

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

> OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Charlotte A. Sanson Product Registration Manager **BASF** Corporation **Agricultural Products** P.O. Box 13528 Research Triangle Park, NC 27709

MAR 3 0 2007

SUBJECT: Application for Pesticide Notification - Correction of Typos Poast Plus® Herbicide EPA Reg. No. 7969-88 Application Dated February 14, 2007

Dear Ms. Sanson:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the product above. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the actions requested fall within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions, please me directly at 703-305-6249 or Terri Stowe of my staff at 703-305-6117.

Sincerely,

Linda Arrington Notifications & Minor Formulations Team Leader **Registration Division (7505P)** Office of Pesticide Programs

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Agricultural Products Division d/45



February 14, 2007

NOTIFICATION

MAR 3 0 2007

Document Processing Desk (NOTIF) Office of Pesticide Programs (7504C) US Environmental Protection Agency Room 266A, Crystal Mall 2 1921 Jefferson Davis Highway Arlington, VA 22202

# Subject: Poast Plus® Herbicide, EPA Registration No. 7969-88 Notification of Error Correction

Dear Sir/Madam:

On July 27, 2005, EPA approved amended labeling for Poast Plus® Herbicide, EPA Registration No. 7969-88 (copy attached). The purpose of this notification is to correct the following errors:

- 1) In the Application Instructions section (page 4), the trade name **Poast** was corrected to Poast Plus.
- In the Spray Drift Management section, under Swath Adjustment (page 5), "downward" was corrected to "downwind" in the sentence "When applications are made with a crosswind, the swath will be displaced downwind."
- 3) In Table 5, Spot Treatment Dilution (page 10), the percent dilutions of Poast Plus in the subheader of columns two and three have been corrected from 1.5% to 1.0%, and from 2.25% to 1.5%. Poast was also corrected to Poast Plus in the subheader of the third column.
- 4) In Table 6, Spot Treatment Application Rates (page 10), the table references were corrected from "Tables 3-4" to "Tables 1, 2, and 3." The spot treatment dilutions of Poast Plus were also corrected to match the corrections described in #2 above, i.e. - 1.5% changed to 1.0%. and 2.5% changed to 1.5%.

Enclosed are one copy of amended labeling, reflecting the changes described above (highlighted on pages 4, 5, and 10), and a completed EPA 8570-1 Registration Application form.

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under section 12 and 14 of FIFRA.

**BASF Corporation** 26 Davis Drive Research Triangle Park, NC 27709 Tel: (800) 669-1770 www.basf.com/usa

Helping Make Products Better<sup>™</sup>



# The Chemical Company

Thank you for your attention to this matter. If you have any questions or need further information, please contact me directly at (919) 547-2983, or by e-mail at sansonc@basf.com.

Regards, BASF Corporation Agricultural Products Division

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Charlotte A. Sanson Product Registration Manager

enc.

cc: Vickie Walters (PM 25 team)

BASF Corporation 100 Campus Drive Florham Park N.J. 07932 Tel: (800) 526-1072 www.basf.com/usa

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. Typed Name Charlotte A. Sanson		5	. Date February 1	4, 2007				

EPA Form 8570-1 (Rev. 3-94) Previous editions are obsolete.



# NOTIFICATION MAR 3 0 2007

# Poast Plus<sup>®</sup> herbicide

Active Ingredient: sethoxydim: 2·[1-(ethoxyimino)butyi]·5-[2-(ethylthio)propyi] 3· hydroxy-2- cyclohexen-1-one* Inert Ingredients: Total: *Equivalent to 1.0 pounds of sethoxydim per gallon.	. 13.0% <u>87.0%</u> 100.0%
EPA Reg. No. 7969-88 EPA Est. No	
KEEP OUT OF REACH OF CHILDREN. CAUTION/PRECAUCIÓN	
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (Il you do not understand this label, find someone to explain it to you in detail.	
See inside booklet for complete First Aid, Precautionary Statements, Directions Fo and Conditions of Sale and Warranty.	or Use
Net Contents:	

BASF Corporation, Agricultural Products 26 Davis Drive, Research Triangle Park, NC 27709

	FIRST AID
If swallowed	<ul> <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> <li>DO NOT give anything by mouth to an unconscious person.</li> </ul>
If on skin or clothing	<ul> <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>
lf in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance ,then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
	HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact BASF Corporation for emergency medical treatment information: 1-800-832-HELP (4357).

# PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# CAUTION

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

# Personal Protective Equipment (PPE)

Some materials that are chemically resistant to this product are listed below. For more options, refer to **Category E** on an EPA chemical resistance category selection chart.

# Applicators and other handlers must wear:

- Long sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or viton ≥ 14 mils
- · 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.

# **Engineering Controls Statement**

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

# USER SAFETY RECOMMENDATIONS

#### Users should:

- Wash 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.

# **Environmental Hazards**

This product is toxic to aquatic organisms. For terrestrial uses, **DO NOT** apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwaters.

#### **Endangered Species Concerns**

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law. This pesticide is toxic to vascular plants and should be used strictly in accordance with drift precautions on this label in order to minimize off-site exposures.

# **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. Unless otherwise stated in supplemental labeling, all applicable directions, restrictions and precautions are to be followed. This labeling must be in the user's possession during application.

# 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, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or viton ≥ 14 mils
- · Shoes plus socks

# STORAGE AND DISPOSAL

**DO NOT** contaminate water, food, or feed by storage or disposal.

**Pesticide Storage: DO NOT** store below 32° F or above 100° F. Store in a dry place away from heat or open fiame. Avoid contamination of feed or foodstuffs.

**Pesticide Disposal:** Pesticide wastes are toxic. Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### CONTAINER DISPOSAL

Plastic Containers: 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.

# Bulk/Mini-bulk Containers:

Refillable/reusable containers should be returned to the point of purchase for cleaning and refilling.

# In Case of Emergency

In case of large-scale spillage regarding this product, call: CHEMTREC 1-800-424-9300 BASF Corporation 1-800-832-HELP (4357) In case of medical emergency regarding this product, call:

- Your local doctor for immediate treatment.
- Your local poison control center (hospital),
- BASF Corporation 1-800-832-HELP (4357),

# Steps to be taken in case material is released or spilled:

Wear the personal protective equipment specified on this label. Recover the material for reuse according to label whenever possible. Cover the liquid with an absorbent material (such as pet litter). Sweep up and place in an appropriate container for disposal. Remove and wash clothing and personal protective equipment prior to reuse. Keep the spill out of all sewers and open bodies of water.

# I. GENERAL INFORMATION

Poast Plus® herbicide is a selective, broad spectrum, postemergence herbicide for control of annual and perennial grass weeds. Poast Plus does not control sedges or broadleaf weeds. Essentially, all grass crops, such as sorghum, corn, small grains, and rice, as well as ornamental grasses, such as turf, are susceptible to Poast Plus.

### Mode of Action

**Poast Plus** rapidly enters the target weed through its foliage and translocates throughout the plant. The effects range from slowing or stopping growth (generally within 2 days), to foliage reddening and leaf tip burn. Subsequently, foliage burnback may occur. These symptoms will generally be observed within 3 weeks depending on environmental conditions.

#### **Crop Tolerance**

All labeled crops are tolerant to **Poast Plus** at all stages of growth.

# **Herbicide Resistance**

Repeated use of **Poast Plus** (or similar postemergence grass herbicides with the same mode of action) may lead to the selection of naturally occurring biotypes with resistance to these products. If poor performance cannot be attributed to adverse weather conditions or improper application methods, a resistant biotype may be present. Consult your local representative or agricultural advisor for assistance.

