to insure that it is firm, smooth and free of clods and trash.

Best results in controlling weeds are achieved when PREMERGE 3.3

12/16

treatments receive adequate rainfall or overhead irrigation within 7 days after application.

If Potato crop is lost due to weather conditions in fields treated only with PREMERGE 3.3, Potatoes or any other crop found on the PREMERGE 3.3 label allowing Preplant Incorporated use, can be replanted the same year without adverse effects. **DO NOT** rework the soil deeper than the original treatment zone.

**DO NOT** use PREMERGE 3.3 on sweet potatoes or yams.

**DO NOT** use PREMERGE 3.3 in Potatoes grown on peat or muck soils.

#### **TIMING**

**Preemergence:** Apply PREMERGE 3.3 to Potatoes after planting but before Potatoes and weeds emerge or after drag-off, where drag-off is practiced.

**Preemergence Incorporated:** After planting, apply PREMERGE 3.3 and incorporate before Potatoes and weeds emerge. Where drag-off is practiced, treat with PREMERGE 3.3 and incorporate before, during or after drag-off, but always before Potatoes and weeds emerge. PREMERGE 3.3 should be incorporated within 7 days of application.

Best results are obtained if PREMERGE 3.3 is thoroughly and uniformly incorporated into the top 1 to 2 inches of soil. Care should be taken not to damage Potato seed pieces or sprouts with mechanical incorporation.

Mechanical incorporation may not be required if field receives enough rainfall or irrigation to incorporate into the soil within 7 days of application.

**Early Postemergence:** PREMERGE 3.3 may be applied from Potato emergence to the 6 inch stage of growth. PREMERGE 3.3 treatments will not control established weeds. Established weeds should be removed via cultivation prior to PREMERGE 3.3 treatment.

**DO NOT** apply PREMERGE 3.3 Early Postemergence to Potatoes under stress due to cold/wet or hot/dry conditions as crop injury may occur.

**Preemergence or Early Postemergence applied via Sprinkler Irrigation Systems:** PREMERGE 3.3 may be applied via Sprinkler Irrigation System to Potatoes after planting but before Potatoes and weeds emerge or after drag-off, where drag-off is practiced.

#### **RECOMMENDED USE RATES IN POTATOES (pints/acre)**

Soil Texture	< 3% Organic Matter	> 3% Organic Matter
Coarse	1.2 to 1.8 pts.	1.2 to 2.4 pts.
Medium	1.8 to 2.4 pts.	2.4 to 3.6 pts.
Fine	2.4 to 3.6 pts.	3.6 pts.

For heavy weed infestations or when PREMERGE 3.3 is applied alone, use the higher rate.

#### **TANK MIXES**

PREMERGE 3.3 may be applied to Potatoes in combination with one or more of the following herbicides for added control:

Herbicide	Recommended Rates
EPTC 7# EC (i.e. Eptam)	3.0 to 3.5 pts./A
linuron (i.e. Lorox <sup>®</sup> )	1.5 to 4.0 lbs ai/A
metribuzin (i.e. Sencor <sup>®</sup> )	0.25 to 0.5 lbs ai/A
Matrix <sup>®</sup>	1.0 to 1.5 oz/A

Observe all directions, precautions, and restrictions found on labeling of the products used in the tank mix. Follow most restrictive.

#### **Additional Tank Mix Information**

- PREMERGE 3.3 plus EPTC may be applied Preemergence Incorporated or Early Postemergence through Sprinkler Irrigation Equipment.
- The Superior variety of Potato is sensitive to EPTC. Early season stunting may occur if crop under any stress.
- For nutsedge control apply 4 to 7 pints of EPTC 7E per acre.
- Tank mixes of PREMERGE 3.3 plus linuron may only be used East of the Rocky Mountains.
- Tank mixes of PREMERGE 3.3 plus metribuzin may be applied Preemergence or Early Postemergence. Early Postemergence treatments of PREMERGE 3.3 plus metribuzin may also be applied through Spinkler Irrigation Equipment.
- **DO NOT** apply tank mixes of PREMERGE 3.3 plus metribuzin during or within 3 days of cool, wet, or cloudy weather, otherwise crop injury could result.
- **DO NOT** apply tank mixes of PREMERGE 3.3 plus metribuzin to early maturing or smooth skin Potato varieties, otherwise crop injury could result.
- Tank mixes of PREMERGE 3.3 plus Matrix may be applied Preemergence or after drag-off.
- **DO NOT** apply tank mixes of PREMERGE 3.3 plus Matrix with aerial equipment.
- **DO NOT** apply tank mixes of PREMERGE 3.3 plus Matrix on Potatoes grown for seed.

