

264-809

09-30-2009

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

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Prasad Rao  
Bayer CropScience  
P.O. Box 12014, 2 T.W. Alexander Drive  
Research Triangle Park, NC 27709

SEP 30 2009

Dear Mr. Rao:

Subject: Revised Labeling – Add Triticale  
Olympus 70% Water Dispersible Granular Herbicide  
EPA Registration No. 264-809  
Your Submission Dated September 22, 2009

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable provided that you:

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) or 4(a) when the Agency requires all registrants of similar products to submit such data.

2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

a. Delete the proposed increased application rate from 0.9 to 1.2 oz in three Western States.

Our staff reviewed the proposed increase in the application. Based on the cited HED review the residue data does not appear to support the proposed increase. There are detectable residues at the 1 X rate tested. 2x or 3X field studies were not submitted. The amendment needs a HED scientific review in order to assure that the established tolerances are not exceeded by the proposed increased application rate. It is a common practice to graze livestock on planted wheat during the winter. Please note that if your company has any additional data to support the proposed increased rate on winter wheat, it would assist our review. Appropriate PRIA II fees are required, If scientific review of the cited or submitted data is needed.

b. On page 3 in the Heading delete the term "Information". This term implies the following directions and restrictions do not all have to be followed as specified on the label.

3. Submit one (1) copy of your final printed labeling before you release the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

If you have any questions concerning this letter, please contact Mr. James Stone at 703-305-7391.

Sincerely yours,

Joanne I. Miller  
Product Manager (23)  
Herbicide Branch  
Registration Division (7505P)

Enclosure

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# OLYMPUS™ 70% Water Dispersible Granular Herbicide

For post-emergence control of certain grasses and broadleaf weeds in wheat and triticale.

**ACTIVE INGREDIENT:**

Propoxycarbazone-sodium\* ..... 70%

**INERT INGREDIENTS** ..... 30%

\* CAS Number 181274-15-7

**TOTAL : 100%**

**EPA Reg. No. 264-809**

**EPA Est. 3125-MO-1**

**STOP - Read the label before use  
Keep out of reach of children  
CAUTION**

For **MEDICAL** And **TRANSPORTATION** Emergencies **ONLY** Call 24 Hours A Day 1-800-334-7577

For **PRODUCT USE** Information Call 1-866-99BAYER (1-866-992-2937)

**ACCEPTED with COMMENTS**

In EPA Letter Dated:

SEP 30 2009

**FIRST AID**

<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor for treatment advice.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>	Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.
<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>	264-809
<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.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>	

**For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577.**

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

**NOTE TO PHYSICIAN:** No specific antidote is available. Treat the patient symptomatically.

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION:** Harmful if swallowed. Avoid contact with skin, eyes or clothing.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

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

**Applicators and other handlers must wear:**

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

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

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### User Safety Recommendations

**User 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

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 apply when weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment washwaters.

Do not allow sprays to drift onto adjacent desirable plants.

Drift or runoff may adversely affect non-target plants.

### 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 long-sleeved shirt and long pants, socks, shoes, chemical-resistant gloves made of any waterproof material and protective eye wear.

### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Dispose of pesticide as directed below. In spill or leak incidents, keep unauthorized people away. You may contact the Bayer CropScience Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Bayer CropScience Emergency Response Telephone No. is 1-800-334-7577 or contact Chemtrec at 800-424-9300.

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

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### GENERAL INFORMATION

OLYMPUS™ is a selective postemergence herbicide for use in spring, durum, winter wheat and triticale.

### ENVIRONMENTAL AND BIOLOGICAL ACTIVITY

OLYMPUS™ is absorbed by foliage and roots of weeds and offers contact and residual weed control. OLYMPUS™ provides the most consistent control when 0.5 inches of activating rainfall occurs prior to the weeds reaching a tolerant stage. OLYMPUS™ is active against many important grass and broadleaf weeds (see list below for details). Best weed control can be expected when applications are made after the crop has fully emerged and before grass weeds tiller.

Environmental conditions which support vigorous growth of crop and weeds result in highest herbicidal activity. Following application, symptoms of herbicidal activity may develop within several days. Speed of action depends on environmental conditions and increases with increasing temperature and moisture. Sensitive weeds quickly stop growing and no longer compete with the crop. Visible signs of activity include termination of plant development, yellowing and/or reddening of weeds, and finally plant death.