#### Irrigation

In irrigated areas, it may be necessary to irrigate before treatment to ensure active weed growth.

#### Cultivation

**DO NOT** cultivate within 5 days before or 7 days after applying **Poast Plus**. Cultivating 7 days or later after treatment may help provide season-long control.

# **Cleaning Spray Equipment**

Clean soray equipment thoroughly using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions before and after applying this product.

# **II. APPLICATION INSTRUCTIONS**

Applications can be made to actively growing weeds as aerial, broadcast, band, or spot spray applications at the rates and growth stages listed in **Tables 1**, **2** and **3**, unless instructed differently in section **VI. Crop-Specific Information**. The most effective control will result from making postemergence applications of **Poast Plus**<sup>®</sup> **herbicide** early, when weeds are small. Delaying application permits weeds to exceed the maximum size stated and may prevent adequate control.

Apply **Poast Plus** to the foliage of grasses uniformly and completely because large leaf canopies shelter smaller weeds and can prevent adequate spray coverage. **DO NOT** spray to the point of runoff.

# Spray Drift Management

# General Information Pertaining to Aerial and Ground Applications

Make aerial or ground application when the wind velocity favors on-target product deposition. Apply only when the wind speed is less than or equal to 10 mph. For all nonaerial applications, wind speed must be measured to the application site on the upwind side, immediately prior to application. **DO NOT** make aerial or ground applications into areas of temperature inversions. Inversions are characterized by stable air and increasing distance above the ground. Mst or fog may indicate the presence of an inversion in humid areas. When permissible by local regulations, the applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.

# Aerial Application Methods and Equipment

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipmentand weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

**DO NOT** apply under circumstances where possible drift to unprotected persons, to food, forage, or other plantings that might be damaged, or crops thereof rendered unfit for sale, use or consumption can occur.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- The distance of the outer most nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the <u>Aerial Drift</u> <u>Reduction Advisory Information</u>.

### Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. Use the largest droplet size consistent with acceptable efficacy. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see **Wind**, **Temperature and Humidity**, and **Temperature Inversions**).

Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure. For ground boom and aerial applications, use medium or coarser spray nozzles according to ASAE 572 definition for standard nozzles or a volume mean diameter (VMD) of 300 microns or greater for spinning atomizer nozzles.

### **Controlling Droplet Size**

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets. Use a minimum of 5 gallons of water per acre. Increase water volume to a least 10 gallons of water per acre if grass foliage or crop canopy is dense.
- Pressure DO NOT exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of Nozzles Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid-stream nozzles oriented straight back produce the largest droplets and the lowest drift.

# **Boom Length**

For some use patterns, reducing the effective boom length to less than % of the wingspan or rotor length may further reduce drift without reducing swath width.

#### **Application Height**

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

### Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller droplets, etc.).

# Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

### **Temperature and Humidity**

Low humidity and high temperatures increase the evaporation of spray droplets and therefore the likelihood of increased spray drift. Avoid spraying during conditions of low humidity and/or high temperatures. When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

#### **Temperature Inversions**

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

# Sensitive Areas

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (eg residential areas, bodies or water, known habitat for threatened or endangered species, or nontarget crops) is minimal (eg when wind is blowing away from the sensitive areas).

# Ground Application Methods and Equipment (Broadcast)

For ground boom applications, apply with nozzle height no more than 4 feet above ground or crop canopy.

**DO NOT** apply when conditions favor drift from target area or when windspeed is greater than 10 mph.

Water Volume: Use 5-20 gallons of spray solution. In the West and in the High and Rolling Plains Region, (see regional descriptions in **Table 1**), **DO NOT** use less than 10 gallons of spray solution per acre.

**Spray Pressure:** Use 40-60 psi (measured at the boom, not at the pump or in the line). When crop and weed foliage are dense, use a maximum of 20 gallons of water and 60 psi.

Application Equipment: Use standard high-pressure pesticide flat fan or hollow cone nozzles spaced up to 20 inches apart. **DO NOT** use flood, whirl chamber, or controlled droplet applicator (CDA) nozzles as erratic coverage can cause inconsistent weed control. When tall weeds such as volunteer corn are to be controlled, the boom should be high enough to cover the entire plant. Refer to the nozzle manufacturer's directions for recommended height. When a crop such as cotton is 24 inches or taller and the grasses are below the crop canopy, use drop nozzles to ensure good coverage of the grass species.

**DO NOT** use selective application equipment such as recirculating sprayers or wiper applicators.

# **Ground Application (Banding)**

**Poast Plus** may be applied by banding to control annual grasses. Banding is not recommended for perennial grasses.

Follow **Ground Application (Broadcast)** instructions for band applications. When applying **Poast Plus® herbicide** by banding, determine the amount of herbicide and water volume needed using the following formula:

<u>Bandwidth in inches</u> Row width in inches	x	Broadcast rate per acre =	B	anding herbicide rate per acre
Bandwidth in inches Row width in inches	x	Broadcast volume per acre	=	Banding water volume per acre

# Spot or Small Area Application.

**DO NOT** make spot treatments in addition to broadcast or band treatments. When using knapsack sprayers or high-volume spray equipment with hand guns or other suitable nozzle arrangements, prepare a 1-1.5% solution of **Poast Plus** in water unless otherwise specified under specific crops. Use a concentration of 0.5% for **Dash<sup>®</sup> HC** and **Sundance<sup>®</sup> HC** spray adjuvants, or 1% for oil concentrate. Prepare the desired volume of spray solution by mixing the amount of **Poast Plus<sup>®</sup> herbicide** and the amount of **Dash HC**, **Sundance HC** or oil concentrate in water according to **Tables 5** and **6**.

# Rescue Treatment for Controlling Selected Annual Grasses

If **Poast Plus** cannot be applied at the recommended time, larger annual grasses may be controlled with a later application by increasing the rate of **Poast Plus** (see **Table 3**). **DO NOT** exceed the maximum rate per acre, per season, for specific crops (see **Table 7**).

# **III. ADDITIVES**

To achieve consistent weed control, always use one of the following additives: **Dash HC**, **Sundance HC**, methylated/modified seed oil, or crop oil concentrate. In addition, urea ammonium nitrate or ammonium sulfate is recommended for use on alfalfa, beans, cotton, flax, peanuts, peas, pctatoes, soybeans, **Poast Protected™ field com**, **Poast Protected sweet corn**, sugarbeets, and sunflowers to enhance activity on certain grass species. See **Table 4. Additive Rates Per Acre** for more information. However, when used in many vegetable crops under the following conditions, **Poast Plus** plus adjuvants should be used with caution due to potential crop leaf injury: when the temperature exceeds 90° F and the relative humidity is 60% or greater, or anytime the temperature exceeds 100° F, regardless of the humidity.

Because most nitrogen solutions are mildly corrosive to galvanized, mild steel, and brass spray equipment, rinse the entire spray system with water soon after use. UAN and AMS are not registered in California.

Consult a BASF representative or local agricultural authority for more information on the use of additives.

### Dash HC, Sundance HC, Crop Oil Concentrate, or Methylated Seed Oils

A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all of the following criteria:

- be non-phytotoxic,
- · contain only EPA-exempt ingredients,
- · provide good mixing quality in the jar test, and
- · be successful in local experience.

The exact composition of suitable products will vary; however, vegetable and petroleum oil concentrates should contain emulsifiers to provide good mixing quality.

Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. For more information, see **Compatibility Test for Mix Components**. For most crops, **Dash HC** or **Sundance HC** may be substituted for crop oil concentrate or methylated seed oil; however, for some crops and tank mixes, **Dash HC**, **Sundance HC** and MSO are not recommended. (See section **VI. Crop-Specific Information** for more information.)

#### Nitrogen Source

- Urea Ammonium Nitrate (UAN): Commonly referred to as 28%, 30%, or 32% nitrogen solution), UAN may be used in addition to Dash HC, Sundance HC, or crop oil concentrate to improve weed control. DO NOT use brass or aluminum nozzles when spraying UAN.
- Ammonium Sulfate (AMS): AMS per acre may be substituted for UAN. When liquid AMS is used, 3.0 quarts of 8-8-0 analysis may be substituted for 2.5 pounds of dry AMS. Use high-quality AMS (spray grade) to avoid plugging of nozzles. Other sources of nitrogen are not as effective as those mentioned. If the AMS is added directly to the spray tank, add slowly while agitating. Adding the mix too quickly may clog outlet lines. Be sure the AMS is completely dissolved before adding any other products. BASF does not recommend applying AMS if applied in less than 10 gallons per acre because of potential problems with precipitation in reduced volumes.

# IV. GENERAL TANK MIXING INFORMATION

#### **Tank Mix Partners/Components**

The following products, listed with its common name, may be tank mixed with **Poast Plus** according to the specific tank mixing instructions in this label and respective product labels.

- Atrazine
- Basagran<sup>e</sup>/bentazon
- Betamix<sup>e</sup>/desmedipham + phenmedipham
- Betanex\*/desmedipham
- Biazer®/acifluorfen
- Bronate®/bromoxynil + MCPA
- Buctril\*/bromoxynil
- Clarity\*/dicamba
- Classic<sup>®</sup>/chlorimuron
- Classic-/chioninuron
   Cobra\*/lactofen
- Coora-7lactoren
- Dual\*/metolachior
- Duai II<sup>®</sup>/metolachlor
   FirstRate<sup>®</sup>/cloransulam-
- methyl
- Flexstar\*/fomesafen
- Frontier\*/dimethenamid
- Galaxy\*/bentazon +
- acifluorfen
   Guardsman<sup>e</sup>/atrazine + dimethenamid
- Harness<sup>®</sup>/acetochlor
- Laddok\* S-12/bentazon + atrazine
- Lexone<sup>®</sup> DF/metribuzin
- Liberty<sup>®</sup>/glufosinate
- Marksman<sup>•</sup>/atrazine + dicamba
- MCPA
- Outlook\*/dimethenamid-P
- Pursuit\*/imazethapyr
- Pursuit<sup>®</sup> DG/imazethapyr
- Pursuit<sup>®</sup> W/imazethapyr

Reflex\*/formesafen
 Reliance\*\*STS/chlorimuron

Pursuit\* W DG/imazethaovr

+ thifensulfuron

Raptor\*/imazamox

- Resource\*/flumiciorac
- Roundup Ultra•/glyphosate
- Sencor<sup>®</sup> DF/metribuzin
- Staple\*/pyrithiobac
- Stellar<sup>e</sup>/flumiclorac + lactofen
- Stinger<sup>®</sup>/clopyralid
- Storm\*/bentazon +
   acifluorfen
- Surpass\*/acetochlor
- Synchrony<sup>®</sup> STS/chlorimuron + thifensulfuron
- Touchdown<sup>®</sup>/sulfosate
- UpBeet\*/triflusulfuron
- 2,4-D amine
- 2,4-DB
- 2,4-D (LVE)

See section VI. Crop-Specific Information for more details. Read and follow the applicable **Restrictions and Limitations** and **Directions For Use** on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

Separate applications should be made if all target weeds are not at the labeled growth stage for treatment at the same time.

Physical incompatibility, reduced weed control, or crop injury may result from mixing **Poast Plus® herbicide** with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers. BASF does not recommend using tank mixes other than those listed on BASF labeling. Local agricultural authorities may be a source of information when using other than BASF recommended tank mixes.

# **Compatibility Test for Mix Components**

Before mixing components, always perform a compatibility jar test.

For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Only use water from the intended source at the source temperature.

Add components in the sequence indicated in the **Mixing Order** using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended label rate per acre.

Always cap the jar and invert 10 cycles between component additions.

When the components have all been added to the jar, let the solution stand for 15 minutes. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, **DO NOT** mix the ingredients in the same tank.

### **Mixing Order**

- Water. Begin by agitating a thoroughly clean sprayer tank three-quarters full of clean water.
- Agitation. Maintain constant agitation throughout mixing and application.
- 3) Products in PVA bags. Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- 4) Water-dispersible products (such as dry flowables, wettable powders, suspension concentrates, or suspoemulsions). If an inductor is used, rinse it thoroughly after the component has been added.
- 5) Water-soluble products. If an inductor is used, rinse it thoroughly after the component has been added.
- 6) Emulsifiable concentrates (such as Poast Plus or oil

concentrate when applicable). If an inductor is used, rinse it thoroughly after the component has been added.

7) Water-soluble additives (such as AMS or UAN when applicable). If an inductor is used, rinse it thoroughly after the component has been added.

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# 8) Remaining quantity of water.

Maintain constant agitation during application.

# Table 1. Standard Application Rates and Timing - Annual Grasses

All application rate and timing recommendations are based on growing region. Therefore, refer to the maps below and descriptions below to ensure application accuracy. Follow the **Application Rate and Timing** tables for your region only. Refer to **Table 7** for the maximum allowable use rates for specific crop and use sites.

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	Midwest, So	outh, and Northeast	West & Hig	h and Rolling Plains
Annual Grass				
	Maximum Height	Rate Per Acre (pints)	Maximum Height	Rate Per Acre (pints)
Barnyardgrass Crabgrass, Large' , Smooth' Cupgrass, Southwestern , Woolly Fescue, Tall (seedling) Foxtall, Giant , Green , Yellow Goosegrass Itchgrass Johnsongrass (seedling) Junglerice Lovegrass Millet, Wild Proso Oats, Tame , Wild' Orchardgrass (seedling) Panicum, Browntop , Fall , Texas Red Rice' Ryegrass, Annual Sandbur, Field Shattercane/Wildcane' Signaigrass, Broadleaf Sprangletop, Red <sup>3</sup> Stinkgrass Volunteer <sup>2-</sup> Barley' Corn' Oats' Rye' Wheat'	8 6 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	$\begin{array}{c} 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\$	8" 4" 4" 8" 4" 8" 8" 8" 8" 8" 8" 8" 8" 8" 8	$\begin{array}{c} 2.25\\ 3.0\\ 3.0\\ 3.0\\ 3.0\\ 3.0\\ 2.25\end{array}$

Add nitrogen to the crop oil concentrate to improve grass control on indicated species.

2 Apply Poast Plus® herbicide before tillering.

Poast Plus is not recommended for use on red sprangletop in California, Arizona, or western New Mexico.

<sup>4</sup> In the West Region, volunteer cereals that emerge from late spring through early summer (May through July) may be partially or incompletely controlled because of unfavorable conditions at application time.

#### Regional Descriptions

West & High and Rolling Plains: An area of the Western United States, including Western Texas, Oklahoma and Kansas; west of a line running north from Del Rio to Gainesville, Texas, and extending along Interstate 35 to the Oklahoma-Kansas border, then west along border to Highway 83 and then north to the Kansas-Nebraska border, west to Colorado, all of Colorado to the Continental Divide, then West of the Continental Divide North to the U.S.-Canada border.