#### **RICE**

PREMERGE 3.3 provides residual weed control from Early Postemergence tank mix applications with WHAM! EZ<sup>®</sup>, SuperWHAM<sup>®</sup>, Blue Drum<sup>®</sup> Propanil, RiceSolo<sup>™</sup> and Duet<sup>®</sup> in dry-seeded Rice.

PREMERGE 3.3 may also be applied as a delayed Preemergence treatment alone or in a tank mix with Facet, Bolero, or glyphosate in DRILLED, dry-seeded rice.

#### **GENERAL INFORMATION**

**DO NOT** use PREMERGE 3.3 in California.

**DO NOT** use PREMERGE 3.3 in water-seeded rice.

**DO NOT** use water from rice fields treated with PREMERGE 3.3 on crops not found on the PREMERGE 3.3 label.

**DO NOT** exceed maximum application rate per growing season.

**DO NOT** apply to rice fields used for fish or crayfish production.

**DO NOT** use rice straw from treated fields as feed or bedding.

If Rice crop is lost due to weather conditions or disease in fields treated with PREMERGE 3.3, only drilled, dry seeded rice may be immediately replanted. Replanting has significant potential for rice stand reduction and stunting as newly planted, germinating rice seed comes into contact with PREMERGE 3.3 treated soil. A 10% increase in seeding rate is recommended for replanting. Replant rice seed below the herbicide layer. Grower assumes all risks and consequences associated with replanting.

13/16

**DO NOT** use PREMERGE 3.3 on peat or muck soils.

### TIMING

**Late Preemergence:** PREMERGE 3.3 may be applied Late Preemergence to DRILLED, dry-seeded Rice using conventional, minimum till, or no-till cultivation practices.

Application should only be made to a seedbed that is smooth and free of clods and prepared to allow complete Rice seed coverage with soil at planting.

Treatment should be made when conditions favor vigorous rice and weed growth. If adequate field moisture is not present, or field has not received enough rainfall or irrigation to seal over seed, flush Rice field before application. Rice fields should be completely drained prior to application. Rice seed should have already germinated prior to application. **DO NOT** flush field immediately after application. Flushing field or receiving heavy rainfall after application can result in Rice injury.

Best residual activity is maintained by keeping fields moist after application.

Observe good water management practices for best weed control results and growth of Rice.

### RECOMMENDED USE RATES IN RICE (pints/acre)

Soil Texture	Rate
Sands, loamy sands	<b>DO NOT USE</b>
Sandy loams	1.8 pts
Loams, silt loams, silts, sandy clay loams	1.8 to 2.4 pts.
Silty clay loams, clay loams, sandy clay, silty clays, clays	1.8 to 2.4 pts.

If heavy weed infestations are expected, use the higher rate for the field's soil texture.

### TANK MIXES IN RICE

PREMERGE 3.3 plus SuperWHAM, WHAM! EZ, RiceSolo, Duet, or Blue Drum Propanil

Early Postemergence: Tank mixing PREMERGE 3.3 with one of the Propanil based products above provides unique broad spectrum control with BOTH residual and contact weed control. Duet contains both Propanil and bensulfuron methyl thus also giving increased sedge and broadleaf weed control.