Abnormal environmental conditions (excess soil moisture or drought, extreme cold weather) can influence crop tolerance and herbicidal activity and may cause temporary damage to the crop or reduced levels of weed control. This may result in weed stunting, rather than weed death. However, weed competition will be greatly reduced, and should permit normal crop development. Crop response may occur when frost occurs shortly after application to actively growing wheat. In winter wheat, OLYMPUS™ can be applied either in the

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fall or the spring, or as a sequential treatment in the fall followed by a spring application. Fall applications generally offer more effective weed control than spring applications, unless drought or extreme rainfall provides unusual conditions. Best and most consistent weed control is provided by sequential applications in fall and spring.

**CROPS**

OLYMPUS™ may be used on triticale and winter and spring wheat, including durum wheat.

**VARIETIES**

Avoid use on any variety known to be sensitive to the ALS mode of action.

If OLYMPUS™ is tank-mixed with any other product, refer to the label of the tank-mix partner for further instructions and potential restrictions (timing of application, varietal tolerance).

**SURFACTANTS**

A **non-ionic surfactant (NIS)** is required in the spray solution. Use only non-ionic surfactants which are approved by EPA for use on food crops and which contain at least 80 percent active ingredient.

Non-ionic surfactants should be used at 0.25% - 0.5% in spray solution.

**APPLICATION IN FLUID FERTILIZER**

OLYMPUS™ may be applied using a liquid nitrogen solution as the spray carrier. For fall applications, the fertilizer solution should not exceed 50% liquid nitrogen and not exceed more than 30 pounds of actual nitrogen per acre. A NIS surfactant at a maximum of 0.25% v/v is required in spray solutions containing liquid nitrogen. Due to the activity of fertilizer on the crop, temporary injury may result when liquid nitrogen is used as a spray carrier. Crop response symptoms due to the use of liquid nitrogen as a spray carrier may include reduced wheat growth, discoloration, and leaf burn. Spring applications of fertilizer solutions containing more than 50% liquid nitrogen may result in excessive leaf burn from the liquid nitrogen solution.

**APPLICATION INFORMATION**

Most consistent control is obtained with ground application. Either ground or aerial (fixed wing or helicopter) application equipment may be used to apply OLYMPUS™ postemergence as a foliar spray. Do not apply pre-emergence to wheat or injury may occur.

Thorough coverage improves weed control. Select spray volume to ensure optimum plant coverage.

Calibrate spray equipment before use.

The use of nozzles and spray pressure that deliver Coarse spray droplets as indicated in the nozzle manufacturer's catalogs and in accordance with ASAE Standard S-572 are highly recommended for optimum spray coverage and canopy penetration. Avoid uneven spray distribution, skips, overlaps, and spray drift.

Do not apply OLYMPUS™ through irrigation systems.

Wheat may be treated when the majority of wheat plants have emerged to before jointing begins. Because of the soil activity provided by OLYMPUS™, all weeds do not have to be emerged for weed control to occur.

To avoid crop injury, apply OLYMPUS™ from 2-leaf to before jointing begins. Do not apply more than a total of 1.2 oz of OLYMPUS™ per acre per crop year.

**Ground Application**

OLYMPUS™ Herbicide can be applied broadcast in 5 or more gallons of water per acre. For weed control in dense weed canopies, use 15 or more gallons of water per acre. Weed infestations should be treated before they become competitive with the crop. Use screens that are 50-mesh or larger.

**Aerial Application**

OLYMPUS™ Herbicide should be applied in a minimum of 5 gallons of water per broadcast acre. DO NOT use raindrop nozzles. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

See the **Spray Drift Management** section of this label for additional information on proper application of OLYMPUS™ Herbicide.

<b>Table 1 – Control or suppression of Bromus species and other weed species shown in “Weeds Controlled”</b>		
<b>Timing of Application</b>	<b>Rate ( oz/A)</b>	<b>Remarks</b>
Fall or Spring	0.6 to 0.9	Apply specified dosage per acre as a postemergence broadcast spray using ground or aircraft application equipment.
Fall followed by Spring	0.6 – 0.9 oz followed by 0.3 - 0.6 oz	Apply 0.6 – 0.9 oz/A in the Fall followed by 0.3 - 0.6 oz/A in the Spring as a postemergence broadcast spray using ground or aircraft application equipment. Do not exceed 1.2 oz of OLYMPUS™ per crop year. Sequential applications are required for suppression of jointed goatgrass.