Midwest, South, and Northeast: all other regions not listed above.

descriptions in **Table 1** to ensure application accuracy. Follow the **Application Rate and Timing** tables for your region only. Refer to **Table 7** for the maximum allowable use rates for specific crop and use sites.

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	Midwest, Sc	outh, and Northeast	West & Hig	h and Rolling Plains
Perennial Grass				
Standard Initial Application	Maximum Height	Rate Per Acre (pints)	Maximum Height	Rate Per Acre (pints)
Bermudagrass Johnsongrass (Rhizome) Johnsongrass (No-Till) Muhly, Wrestem Quackgrass' Ryegrass Perennial	6" stolon 25" 20" 6" 8" 8"	2.25 2.25 2.25 1.875 2.25 2.25 2.25 2.25	6" stolon 10"  8" 8"	3.02 <sup>2</sup> -3.75 2.25 <sup>2</sup> -3.75 
Sequential Application	Maximum Height	Rate Per Acre (pints)	Maximum Height	Rate Per Acre (pints)
Bermudagrass	4" stolon	1.5	4" stolon	2.252
Johnsongrass (Rhizome)	12"	1.5	8"	1.5²-2.25
Johnsongrass (No-Till)	12"	1.5	]	
Muhly, Wirestem	6"	1.875		-
Quackgrass'	8"	1.5	8"	2.25
Ryegrass, Perennial	8"	2.25	J 8"	2.25

Add nitrogen to the crop oil concentrate to improve grass control on indicated species. Cultivate 7-14 days after an initial or sequential application to aid control.

<sup>2</sup> Use 3.75 pints per acre for the following forage crops: alfalfa, clover, birdsfoot trefoil, sainfoin.

#### Table 3. Special Application Rates and Timing for Midwest, South and Northeast Annual Grass **Special Early** Early Rate Per Acre Rescue **Rescue Rate Per Acre** Maximum Height (Pints) Maximum Height (Pints) 4" 1.1251 12 Barnyardgrass 8" 8" Crabgrass, Large<sup>a</sup> , Smooth<sup>3</sup> 16" 16" 4" 3 0 4" 1.125 Foxtail, Giant<sup>2</sup> , Green² , Yellow² 1.125 16" 8' 16' 1.125 2.25 Goosegrass 2.25 Johnsongrass (seedling) 0.75 24" Millet, Wild Proso 1,5 1.125 12' 2.25 Panicum, Fall 1.125 12" , Texas Signalgrass, Broadleaf 1.5 12" 2.25 12" 1.125 Volunteer Corn<sup>3</sup>

' in the following states use 1.5 pint: AL, AR, FL, GA, LA, MS, NC, SC, TN, TX, and VA.

<sup>2</sup> For flax, use 0.75 pint per acre when foxtalls are less than 1.5" high. When using the special early rate, the foxtall species should not have started to tiller.

<sup>a</sup> Add nitrogen to the crop oil concentrate to improve grass control on indicated species.

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Additive	Ground Application	Aerial Application
AMS	2.5 pounds	2.5 pounds
Dash <sup>o</sup> HC/Sundance <sup>o</sup> HC	1.0 pint	1.0 pint
Crop Oil Concentrate	2.0 pints	2.0 pints
Methylated Seed Oils/MSO	1.5 pints	1.5 pints
UAN Solution	4.0-8.0 pints	4.0-8.0 pints

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<b>C</b>	Amount of Product to be Added							
Spray Solution Volume	Poast Plus <sup>e</sup> herbicide (1.0%)		Poast <sup>e</sup> Plus (1.5%)	Oil Concentrate (1.0%)		Dash HC/Sundance HC (0.5%)		
1 gallon 3 galions 5 gallons 25 gallons 50 gallons 100 gallons	1.9 fl oz 5.8 fl oz 9.6 fl oz 3.0 pints 6.0 pints 12.0 pints	or -	2.9 fl oz 8.75 fl oz 14.5 fl oz 4.5 pints 9.0 pints 18.0 pints	1.3 fl oz 3.8 fl oz 6.4 fl oz 2.0 pints 4.0 pints 8.0 pints	or	0.6 fl oz 1.9 fl oz 3.2 fl oz 1.0 pint 2.0 pints 4.0 pints		

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	Concentration in Spray Solution <sup>1</sup>						
Grass (see Tables 1, 2, and 3 for the complete list of grasses controlled)	Poast Plus	Crop Oil Concentrate/ Methylated Seed Oil		Dash HC/ Sundance HC			
Annual grasses up to 6" height	1.0%	1.0%		0.5%			
Annual grasses up to 12" height	1.5%	1.0%		0.5%			
Perennial grasses <sup>2</sup>	1.5%	1.0%		1.0%			

# V. GENERAL RESTRICTIONS AND LIMITATIONS - ALL CROPS

- Maximum seasonal use rate: See Table 7 for crop-specific maximum seasonal use rates.
- Preharvest Interval: See Table 7 for crop-specific preharvest intervals.
- Restricted-Entry Interval (REI): 12 hours
- Avoid all direct or indirect contact with any desired grass crop unless otherwise recommended on the Poast Plus<sup>®</sup> herbicide label.
- Stress: DO NOT apply to grasses or crops under stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, or widely fluctuating temperatures, as unsatisfactory control may result. In irrigated areas, it may be necessary to irrigate before application to insure active weed growth.
- DO NOT apply to crops that show injury (leaf phytotoxicity or plant stunting) produced by any other prior herbicide applications, because this injury may be enhanced or prolonged.
- DO NOT apply as a preplant or preemergence treatment before planting grass crops, such as corn, millet, or sorghum, unless otherwise specified on supplemental labeling.
- DO NOT use selective application equipment such as recirculating sprayers, wiper applicators, or shielded applicators.
- Rainfast Period: Poast Plus is rainfast 1 hour after application.
- DO NOT apply through any type of irrigation equipment.
- DO NOT plant other crops to be harvested for 30 days after application unless Poast Plus is registered for use on that crop.