Utilizing good field scouting and water management techniques, a recommended Rice weed control program would be to apply a Propanil based product, such as WHAM! EZ, to control the first infestation of rice weeds (Early Postemergence) followed by an application of PREMERGE 3.3 plus a Propanil based product, such as SuperWHAM, to control a second infestation (Pre Flood). This program would allow for early weed control while rice is very young followed by a treatment having both contact and residual weed control qualities, when rice nears the growth stage capable of sustaining a permanent flood. PREMERGE 3.3 applied in this manner allows for residual weed control until the permanent flood can be established.

Rice fields should be treated when a barnyardgrass or broadleaf signalgrass infestation reaches the 1-3 leaf stage or sprangletop has reached 1/2 inch. Consider using RiceSolo in a tank mix with PREMERGE 3.3 where sprangletop is a problem.

Rice fields should be completely drained before application to expose weed

foliage. Apply PREMERGE 3.3 plus Propanil spray solution uniformly across the field. Uniform and complete foliage cover provides best results. Use a minimum spray solution of 10 gallons per acre by air and 20-30 gallons by ground equipment.

**DO NOT** flush fields immediately after application of PREMERGE 3.3 as crop injury may result.

Best PREMERGE 3.3 residual activity is accomplished by keeping fields moist after application.

### RECOMMENDED TANK MIX USE RATES IN RICE (pints/acre)

Soil Texture	PREMERGE 3.3	SuperWHAM, WHAM! EZ, RiceSolo, Blue Drum Propanil, or Duet
Coarse	1.8 pts.	3 to 4 qts.
Medium	1.8 to 2.4 pts.	3 to 4 qts.
Fine	1.8 to 2.4 pts.	3 to 4 qts.

Check the Propanil product label for situations requiring use of higher rates and specific use restrictions.

### SOYBEANS

PREMERGE 3.3 may be applied for weed control in Soybeans as a surface spray Preplant Preemergence in soybeans grown with conventional, minimum, or no-till cultivation, Preemergence Incorporated, or surface applied Preemergence (Except to Soybeans grown North of Interstate 80).

### GENERAL INFORMATION

**DO NOT** use PREMERGE 3.3 in Soybeans grown in California.

**DO NOT** apply PREMERGE 3.3 Postemergence in Soybeans as crop injury can result.

**DO NOT** use PREMERGE 3.3 as a surface applied Preemergence to Soybeans grown North of Interstate 80.

Not recommended for use on peat or muck soils.

Livestock may be allowed to graze or fed forage from treated fields.

If Soybean crop is lost due to weather conditions in fields treated only with PREMERGE 3.3, Soybeans or any other crop found on the PREMERGE 3.3 label allowing Preplant Incorporated use, can be replanted the same year without adverse effects. **DO NOT** rework the soil deeper than the original treatment zone.

Best results in controlling weeds with surface applied Preplant and Preemergence treatments are achieved when PREMERGE 3.3 treatments receive adequate rainfall or overhead irrigation within 7 days after application. Should adequate moisture to move PREMERGE 3.3 into the weed seed germination zone not be received, a shallow cultivation should be made when Soybeans have emerged but while weeds are small enough to be removed by cultivation. Secondary weed control with a postemergence herbicide may be necessary.

### TIMING

**Preplant:** PREMERGE 3.3 may be applied up to 15 days before planting.

**Preplant Incorporated:** PREMERGE 3.3 may be applied up to 60 days before planting. Treatment must be incorporated within 7 days of application.

**Preemergence:** PREMERGE 3.3 may be applied up to 2 days after planting. Application should only be made to a seedbed that is smooth and

14/116

free of clods.

**DO NOT** apply PREMERGE 3.3 Postemergence in Soybeans as crop injury can result.

**RECOMMENDED PREPLANT (surface applied or incorporated) USE RATES IN SOYBEANS (pints/acre)**

Soil Texture		<3% Organic Matter	>3% Organic Matter
Coarse		1.2 to 1.8 pts.	2.4 pts.
Medium	Northern States	1.8 to 3.0 pts.	2.4 to 3.6 pts.
	Southern States	1.8 to 2.4 pts.	
Fine		2.4 to 3.6 pts.	3.6 pts.
Heavy Clay		3.6 pts.	3.6 pts.