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Table 2 – Control of wild oat in Idaho, Montana, Oregon, and Washington*		
Timing of Application	Rate (oz/A)	Remarks
Fall	0.9	<b>Fall emerging wild oat:</b> Use as a fall application before wild oat reaches 2 tillers. Fall applications may not control spring germinating wild oat.
Spring	0.9	<b>Spring emerging wild oat:</b> Apply after emergence but before wild oat reaches the 2-tiller stage of growth.

\*When used according to label directions, wild oat will be controlled in Idaho, Montana, Oregon and Washington. Wild oat will be suppressed in areas where OLYMPUS™ is labeled for use outside these four states.

**USE RATES**

**Winter wheat**

Apply OLYMPUS™ at 0.6 - 0.9 oz per acre in fall or spring in a single application to actively growing weeds. Select rate according to table "Weeds Controlled". Do not exceed a product application rate of 0.9 oz per acre in a single application in fall or spring.

- In the states of WA, OR and ID only, 1.2 oz of Olympus per acre may be applied in the fall.

A fall application of OLYMPUS™ may be followed by a spring application of the product up to a maximum of 1.2 oz per acre OLYMPUS™ per crop year.

Apply OLYMPUS™ before jointing begins to avoid crop injury.

**Spring wheat**

Apply OLYMPUS™ at 0.6 - 0.9 oz per acre in a single application to actively growing weeds. Select rate according to table "Weeds Controlled". Do not exceed a product application rate of 0.9 oz per acre per spring wheat growing season. See "**CROP ROTATION RESTRICTIONS**" section. Avoid use on ALS sensitive varieties.

Apply OLYMPUS™ before jointing begins to avoid crop injury.

**Triticale**

Apply OLYMPUS™ at 0.6 - 0.9 oz/A in fall or spring in a single application to actively growing weeds.

- In the states of WA, OR and ID only, 1.2 oz of OLYMPUS™ per acre may be applied in the fall.

**ENDANGERED SPECIES**

To avoid adverse effects on endangered plant species, the following mitigation measures will be required where endangered species occur in Counties listed in the table on the following page.

For ground applications, the applicator must:

1. Apply when there is sustained wind away from native plant communities, OR
2. Leave 50 foot untreated buffer between treatment area and native plant communities.

For aerial applications, the applicator must:

1. Apply only when there is sustained wind away from native plant communities, OR
2. Leave 350 foot untreated buffer between treatment area and native plants.

State	County	State	County	State	County	State	County
<b>Colorado</b>	Morgan	<b>Kansas</b>	Allen	<b>Missouri</b>	Barton	<b>Oregon</b>	Baker
	Weld		Anderson		Benton		Benton
			Bourbon		Cass		Clackamas
<b>Illinois</b>	Alexander		Coffey		Cedar		Douglas
	Brown		Crawford		Dade		Jackson
	Bureau		Douglas		Harrison		Josephine
	Calhoun		Franklin		Howell		Klamath
	Cass		Jackson		Pettis		Lane
	Cook		Jefferson		Polk		Linn
	Du Page		Johnson		St Clair		Marion
	Ford		Leavenworth		Vernon		Polk
	Fulton		Linn				Union
	Greene		Lyon	<b>Nebraska</b>	Cherry		Washington
	Grundy		Miami		Hall		Yamhill
	Jackson		Neosho		Kimball		
	Jersey		Osage		Lancaster	<b>Tennessee</b>	Coffee
	La Salle		Pottawatomie		Seward		Dickson
	Lee		Riley				Lawrence
	Madison		Shawnee	<b>New Mexico</b>	Chaves		Marion
	Marshall						Maury
	Mason	<b>Kentucky</b>	Barren	<b>Ohio</b>	Lucas		Williamson
	Massac		Edmonson		Ottawa		Wilson
	Monroe		Fleming		Wayne		
	Morgan		Grayson			<b>Texas</b>	Hidalgo
	Ogle		Hardin	<b>Oklahoma</b>	Craig		Nueces
	Peoria		Hart		Rogers		Pecos
	Pike		Nicholas				
	Putnam					<b>Utah</b>	Emery
	Randolph						
	Saline					<b>Washington</b>	Chelan
	Schuyler						Cowlitz
	Scott						Lewis
	St Clair						
	Tazewell						
	Union						
	Winnebago						
	Woodford						

**WEEDS CONTROLLED**

OLYMPUS™ effectively controls the following weeds when applied at the rates and application timings shown and weeds are actively growing. Best control is achieved when grass weeds are treated at the 2-leaf to 2-tiller stage of growth and before broadleaf weeds are larger than 2 inches in diameter.