Table 7. Crop-Specific Restrictions and Limitations for Poast Plus® Herbicide								
Сгор	Minimum Time From Application to Harvest (PHI)	Maximum Rate Per Acre Per Application	Maximum Rate Per Acre Per Season	Livestock Grazing or Feeding	Aircraft Application			
Alfalfa, sirdsfoot trefoil, and sainfoin'	14 days before cutting for (dry) hay	3.75 pints	9.75 pints	Yes	Yes			
Alfalfa, birdsfoot trefoil, and sainfoin' (Undried)	7 days before grazing, feeding, or cutting for (undried) forage	3.75 pints	9.75 pints	Yes	Yes			
Apricot	25 days	3.75 pints	7.5 pints	n/a	No			
Artichoka, Globe	7 days	3.75 pints	7.5 pints	No	Yes			
Asparagus	1 day	3.75 pirits	7.5 pints	No	Yes			
Avocado (nonbearing)'	1 year	3.75 pints	11.25 pints	n/a	No			
Beans', Dry , Succulent <	30 days 15 days	3.75 pints 3.75 pints	6.0 pints 6.0 pints	Yes Yes	Yes Yes			
Beet (Garden)	60 days	3.75 pints	7.5 pints	No	Yes			
Blueberry'	30 days	3.75 pints	7.5 pints	No	Yes			
Brassica including: Broccoli (including Chinese & Raab), Brussels Sprouts, Cabbage (Bok Choy, Chinese Mustard, Napa), Cauliflower, Collard, Kale, Kohlrabi, Mustard Greens, Rape Greens	30 days	2.25 pints	4.5 pints	No	Yes			
Buib Vegetables including: Garlic, Leek, Onion (Dry Bulb & Green), Shallot	30 days	2.25 pints	6.75 pints	No	Yes			
Caneberries' including: (All variet es and/or hybrid's of these) Blackberry, Raspberry (Red, Black), Loganberry, Youngberry	45 days	3.75 pints	7.5 pints	No	Yas			
Canola/Crambe/Rapeseed'	60 days	3.75 pints	7.5 pints	No	Yes			
Carrot	30 days	3.75 pints	7.5 pints	No	Yes			
Cherries (sweet and sour)	25 days	3.75 pints	7.5 pints	n/a	No			
Citrus <sup>1</sup>	15 days	3.75 pints	15.0 pints	No	No			
Clover	7 days before grazing, feeding, or cutting for (undried) forage	3.75 pints	9.75 pints	Yes	Yes			
Clover hay	20 days before grazing, feeding, or cutting for (dry) hay	3.75 pints	9.75 pints	Yes	Yes			
Corn (Poast Protected <sup>∞</sup> field corn)'	60 days (grain or fodder) 45 days (forage and silage)	2.25 pints	4.5 pints	Yes	Yes			
Corn (Poast Protected" sweet corn)	45 days (grain or fodder) 30 days (fresh sweet corn or forage and silage)	2.25 pints	4.5 pints	Yes	Yes			
Cotton'	40 days	3.75 pints	11.25 pints	No	Yes			
Cranberry'	60 days	3.75 pints	6.75 pints	No	Yes			
See VI. Crop-Specific Information for	more details and use res	strictions.		<del></del>				

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n/a = not applicable.

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Table 7. Crop-Specific Restrictions a	nd Limitations for Poa	st Plus <sup>®</sup> Herbicid	e (continued)		
Сгор	Minimum Time From Application to Harvest (PHI)	Maximum Rate Per Acre Per Application	Maximum Rate Per Acre Per Season	Livestock Grazing or Feeding	Aircraft Application
<u>Cucurbits including:</u> Cantaloupes (all), Cucumber, Gherkin, Honeydew Melon, Muskmelon (all), Pumpkin, Squash (all), Watermelon	14 days	2.25 pints	4.5 pints	No	Yes
Date (nonbearing)'	1 year	3.75 pints	11.25 pints	n/a	No
Deciducus Trees, Non-food Crop Areas, Fallow Land'	n/a	3.75 pints	n/a	No	No
Fescue, Tall'	n/a	3.75 pints	n/a	No	Yes
Fig (nonbearing)'	1 year	3.75 pints	11.25 pints	n/a	No
Flax'	75 days	2.25 pints	6.0 pints	Yes	Yes
Fruiting Vegetables' including: Eggplant, Groundcherry, Pepino, Peppers (all), Tomatillo, Tornato'	20 days	2.25 pints	6.75 pints	No	Yes
Grape'	50 days	3.75 pints	7.5 pint	No	No
Head & Petiole Type Vegetables Cardoon, Celery', Celery (Chinese), Celtuce, Fennel (Florence), Lettuce (Head), Radicchio, Rhubarb', Swiss Chard	30 days	2.25 pints	4.5 pints	No	Yes
Horseradish'	60 days	3.75 pints	7.5 pints	No	No
Leafy Vegetables Amaranth, Arugula, Chervil, Chrysanthemum (Edible, Garland), Cilantro, Corn Salad, Cress (Garden, Upland), Dandelion, Dock, Endive (Escarole), Lettuce (Leaf), Orach, Parsley, Purslane (Garden, Winter), Spinach (including New Zealand & Vine)	15 days	2.25 pints	4.5 pințs	No	Yes
Lentili	50 days	3.75 pints	6.0 pints	No	Yes
Lingonberry, Salal, Juneberry	45 days	3.75 pints	7.5 pints	No	Yes
Mint'	20 days	3.75 pints	7.5 pints	No	Yes
Nectarine	25 days	3.75 pints	7.5 pints		No
Olives (nonbearing)'	1 year	3.75 pints	11.25 pint	n/a	No
Orchard flcor middles1	n/a	0.75 pint	0.75 pint	n/a	No
Peach	25 days	3.75 pints	7.5 pints	n/a	No
Peanut <sup>1</sup>	40 days	2.25 pints	3.75 pints	No	Yes
Peas, Dry , Succulent	30 days 15 days	3.75 pints 3.75 pints	6.0 pints 6.0 pints	Yes Yes	Yes Yes
Pistachio'	15 days	3.75 pints	15.0 pints	n/a	No
Plum (nonbearing)'	1 year	3.75 pints	11.25 pints	n/a	No
'See VI. Crop-Specific Information for	more details and use res	trictions.			

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'See VI. Crop-Specific Information f n/a = not applicable.

Сгор	Minimum Time From Application to Harvest (PHI)	Maximum Rate Per Acre Per Application	Maximum Rate Per Acre Per Season	Livestock Grazing or Feeding	Aircraft Application
Pome Fruits' including: Apples, Crabapples, Pears, and Quince	14 days	3.75 pints	11.25 pints	No	Na
Pomegranate (nonbearing)'	1 yearm	3.75 pints	11.25 pints	n/a	Yes
Potatoes', Field , Sweet (East U.S.) , Sweet (West U.S.)	30 days 30 days 60 days	3.75 pints 3.75 pints 2.25 pints	7.5 pints 7.5 pints 7.5 p <del>i</del> nts	No No No	Yes Yes Yes
Prune (nonbearing)'	1 year	3.75 pints	11.25 pints	n/a	No
Tubercus & Corm Vegetables Arracacha, Arrowroot, Artichoke (Chinese, Jerusalem), Canna (Edible), Cassava (Bitter, Sweet), Chayote Root, Chufa, Dasheen (Taro), Ginger, Leren, Potato', Tanier, Tumeric, Yam Bean, Yam (True)	30 days	3.75 pints	7.5 pints	No	Yes
Safflower	30 days	3,75 pints	7.5 pints	No	Yes
Set Aside Conservation Land'	n/a	3.75 pints	11.25 pints	n/a	Yes
Soybean'	75 days	3.75 pints	7.5 pints	Only seed and hay	Yes
Strawberry'	7 days	3.75 pints	3.75 pints	No	Yes
Sugar Beet'	60 days	3.75 pints	7.5 pints	Yes	Yes
Sunflower	70 days	3.75 pints	3.75 pints	No	Yes
Tobacco'	42 days	2.25 pints	6.0 pint	No	Yes
Tree Nuts'	15 days	3.75 pints	15.0 pints	No	No

# VI. Crop-Specific Information

# **Crops Grown For Seed**

Poast Plus® herbicide is recommended for use on all crops on this labe' when they are grown for seed production. Use the Poast Plus rates given for each food crop listed in other sections on this label. Sight modifications in application methods may be required for certain seed crops due to crop canopy or different builtural methods. from the corresponding food crop.

# Field Crops

Always add 1.0 pint of Dash® HC or Sundance® HC spray adjuvant, or 2 pints of oil concentrate per acre. Add 4.0-8.0 pints of UAN or 2.5 pounds of AMS to control crabgrass, volunteer corn and all volunteer cereals. UAN and AMS are not registered in California.

# Beans, Dry

Poast Plus may be applied in a tank mix with one of the following herbicides:

Frontier<sup>®</sup>

Basagran<sup>∞</sup>

# Canola/Crambe/Rapeseed

Not regis ered in California. Processed meal may be fed.