Pursuit	Preplant Preplant Incorporated Preemergence	4 ozs./A
Scepter*	Preplant Preplant Incorporated Preemergence	0.67 pts./A
Sencor F	Preplant Preplant Incorporated Preemergence	0.5 to 1.0 pts./A

Observe all directions, precautions, and restrictions found on labeling of the products used in the tank mix. Follow most restrictive.

**Additional Tank Mix Information**

PREMERGE 3.3 may be tank mixed with Butoxone 200, Gramoxone\* Extra, glyphosate (i.e. Touchdown\*, Roundup\*), 2,4-D to kill existing vegetation prior to planting.

**RECOMMENDED PREEMERGENCE USE RATES IN SOYBEANS (pints/acre)**

Soil Texture	<3% Organic Matter	>3% Organic Matter
Coarse	1.2 to 1.8 pts.	1.8 pts.
Medium	1.8 to 2.4 pts.	1.8 to 2.4 pts.
Fine	1.8 to 2.4 pts.	2.4 to 3.0 pts.

For heavy weed infestations, fields containing high amounts of crop residue before seed bed preparation, no-till Soybeans or when PREMERGE 3.3 is applied alone, use the higher rate.

**TANK MIXES**

PREMERGE 3.3 may be applied to Soybeans in combination with, but not limited to, one or more of the following herbicides for added weed control:

Herbicide	Timing	Recommended Rates
Butoxone* 200	Preplant	0.7 to 0.9 pts./A
alachlor (i.e. Lasso)	Preplant Preplant Incorporated Preemergence	2.5 to 4.0 lbs. a.i./A
Dual	Preplant Preplant Incorporated Preemergence	1.5 to 3.0 pts./A
Canopy*	Preplant Preplant Incorporated Preemergence	6 to 12 ozs./A
Command* 4EC	Preplant Incorporated	0.75 to 1.5 pts./A
linuron (i.e. Lorox)	Preplant Preplant Incorporated Preemergence	1.0 to 2.5 lbs. a.i./A
Lorox plus	Preplant Preplant Incorporated Preemergence	12 to 18 ozs./A

**SUNFLOWERS**

PREMERGE 3.3 may be applied for weed control in Sunflowers as a Preplant Incorporated treatment in the spring. A fall Preplant Incorporated treatment is allowed in North Dakota, South Dakota, and Minnesota for fields to be planted with Sunflowers the following spring. No-till Sunflower fields may also be treated by applying PREMERGE 3.3 to the soil surface before planting (Preplant) or before Sunflower emergence (Preemergence) in Colorado, Kansas, Minnesota, Nebraska, North Dakota, and South Dakota.

**GENERAL INFORMATION**

If Sunflower crop is lost due to weather conditions in fields treated only with PREMERGE 3.3, Sunflower or any other crop found on the PREMERGE 3.3 label allowing Preplant Incorporated use, can be replanted the same year without adverse effects. **DO NOT** rework the soil deeper than the original treatment zone.

**DO NOT** feed livestock treated forage or graze livestock in treated fields.

**DO NOT** treat Sunflowers grown on peat or muck soils with PREMERGE 3.3.

**TIMING**

**Preplant Incorporation:** PREMERGE 3.3 may be applied up to 60 days before planting. Treatment should be incorporated within 7 days of application.

Fall treatments should be applied in the late fall when the soil temperature has dropped below 45°F but before the ground freezes. **DO NOT APPLY** when air temperatures are below 45°F. Prior to planting Sunflowers in the spring, the treated field should be shallowly cultivated.

**Preplant:** Apply PREMERGE 3.3 to the soil surface of No-till Sunflower fields up to 30 days before planting. Best results are achieved when treated fields receive enough rainfall or irrigation to place Premerge 3.3 into contact with germinating weed seeds. Unless the field receives adequate rainfall or irrigation within 7 days of application, additional treatment with a postemergence herbicide registered for use on Sunflowers may be required to achieve desired weed control. Preplant use in No-till Sunflower fields is restricted to Colorado, Kansas, Minnesota, Nebraska, North Dakota, and South Dakota.