Common name	Scientific name	Fall Application Rates		Spring Application Rates	
		0.6 oz/A	0.9 oz/A	0.6 oz/A	0.9 oz/A
<b>Grasses</b>					
Cheat (true cheat) <sup>2</sup>	<i>Bromus secalinus</i>	C	C	C	C
Dense silky-bent (Windgrass)	<i>Apera spica-venti</i>	C	C	C	C
Downy brome <sup>3</sup>	<i>Bromus tectorum</i>	S	C	S	S
Foxtail barley	<i>Hordeum jubatum</i>	C	C	C	C
Hood canarygrass	<i>Phalaris paradoxa</i>	C	C	C	C
Japanese brome <sup>1</sup>	<i>Bromus japonicus</i>	C	C	C	C
Jointed goatgrass <sup>5</sup>	<i>Aegilops cylindrica</i>	-	S	-	S
Littleseed canarygrass	<i>Phalaris minor</i>	C	C	C	C
Quackgrass	<i>Elytrigia repens</i>	S	S	S	S
Rattail fescue	<i>Vulpia myuros</i>	S	S	S	S
Rescuegrass	<i>Bromus catharticus</i>	-	S	-	S
Ripgut brome	<i>Bromus rigidus</i>	S	C	S	C
Soft chess	<i>Bromus commutatus</i>	C	C	C	C
Wild oat <sup>4</sup>	<i>Avena fatua</i>	S	C	S	C
Windgrass	<i>Apera interrupta</i>	C	C	C	C
<b>Broadleaves</b>					
Black mustard	<i>Brassica nigra</i>	C	C	C	C
Blue mustard	<i>Chorispora tenella</i>	C	C	S	C
Burr buttercup	<i>Ranunculus testiculatus</i>	C	C	C	C
Bushy wallflower	<i>Erysimum repandum</i>	S	C	S	C
Field pennycress	<i>Thlaspi arvense</i>	C	C	C	C
Flixweed	<i>Descurania sophia</i>	C	C	C	C
Henbit	<i>Lamium amplexicaule</i>	S	S	-	S
Mouseear chickweed	<i>Cerastium vulgatum</i>	S	C	-	-
Pigweed, redroot	<i>Amaranthus retroflexus</i>	-	S	C	C
Rape (volunteer)	<i>Brassica rapa</i>	C	C	C	C
Shepherdspurse	<i>Capsella bursa-pastoris</i>	C	C	C	C
Small seeded falseflax	<i>Camelina micropora</i>	C	C	C	C
Tall wormseed wallflower	<i>Erysimum cheiranthoides</i>	C	C	C	C
Tansy mustard	<i>Descurania pinnata</i>	C	C	C	C
Tumble mustard	<i>Sisymbrium altissimum</i>	C	C	C	C
Wild buckwheat	<i>Polygonum convolvulus</i>	-	-	-	S
Wild mustard	<i>Brassica kaber</i>	C	C	C	C
Wild turnip	<i>Brassica campestris</i>	C	C	C	C
<b>Note: C means Control S means Suppression</b>					
Suppressed weeds will be stunted in growth and/or be reduced in number as compared to non-treated areas but performance will not be commercially acceptable.					

<sup>1, 2</sup>For field infestations consisting of Japanese brome or cheat (true cheat) only, control may be achieved up to a maximum growth stage of 6-tillers.

<sup>3</sup> When weeds are exposed to unfavorable environmental conditions (severe weather conditions, drought, extreme temperatures, etc.), control may be reduced. Applications should be made to actively growing weeds.

<sup>4</sup> When used according to label directions, wild oat will be controlled in Idaho, Montana, Oregon and Washington. Wild oat will be suppressed in areas where OLYMPUS™ is labeled for use outside these four states.

<sup>5</sup> Fall and Spring sequential applications required. See Table 1 application information.

**TANKMIXES**

For broad-spectrum control of both annual grasses and broadleaf weeds, OLYMPUS™ may be mixed with broadleaf herbicides. With all tank-mix partners, read and follow use directions, rates, precautions, timing and growth stage limitations, recropping restrictions, grazing interval restrictions and recommendations on the broadleaf herbicide and surfactant labels. A non-ionic surfactant is always required with Olympus™ (see “**SURFACTANT**” section).