# Corn. field

Only Poast Protected® field corn hybrids are tolerant to Poast Plus applications. Severe crop injury will occur to corn hybrids not designated as Poast Protected corn.

Not for use in California.

Over-the-top applications of Poast Plus in Poast Protected field corn may be made until the onset of pollen shed provided the appropriate preharvest intervals are met. DO NOT apply Poast Plus after pollination occurs.

Poast Plus may be applied in a tank mix with one of the following herbicides:

- Atrazine
- Harness
- Basagran
- Dual® & Dual II®
- Laddok<sup>®</sup> S-12 Surpass<sup>e</sup>
- 2,4-D (LVE)
- Frontier Guardsman<sup>®</sup>

# Corn, sweet

Only Poast Protected sweet corn hybrids are tolerant to Poast Plus applications. Severe crop injury will occur to sweet corn hybrid's not labeled as Poast Protected sweet corn.

Applications of Poast Plus in Poast Protected sweet corn may be made until the onset of pollen shed. DO NOT apply Poast Plus after pollination occurs. A second application of Poast Plus in Poast Protected. sweet corn may be made 10 days or later following the first application.

Poast Plus may be applied in a tank mix with one of the following herbicides:

- Atrazine
- Guardsman
- Basagran
- Outlook<sup>™</sup> Laddok S-12
- Frontier
- Cotton

Processed meal may be fed to animals.

Poast Plus may be applied in a tank mix with one of the following herbicides: (including herbicides registered for use in cotton tolerant to glyphosate and bromoxynil):

- Buctril<sup>®</sup>
- Roundup Uitra<sup>€</sup>
- Staple<sup>®</sup>

For best grass control, apply Poast Plus 3 days prior to Staple.

# Flax

Not registered in California

Processed meal may be fed to animals.

Poast Plus may be applied in a tank mix with one of the following herbicides:

- Bronate®
- Buctril
- MCPA

Buctril, MCPA or Bronate herbicides applied with Poast Plus may cause leaf burn, retarded growth, and delayed maturity of the crop.

Tank Mixing Restrictions (partial list)

DO NOT delay spraying broadleaf weeds even though grassy weeds are not in the correct stage for treatment.

DO NOT add AMS or UAN solution to a tank mix of Poast Plus + Buctril or MCPA or Bronate.

# Lentil

Not registered in California.

# Mint

Poast Plus may be applied in a tank mix with one of the following herbicides: Buctril

Basagran

# Peanut

Processed meal may be fed to animals.

**Poast Plus® herbicide** may be applied in a tank mix with one of the following herbicides.

- Basagran
   Storm
- Blazer\* 2,4-DB

# Soybean

In California, the maximum rate per acre per application is 2.0 pints.

Only processed meal from seed or hav may be fed to animals.

**Poast Plus** may be applied in a tank mix with one of the following herbicides (including uses in **RoundUp Ready**<sup>®</sup>, **Liberty Link**<sup>®</sup> and **STS**<sup>®</sup> varieties):

- Basagran
- Pursuit<sup>®</sup> W DG
- Blazer
- Raptor<sup>®</sup>
   Reflex<sup>®</sup>
- Classic<sup>®</sup>
  Cobra<sup>®</sup>
- Reliance<sup>™</sup>STS
- FirstRate\*
- PirstRate
- Resource<sup>®</sup>
   Roundup Ultra<sup>®</sup>
- Flexstar<sup>®</sup>
  Frontier<sup>®</sup>
- Stellar<sup>®</sup>
- Galaxy<sup>®</sup>
- Storm<sup>®</sup>
- Liberty\*
- Pursuit<sup>®</sup>
- Synchrony<sup>®</sup> STS
   Touchdown<sup>®</sup>
- Pursuit<sup>®</sup> DG
- 2,4-D (LVE)\*
- Pursuit<sup>®</sup> W

\*For use as preplant burndown only.

#### Tank Mix Specific Restrictions

Tank mixes of **Poast Plus** with **Basagran + Blazer**, **Galaxy** or **Storm** herbicides are not for use in California.

**DO NOT** use MSO with any tank mix combination except with **Basagran**, **Pursuit** or **Raptor** herbicides.

# **Sugar Beets**

Processed pulp and molasses may be fed to animals.

**Poast Plus** may be applied in a tank mix with one of the following herbicides:

- Betamix
   Stinger
- Betanex<sup>®</sup>

UpBeet<sup>e</sup>

**Poast Plus** may be tank mixed with other postemergence herbicides that are registered for use on sugar beet varieties tolerant to those herbicides.

#### **Tank Mixing Restrictions**

Not for use in California.

The use of UAN solution or AMS with a **Poast Plus** + **Betamix/Betanex** herbicides tank mix is not recommended.

**DO NOT** use **Poast Plus + Betamix/Betanex** if grasses to be controlled include rhizome Johnsongrass, quack-grass, Bermudagrass, wirestem muhly, volunteer corn, shattercane, red rice, or itchgrass.

# Sunflower

Commercially released varieties of sunflower are tolerant to **Poast Plus** at all stages of growth; however, leaf speckling has been occasionally observed on sunflowers with no corresponding reduction in vigor or growth. **Poast Plus** is not recommended for use on sunflower inbred lines grown for seed because crop safety of these lines has not been adequately established.

Processed meal and soapstock may be fed to animals.

### Tobacco

Not registered in California.

**1st application:** Make the first application to plantbed seedlings up to 4 Weeks prior to transplanting to the field. Maximum application rate: 1.5 pints/acre.

**2nd application:** The second application may follow up to 3 weeks after transplanting. Maximum application rate: 2,25 pints/acre

**3rd application:** The third application may be made up to 7 weeks after transplanting. Maximum application rate: 2.25 pints/acre.

**Poast Plus** may be applied at the seedbed stage of growth.

# Forage Crops

# Alfalfa, Birdsfoot Trefoil, Clover, Sainfoin

**Poast Plus** may be applied to seedling or established alfalfa and clover grown for hay, silage, green chop, direct grazing, or for seed.

**Mowing:** The best control of annual grasses can be achieved by applying **Poast Plus** before grass weeds are mowed. Once a grass is mowed it becomes tougher to control, as much of the leaf surface may be removed, putting the grass under stress. In areas without a killing frost, some annuals can over-winter after having been mowed a number of times. These grasses can form large crowns and contain many viable buds. A large crown, even if it is an annual grass, may require repeated applications of **Poast Plus** for partial or complete control.

### Tank Mixing in Alfalfa, Birdsfoot Trefoil & Sainfoin Only

**Poast Plus** may be applied in a tank mix with one of the following herbicides:

• 2,4-DB

# **Tank Mix Specific Restrictions**

**DO NOT** add UAN solution or AMS to a tank mix of **Poast Plus**<sup>a</sup> herbicide + 2,4-DB.

**DO NOT** use **Poast Plus** + 2,4-DB in the High and Rolling Plains of Texas, Western Oklanoma, Western Kansas, and Eastern New Mexico.

# Irrigated Alfalfa, Clover, Birdsfoot Trefoil, and Sainfoin:

Irrigation practices can be very critical to the successful use of **Poast Plus** and may be necessary to start grass weeds growing again. Generally, applications 2-4 days after an irrigation are most effective because:

- · grasses resume active growth,
- · grasses have less chance to grow too large,
- by waiting later, the clover or alfalfa begins to canopy and interferes with spray coverage.

Irrigation shortly after application (2 davs) can be effective, but more consistent grass control is obtained when the irrigation is made before the application.