**Preemergence:** Apply PREMERGE 3.3 to the soil surface of No-till Sunflower fields at planting or immediately after planting. Best results are achieved when treated fields receive enough rainfall or irrigation to place Premerge 3.3 into contact with germinating weed seeds. Unless the field

receives adequate rainfall or irrigation within 7 days of application, additional treatment with a postemergence herbicide registered for use on Sunflowers may be required to achieve desired weed control. Preemergence use in No-till Sunflower fields is restricted to Colorado, Kansas, Minnesota, Nebraska, North Dakota, and South Dakota.

PREMERGE 3.3 plus EPTC tank mix is to be used only in the fall preceding spring Sunflower planting.

#### RECOMMENDED PREPLANT INCORPORATED USE RATES IN SUNFLOWERS - Spring Application (pints/acre)

Soil Texture	Southern States	Northern States	
		<3% Organic Matter	>3% Organic Matter
Coarse	1.2 to 1.8 pts.	1.2 to 2.4 pts.	2.4 pts.
Medium	1.8 to 2.4 pts.	1.8 to 3.0 pts.	3.0 to 3.6 pts.
Fine	1.8 to 2.4 pts.	2.4 to 3.6 pts.	3.6 pts.

If heavy weed infestations are expected, use the higher rate.

#### RECOMMENDED PREPLANT INCORPORATED USE RATES IN SUNFLOWERS - Fall Application (pints/acre)

Soil Texture	<3% Organic Matter	>3% Organic Matter
Coarse	1.8 to 3.0 pts.	3.0 pts.
Medium	2.4 to 3.6 pts.	3.6 to 4.2 pts.
Fine	3.0 to 4.2 pts.	4.2 pts.

If heavy weed infestations are expected, use the higher rate.

#### RECOMMENDED PREEMERGENCE USE RATES IN SUNFLOWERS - No-Till Cultivation (pints/acre)

Soil Texture	<3% Organic Matter	>3% Organic Matter
Coarse	3.0 to 3.6 pts.	3.6 pts.
Medium	3.6 pts.	3.6 pts.
Fine	3.6 pts.	DO NOT USE

If heavy weed infestations are expected, use the higher rate.

#### TANK MIXES

PREMERGE 3.3 may be applied to Sunflowers in combination with the following herbicides for added control:

#### RECOMMENDED TANK MIX USE RATES IN SUNFLOWERS (pints/acre)

Soil Texture	<3% Organic Matter		>3% Organic Matter	
	PREMERGE 3.3	EPTC 7EC	PREMERGE 3.3	EPTC 7EC
Coarse	1.2 to 2.4 pts.	2.25 pts.	2.4 pts.	2.25 pts.
Medium	2.8 to 3.0 pts.	2.25 pts.	3.0 to 3.6 pts.	2.25 pts.
Fine	2.4 to 3.6 pts.	2.25 pts.	3.6 pts.	2.25 pts.

#### Additional Tank Mix Information

#### TOBACCO

PREMERGE 3.3 may be applied for weed control in transplanted Tobacco as a Preplant Incorporated or a "Layby" treatment.

#### GENERAL INFORMATION

If Tobacco crop is lost due to weather conditions in fields treated only with PREMERGE 3.3, Tobacco or any other crop found on the PREMERGE 3.3 label allowing Preplant Incorporated use, can be replanted the same year without adverse effects. **DO NOT** rework the soil deeper than the original treatment zone.

**DO NOT** apply PREMERGE 3.3 as a broadcast spray over Tobacco as crop injury will result.

**DO NOT** feed livestock treated forage or graze livestock in treated fields.

**DO NOT** treat Tobacco grown on peat or muck soils with PREMERGE 3.3.

#### TIMING

**Preplant Incorporated:** PREMERGE 3.3 may be applied up to 60 days before transplanting. Treatment should be incorporated within 7 days of application.