Possible tank-mix partners include:

Amber®	BRONATE ADVANCED™	HUSKIE™	SENCOR® *
Aim™	BUCTRIL®	Harmony® GT, Harmony® Extra	Starane™, Starane Ultra™, Starane NXT™
Ally®, Ally Extra®	Clarity®	MCP Amine or Ester	2,4-D Amine or Ester **
Affinity Tankmix, Affinity Broadspec®	Curtail®, Curtail® M	Peak®	WideMatch®
Banvel® **	Finesse®	Rave™	

\* Spring application in tank-mix combination with SENCOR® may result in reduced control of wild oat.

\*\* Applications with Banvel® or Clarity® (dicamba), Curtail® or 2,4-D Amine or Ester may result in reduced downy brome (*Bromus tectorum*) control.

Do not apply OLYMPUS™ in tankmixture with malathion, mancozeb, phosphorodithioate (Di-Syston®), chlorpyrifos (Lorsban™), or methyl parathion as unacceptable crop response may occur.

**MIXING INSTRUCTIONS**

Ensure the spray tank is clean. In-line strainers and nozzle screens should be clean and 50 mesh or coarser.

1. Fill the spray tank 1/4 to 1/2 full with clean water and begin agitation or bypass.
2. Add the appropriate rate of OLYMPUS™, as determined under "Recommended Rates", directly to the spray tank. Maintain sufficient agitation during both mixing and application.
3. Add the broadleaf weed herbicide.
4. Add the surfactant.
5. Fill the spray tank with balance of water needed.
6. Maintain sufficient agitation during both mixing and application of OLYMPUS™.

**RE-SUSPENDING WG PRODUCTS IN SPRAY SOLUTION**

OLYMPUS™ may settle if left standing without agitation. If the spray solution is allowed to stand for one hour or more, re-agitate the spray solution for a minimum of 10 minutes before application.

**COMPATIBILITY**

If OLYMPUS™ is to be tank mixed with other herbicides, compatibility should be tested prior to mixing. To test for compatibility, use a small container and mix a small amount (0.5 to 1qt) of spray solution, combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. Indications of incompatibility usually occur within 5-15 minutes after mixing. Read and follow the label of each tank mix product used for precautionary statements, directions for use, geographic and other restrictions. Indications of incompatibility include separation in the mix, and either clumping or clabbering of the mixture.

**TANK CLEANUP PROCEDURE**

1. Drain the tank completely, and then wash out tank, boom and hoses with clean water. Drain again.
2. Half fill the tank with clean water and add ammonia (i.e., 3% domestic ammonia solution) at a dilution rate of 1% (i.e., 1 gallon of domestic ammonia for every 100 gallons of rinsate). Complete filling of the tank with water. Agitate/recirculate and flush through boom and hoses. Leave agitation on for 10 minutes. Drain tank completely.
3. Repeat step 2.
4. Remove nozzles and screens and soak them in a 1% ammonia solution. Inspect nozzles and screens and remove visible residues.
5. Flush tank, boom, and hoses with clean water.
6. Inspect tank for visible residues. If present, repeat step 2.

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## SPRAY DRIFT MANAGEMENT

OLYMPUS™ Herbicide is not volatile. Damage to sensitive crops can occur as a result of spray drift. Spray drift can be managed by several application factors and by spraying under the appropriate climatic conditions. Consequently, avoidance of spray drift is the responsibility of the applicator and grower.

**SENSITIVE AREAS:** The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitats for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

Avoiding spray drift at the application site is the responsibility of the applicator and grower. The interaction of many equipment-and-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 or 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.

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
3. All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.

Where states have more stringent regulations, they shall be observed. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

### INFORMATION ON DROPLET SIZE:

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions below).

Uniform, thorough spray coverage is important to achieve consistent weed control. Select nozzles and pressure that deliver **COARSE** spray droplets as indicated in nozzle manufacturer's catalogs and in accordance with ASAE Standard S-572. Nozzles that deliver **COARSE** spray droplets may be used to reduce spray drift provided spray volume per acre (GPA) is increased to maintain coverage of weeds.

### CONTROLLING DROPLET SIZE:

- Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure - 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 the 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 3/4 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.

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

### SWATH ADJUSTMENT:

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

### WIND:

Drift potential is lowest between wind speeds of 2 - 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given 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.

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For all non-aerial applications, wind speed must be measured adjacent to the application site, on the upwind side, immediately prior to application.

**TEMPERATURE AND HUMIDITY:**

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. Avoid spraying during conditions of low humidity and/or high temperatures.

**TEMPERATURE INVERSIONS:**

Do not make aerial or ground applications into areas of temperature inversions 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.