#### **Annual Grass Control**

Apply **Poast Plus** at the grass sizes and rates indicated in **Table 1** and **Table 3**. If a grass has been out, apply **Poast Plus** after the regrowth reaches the minimum height (so there will be enough leaf area for absorption) and before it exceeds the maximum height indicated.

Apply before the clover or alfalfa canopies cover the grasses and interfere with the spray coverage. Also, applications after a clover or alfalfa cutting may need to be timed to follow an irrigation or rainfall which will allow the grasses to regrow to a treatable size.

Some annual grasses are spring- and summer-germinating plants, while others are fall-germinating plants, and the time they are actively growing and most susceptible to **Poast Plus** may vary from area to area. Also, some annuals germinate over a long time, and because control of small grasses is desired, applications after each weed flush may be needed. As a general guideline, spray springand summer-germinating grasses as early in the season as possible. The optimum application timing may occur very early in the spring after initial green-up. Spray fall-germinating weeds in the fall soon after they begin growing but before any killing frosts. Late fall applications may be less effective due to environmental changes, such as frosts or the onset of flowering.

### **Perennial Grass Control**

**Poast Plus** effectively controls or suppresses perennial grasses, such as Bermudagrass, johnson grass, quack-grass, wirestern muhly, and perennial ryegrass. See **Table 2**. However, their growth characteristics are such that they are more difficult to control than annual grasses, especially in a perennial crop such as established alfalfa or clover. A program of repeated applications is usually nacessary for best results.

The most economical way of controlling perennial grasses is to do so in the year of stand establishment before rhizomes or stolons become large and difficult to kill. The field should be disked before seeding to thoroughly fragment mizomes or stolons.

In summer and fall seedings, cool season grasses (quackgrass, wirestem muhly, and perennial ryegrass) can become very competitive under cool fall conditions. Fall applications of **Poast Plus** will reduce late season grass growth and limit the ability of grasses to accumulate nutrient reserves in roots and rh.zomes.

In established stands, it is important to begin applying in the spring when conditions favor active growth and before storage tissues have increased their nutrient reserves. Additional applications should be made on any grass regrowth in later cuttings.

# Interseeded Oats

Oats interseeded with clover, alfalfa, birdsfoot trefoil, and sainfoin may be killed by applying **Poast Plus**. Their removal allows the seedling crops to grow with less competition. This application should be made before the interseeded oats reaches the boot stage or later to be most effective.

# Fruit and Nut Crops

# Blueberry

Not registered in California.

# Caneberries

Aircraft use not registered in California.

# Citrus

Pulp and waste may be fed to livestock.

# Cranberry

Not registered in California.

#### Grape

Pomace and raisin waste may be fed to animals.

# Pistachio

**Poast Plus** should only be applied as a directed spray to the grove floor for bearing pistachio trees.

# Pome Fruits

Pressed or processed apple waste may be fed to animals.

# Strawberry

Not for use on strawberries in Florida. Not for aircraft application in California.

# **Tree Nuts**

**Poast Plus® herbicide** may be used for grass control and suppression in bearing or nonbearing tree nuts. Tree nuts are very tolerant to **Poast Plus** and **Poast Plus** may be applied over the top of small, nonbearing trees or as a directed spray on larger trees.

**DO NOT** apply **Poast Plus** with another pesticide whose label cautions against use with oil adjuvants.

In aimcnd, only aimond hulls may be fed to animals.

# Nonbearing Fruit and Nut Crops

For nonbearing areas, always add 2 pints of oil concentrate per acre.

The nonbearing crops that **Poast Plus** may be applied to are:

Avocado Date Fig Olive Plum Pomegranate Prune

To minimize the potential for tree injury, direct the spray away from the leaves as much as possible.

# Set Aside Conversation Reserve Land, Fallow Acreage

Broadleaf Cover Crops: The growth of broadleaf cover crops such as alfalia, clover, lespedeza, trefoils, and vetches will not be affected by **Poast Plus**.

Grass Cover Crops: Most seeded grass crops such as oats, sudangrass, tall fescue, orchardgrass, bromegrasses, ryegrass, or timothy will be injured or killed by **Poast Plus**, therefore, **DO NOT** use **Poast Plus** if injury to these grass cover crops is undesirable.

Seeded grass cover crops may be injured or killed.

#### Restrictions and Limitations (partial list)

**DO NOT** harvest or graze cover crops other than alfalfa, clover, birdsfoot trefoil, or sainfoin treated with **Poast Plus**.

This use is applicable only for the Midwest, South, and Northeast areas or East of the Rocky Mountains (see maps in **Table 1**).

For alfalfa cover crops, **DO NOT** apply **Poast Plus** within 7 days of grazing, feeding, or cutting for (undried) forage, or within 14 days of cutting alfalfa for (dry) hay.

For alfalfa cover crops, **DO NOT** apply more than a total of 9.75 pints of **Poast Plus** per acre in one season.

**Poast Plus** may be applied in a tank mix with one of the following herbicides:

- Clarity
   Roundup Ultra
- Marksman<sup>®</sup>
- 2.4-D

# Interseeded Cover Crops

#### Poast Plus Activity on the Cover Crop

Grass cover crops controlled or suppressed by this use include wheat, oats, and barley, or any grass crop for which **Poast Plus** is labeled. **Poast Plus** will selectively control grass cover crops in seedling nongrass or broadleaf field, forage, or vegetable crops without injury. In addition, **Poast Plus** will control any annual grasses that have emerged since planting. The slow-dying grass can provide a protective mulch for the primary crop seedlings for up to 3 weeks after applying **Poast Plus**.

Apply **Poast Plus** to cereals that are 3-4 inches in height (before tillering). **DO NOT** allow cereals to exceed this height as excessive competition and lack of control may occur.

# Noncrop Areas

# Deciduous Trees, Nonfood Crop Areas, Fallow Land

#### DECIDUOUS TREES, NONFOOD CROP AREAS, FALLOW LAND:

**Poast Plus** may be used in noncrop areas including rights-of-ways, roadsides and other paved areas, along fences and hedgerows, public buildings, recreation areas, industrial sites, storage yards, airports, electric transformer stations, pipeline pumping stations, sewage disposal areas, on potting and top soils, uncultivated agricultural areas, and general indoor or outdoor sites.

**Poast Plus** is not recommended for use on red sprangletop in California, Arizona or western New Mexico.

Notice to user: Due to variability within species and in application techniques, neither the manufacturer nor the seller has determined whether or not **Poast Plus** can be safely used on all varieties and species of nonbearing food<sup>i</sup> crops, and other nonfood crops under all conditions. Therefore, determine if **Poast Plus** can be used safely before broad use in the following manner:

On a small test area, apply the recommended rate of **Poast Plus** on nonbearing or nonfood crop species or varieties under the conditions expected to be encountered. Any adverse conditions should be visible within 7 days.

#### TALL FESCUE GROWTH SUPPRESSION:

Apply **Poast Plus** to actively growing tall fescue after it has 4-6 inches of new growth, before the emergence of seedheads and before conifer bud break. Applications made from July 1 to mid-August may be less effective, especially if day temperatures reach 90° F. Tall fescue must be 1-year old before the first application of **Poast Plus**.

Adequate coverage of the leaf surface is necessary for absorption of this herbicide. Thus, for optimum control, **DO NOT** mow tall fescue turf for 30 days before or 14 days after applying **Poast Plus<sup>®</sup> herbicide**.