Under adverse growing conditions, transplanted Tobacco may suffer some temporary stunting or retardation of Tobacco development.

**Layby:** Following the final cultivation, PREMERGE 3.3 may be applied to Tobacco as a Layby treatment. The final Tobacco cultivation is usually 4 to 6 weeks after transplanting.

Proper treatment is achieved by spraying a band, 16 to 24 inches wide, centered in between the Tobacco rows. **DO NOT** exceed the maximum recommended per acre rate in the treated band. For example: 2 pints in 10 gallons of water applied as a broadcast spray would treat 1 acre. Whereas, 2 pints in 10 gallons of water applied as a Layby application spraying a 24 inch band in Tobacco grown in 48 inch rows would treat 2 acres.

Exercise caution in application to avoid contact of application spray with Tobacco plants.

#### RECOMMENDED PREPLANT INCORPORATED USE RATES IN TOBACCO - (pints/acre)

STATES	SOIL TEXTURE	PREMERGE 3.3
Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia	Coarse	1.8 to 2.4 pts.
	Medium sandy clay loams, loams	1.8 to 2.4 pts.
	silt loams, silts	2.4 to 3.0 pts.
	Fine	2.4 to 3.0 pts.
Other Tobacco growing states	Coarse	1.8 to 2.4 pts.
	Medium	3.0 to 3.6 pts.
	Fine	3.0 to 3.6 pts.

16/16

**RECOMMENDED BROADCAST RATES FOR LAYBY\*  
TREATMENTS IN TOBACCO (pints/acre)**

Soil Texture	Premerge 3.3
Coarse	1.2 to 1.8 pts.
Medium	1.8 to 2.4 pts.
Fine	1.8 to 2.4 pts.

\*Acreage covered by band treatment to be calculated as a ratio of treated band width divided by Tobacco row width.

Use higher rate, as appropriate to soil texture, if no other herbicide treatment was made prior to PREMERGE 3.3 Layby treatment.

**CONDITIONS OF  
SALE AND WARRANTY**

**CEDAR AND SELLER OFFER THIS PRODUCT AND THE BUYER  
AND USER ACCEPTS THIS PRODUCT UNDER THE FOLLOWING  
AGREED CONDITIONS OF SALE AND WARRANTY.**

The directions for use of this product are believed to be reliable and should be followed carefully. However, it is impossible to take into account all variables and to eliminate all risks associated with its use. Injury or damage may result because of conditions which are beyond the control of Cedar or the Seller. Cedar warrants only that this product conforms to the chemical description on the label and is believed to be reasonably fit for the purposes referred to in the Directions for Use when used as directed under normal conditions. CEDAR MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. In no case shall Cedar or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. Any variation or exception from this warranty must be in writing and signed by an authorized Cedar representative.

**CEDAR CHEMICAL CORPORATION  
5100 POPLAR AVENUE  
24TH FLOOR  
MEMPHIS, TENNESSEE 38137, USA**

Butoxone is a trademark of Cedar Chemical Corp.  
Accent, Bladex, Extrazine II, Karmex, Lorox, Matrix, and Canopy are trademarks of E.I. duPont de Nemours and Co.  
Beacon, Bicep, Dual, Cotoran, and Caparol are trademarks of Ciba Corp.  
Banvel, Frontier, Guardsman, Marksman, and Zorial are trademarks of Sandoz Crop Protection Inc.  
Buctril is a trademark of Rhone-Poulenc Ag. Company  
Harness, Lariat, Bullet, Lasso, and Roundup are trademarks of Monsanto Agricultural Products Co.  
Flo-Met is a trademark of Micro Flo Co.  
Surpass, Eptam, Gramoxone, and Touchdown are trademarks of Zeneca Inc.  
Sencor is a trademark of Miles Inc.  
Command is a trademark of FMC Corp.  
Sonalan is a trademark of Dow AgroSciences  
Scepter and Pursuit are trademarks of American Cyanamid Co.  
WHAM! EZ, SuperWHAM, Blue Drum, RiceSolo, and Duet are trademarks of Riceco