**RE-CROPPING GUIDELINES**

OLYMPUS™ breakdown in the soil is due mainly to microbial activity. It can be affected by soil temperature and moisture. Conditions that accelerate the breakdown of OLYMPUS™ include adequate soil moisture and adequate soil temperatures to support microbial activity. Likewise, OLYMPUS™ breakdown can be slowed under dry, cold conditions. When considering crop rotations, soil moisture and soil temperature conditions since application should be monitored.

To ensure safety of rotational crops, the following cumulative precipitation and rotational intervals must be followed:

**Oklahoma, Kansas, Nebraska, Texas**

Crop	Cumulative Precipitation (Inches)	Rotation Interval (Months)
Wheat	0	0
Proso Millet	10	4
Soybean STS™	10	4
Cotton	24	12
Sorghum (grain)	24	12
Sunflower	24	12
Soybean - Conventional	24	12
Corn – Conventional	30	18

**Washington, Oregon, Idaho**

Crop	Cumulative Precipitation (Inches)	Rotation Interval (Months)
Wheat	0	0
Chickpea	24	12
Field Peas	24	12
Spring Barley	24	18
Lentils	24	18
Canola	24	22
Potato	24	22

**Colorado, Montana, Wyoming, North Dakota, South Dakota**

Crop	Cumulative Precipitation (Inches)	Rotation Interval (Months)
Wheat	0	0
Proso Millet	10	4
Corn – Conventional	24	22

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**NOTE:** In areas where a crop is not specified or the accumulated precipitation was less than specified above, conduct a field bioassay as described in the "**FIELD BIOASSAY**" section of the label. In all areas, 24 inch rainfall and 24 month rotation interval are required for buckwheat, onions, oats, and sugarbeets.

**FIELD BIOASSAY**

A field bioassay must be conducted for crops not listed on this label and for crops where cumulative precipitation requirements are not satisfied or for crops listed on the label for which a shorter plant-back interval than listed is desired. To conduct a field bioassay, plant strips of the crop you want to grow the season following OLYMPUS™ application. Monitor the crop for response to OLYMPUS™ to determine if the crop can be grown safely in previously treated OLYMPUS™ areas.

Regardless of the bioassay results, do not plant any crop, except wheat, closer than 4 months after application.

**WEED RESISTANCE**

OLYMPUS™ is an acetolactate synthase (ALS) inhibiting herbicide. Some weed populations may contain plants naturally resistant to OLYMPUS™ or other herbicides with the same mode of action (ALS/AHAS enzyme inhibitors). Repeated use of herbicides with the same mode of action allows resistant weeds to spread. To manage the spread of resistant weed populations, use herbicides with different modes of action in tankmixture, rotation, or in conjunction with alternate cultural practices.

The use of OLYMPUS™ should conform to resistance management strategies established for the use area. Consult your agricultural advisor for resistance management strategies and recommended pest management practices for your area.

**PRECAUTIONS FOR USE**

- Use adjuvants as specified on this label.
- OLYMPUS™ is rainfast 4 hours after application to most weed species. Rainfall within 4 hours may necessitate retreatment or may result in reduced weed control.
- Injury may occur when Olympus is applied to wheat planted in soils with a pH greater than 8 or less than 5 due to an unfavorable soil environment stressing overall plant growth. This response may be further exacerbated by a rain or an irrigation event.
- Applications should be made to actively growing weeds. Weed control may be reduced when weeds are under stress due to severe weather conditions, drought, very cold temperatures, etc. Weed control may be reduced if the herbicide application is made under dry, dusty conditions – especially in the wheel track areas.
- Wheat forage may be grazed immediately after OLYMPUS™ application.
- Wheat may be harvested for grain and straw 71 days after OLYMPUS™ application.
- Not recommended for use in the San Luis Valley, CO.

**RESTRICTIONS FOR USE**

- Do not apply OLYMPUS™ to crops undersown with grass and legume species.
- Do not apply more than 1.2 oz/acre of OLYMPUS™ in one winter wheat growing season.
- Do not apply when wind causes drift to off-site vegetation as injury may occur. Small amounts of OLYMPUS™ via drift or tank contamination can cause severe damage to crops other than wheat. Careful management of spray drift and tank cleanout is required.
- Do not apply OLYMPUS™ in tankmixture with malathion, mancozeb, phosphorodithioate (Di-Syston®), chlorpyrifos (Lorsban™), or methyl parathion as unacceptable crop response may occur.

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## IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

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