**Rate:** Apply 1.5-1.875 pints of **Poast Plus** per acre. For greater fescue suppression, up to 2.5 pints of **Poast Plus** per acre can be used. Because of environmental differences at application and growth differences of tall fescue, control may exceed or fall short of that desired. Begin treating crops with **Poast Plus** at the minimum recommended rate and adjust rates as loca' conditions and experience dictate. Additional applications may be made if extended growth suppression is desired.

#### ORCHARD FLOOR MIDDLES: Growth Management In Orchard Floor Middles

**Poast Plus** may be applied in a tank mix with one of the following herbicides:

• 2,4-D amine

**Poast Plus** and 2,4-D dimethylamine can be used in a tank mix for growth management in orchard floor middles to reduce the number of mechanical mowings needed during a season. **Poast Plus** and 2,4-D dimethylamine can be safely applied for growth management in the following cool season grasses and mixtures: Kentucky bluegrass, perennial ryegrass, and tall fescue. Some degree of discoloration of the turf may occur. However, the turf will regrow and green up as effects of the treatment wear off. Make one application per season from the following options:

- Poast Plus and 2,4-D dimethylamine can be applied during the spring or summer when growth management is desired. DO NOT apply during bloom or within 3 days of a mowing.
- An optimal timing for application is after sod green up in the spring (before any mowing) or 3 days after the initial mowing of the season is made.
- A prebloom treatment is recommended as any broadleaf weeds such as dandelions can be controlled before they hamper fruit pollination.

This treatment will provide 5-8 weeks of growth management depending on the sod makeup (eg grass species, amount of broadleaf weeds present, etc.), environmental conditions and the desired maintenance height of the middles.

See III. Additives, Mixing Order section for details.

# **Tank Mix Specific Restrictions**

Make no more than 1 application of this tank mix per growing season.

**DO NOT** apply if rainfall or irrigation is expected within 6 hours after application as growth management effects will probably be unsatisfactory.

**DO NOT** apply to a grass sod that is less than 2 years old.

**DO NOT** apply to newly established orchards. Trees must be at least 1 year old and in vigorous condition.

**DO NOT** apply this tank mix within 14 days of harvest of apples and pears.

**DO NOT** apply this tank mix within one year of harvest of nonbearing plurns. Not registered for use in California.

# Vegetable Crops

Allow a minimum of 14 days between sequential applications.

Always add oil concentrate at 2 pints per acre. However, when the temperature exceeds 90° F and the relative humidity is 60% or greater, or anytime the temperature exceeds 100° F, regardless of the humidity, **Poast Plus** plus adjuvants should be used with caution due to potential leaf injury.

# Celery

In Florida, celery may be harvested as close as 14 days of the last application.

# Horseradish

Not for use in California.

# Potato and Tomato

In case of heavy infestations of quackgrass, use 2.5 pints of **Poast Plus** per acre followed by 1.5 pints per acre sequentially if needed.

Potato and tomato wastes may be fed to animals. **Poast Plus** may be applied in a tank mix with one of the following herbicides:

Lexone<sup>®</sup> DF
 Sencor<sup>®</sup> DF

# Tank Mix Specific Restrictions

These tank mixes not applicable to California.

**DO NOT** apply this tank mix to sweet potato or yams. No tank mixes other than **Lexone DF** or **Sencor DF** herbicides are to be applied with **Poast Plus**.

Apply only if there have been at least 3 successive days of sunny weather before application or crop injury may occur.

**DO NOT** add UAN solution or AMS to a **Poast Plus** + **Lexone DF** or **Sencor DF** tank mix.

**DO NOT** use this tank mix if grasses to be controlled include rhizome johnsongrass, quackgrass, Bermudagrass, wirestem muhly, volunteer corn or cereal, shattercane, red rice, or itchgrass.

Apply only to russetted or white-skinned varieties of potato that are not early maturing.

**DO NOT** apply this tank mix within 60 days of potato harvest.

**DO NOT** treat transplanted tomatoes within 14 days of transplanting. Tomatoes must have recovered from transplant shock and new growth must be evident.

**DO NOT** treat seeded tornatoes until plants have reached the 5-6 leaf stage.

# **Sweet Potato**

Eastern U.S. includes AL, FL, GA, LA, MS, NC, SC, TN, TX and VA.

Western U.S. includes AZ, CA, ID, NV, OR and WA.

# Rhubarb

Rhubarb grown only in IL, IN, MI, MN, and WI may be harvested up to **15 day PHI**.

Aircraft application not registered.

Weeds listed in this label		
Common Name	Scientific Name	
Barnyardgrass (Watergrass)	Echinochlos crus-galli	
Bermudagrass (Wiregrass)	Cynodon dactylon	
Crabgrass, Large	Digitaria sanguinalis	
, Smooth	Digitaria ischaemum	
Cupgrass, Southwestern	Eriochloa gracillis	
, Woolly	Eriochloa villosa	
Fescue, Tall	Festuca arundinacea	
Foxtail, Giant (Pigeongrass)	Setaria faber.	
, Green	Setaria viridis	
, Yellow	Setaria glauca	
Goosegras3	Eleusine indica	
ltchgrass	Rottboellia exaltata	
Johnsongrass	Sorghum halepense	
Junglerice	Echinochloa colonum	
Lovegrass	Eragrostis sp.	
Millet, Wild Proso	Panicum miliaceum	
Muhly, Wirestern	Muhlenbergia frondosa	
Oats, Tame	Avena sativa	
, Wild	Avena fatua	
Orchardgrass	Dactylis glomerata	
Panicum, Browntop	Panicum fasciculatu	
, Fall	Panicum dichctomiflorum	
, Texas	Panicum texanum	
Quackgrass	Agropyron repens	
Red Rice	Oryza sativa	
Ryegrass, Annual	Lolium multiflorum	
, Perennial	Lolium perenne	
Sandbur, Field	Cenchrus incenus	
Shattercane/Wildcane	Sorghum bicolor	
Signalgrass, Broadleaf	Brachiaria platyphylla	
Sprandletop, Red	Leptochloa filiformis	
Stinkgrass	Eragrostis cilianensis	
Volunteer Barley	Hordeum vulgare	
Corn	Zea mays	
Oats	Avena sativa	
Bve	Secale Cereale	
Wheat	Triticum aestivum	
Witchgrass	Panicum capillare	

Crops		
This product may be used on the following crops:		
Alfalfa	Juneberry	
Apricot	Leafy Vegetables	
Artichoke	Lentil	
Asparagus	Lingonberry	
Avocado*	Mint	
Beans	Nectarine	
Beet, Garden	Olive*	
Birdsfoot Trefoil	Peach	
Blueberry	Peanut	
Brassica crops	Peas, dry & succulent	
Bulb Vegetables	Pistachio	
Caneberries	Plum*	
Canola/Crambe	Pome Fruits	
Carrot	Pomegranate*	
Charry	Potato	
Citrus	(Prune*	
Clover	Root & Tuberous Vegetables	
Corn (Poast Protected™) field	Safflower	
and sweet	Sainfoin	
Cotton	Salal	
Cranberry	Soybean	
Cucurbits	Strawberry	
Date*	Sugar Beet	
Fescue, Tall	Sunflower	
Fig*	Tobacco	
Flax	Tree Nuts	
Fruiting Vegetables	Other Nonbearing and	
Grape	Nonfood Areas	
Head & Petiole Vegetables		
Horseradish		
* Nonbearing crop only.		

Look inside for complete Restrictions and Limitations and Application Instructions.

# \_\_\_\_\_

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with 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 use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. All such risks shall be assumed by the Buyer.

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