

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

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Jeffrey H. Birk, Ph.D. BASF Corporation P.O. Box 13528 Research Triangle Park, NC 27709

MAR 7 2013

Subject:

Notification; Per PR-Notices 98-10

Pylex Herbicide

EPA Reg. No. 7969-327

Date Submitted: February 15, 2013

Dear Dr. Birk:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notices (PRN) 98-10 dated February 15, 2013 for the product referenced above. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls 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 regarding this letter, please contact me at (703) 306-0415 or <a href="mailto:davis.kable@epa.gov">davis.kable@epa.gov</a>.

Sincerely,

Kable Bo Davis Product Manager 25 Herbicide Branch

Registration Division (7505P)

United States Environmental Protect Washington, DC 20	tion Agenc 0460	y	Am ✓ Oth	jistration endment	OPP Identifier Number
Applicat	ion for Pes	ticide - Sect	tion I		
1. Company/Product Number 7969-327	l l	EPA Product Mana athryn Montagu	-	3. P	roposed Classification
4. Company/Product (Name) Pylex Herbicide	PN 23		-		None Restricted
5. Name and Address of Applicant (Include ZIP Code)	6.	Expedited Rev	eiw. In ac	cordance with	r FIFRA Section 3(c)(3)
BASF Corporation P.O. Box 13528 Research Triangle Park, NC 27709	(b)	(i), my product is	s similar or	identical in co	omposition and labeling
Check if this is a new address	P	roduct Name _			
	Section	n - II			
Amendment - Explain below.  Resubmission in response to Agency letter dated  Notification - Explain below.		Final printed Agency lette "Me Too" A Other - Expl	er dated pplication.	NOT	IFICATION
				MA	R - 7 2013
Notification for Pylex herbicide (7969-327). This notification is condition of the changes have been made to the labeling or the confiden 1001 to willfully make any false statement to EPA. I further under enforcement action and penalties under sections 12 and 14 of FIF This notification is not subject to a fee under PRIA. Contact Jeff E	tial statement of stand that if this FRA. Birk at 919-547-2	formula of this prod notification is not co 622 (phone), 919-5	uct. I unders onsistent with	stand that it is a v n violation of FIFI	violation of 18 U.S.C. Sec. RA and I may be subject to
	Section	- 111			
1. Material This Product Will Be Packaged In:					
Child-Resistant Packaging  Yes  No  No  No	Water Solu Yes No	ble Packeging	2. Ty	pe of Contained Metal Plastic Glass	
* Certification must be submitted   If "Yes"   No. per Unit Packaging wgt.   No. per container	If "Yes" Package w	No. per gt container		Paper Other (	Specify)
3. Location of Net Contents Information 4. Size(s) R	etail Container		5. Location	of Label Directi	ons
6. Manner in Which Label is Affixed to Product Lithor Pape Sten	ograph or glued ciled	Other			
	Section	- IV			
1. Contact Point (Complete items directly below for identificat	ion of individual	to be contacted, i	f necessary	, to process this	application.)
Name Jeffrey H. Birk	Title Product Reg	istration Managei		Telephon 5919-547-	e No. (Include Area Code) -2622
Certific I certify that the statements I have made on this form an I acknowledge that any knowlingly false or misleading so both under applicable law.	d all attachmen				6. Date Application Facetived (Stamped)
2. Signature	3. Title				( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (
MAN	Product Regis	stration Manager	·*		( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (
4. Typed Name	5. Date				
Jeffrey H. Birk		February 15,	2013		



# The Chemical Company

February 15, 2013

Document Processing Desk (NOTIF)
Ms. Kathryn Montague
Product Management (23)
Registration Division (H-7505C)
Office of Pesticide Programs
U.S. Environmental Protection Agency
2777 S. Crystal Drive
Arlington, VA 22202

RE: Notification: Primary brand name change

Pylex herbicide (EPA Reg. No. 7969-327)

Dear Ms. Montague:

BASF is submitting a notification for the change in the primary brand name from Topramezone 2.8 SC Turfgrass herbicide to **Pylex herbicide**.

This submission includes the following administrative documents:

- EPA Application form 8570-1
- Certification with Respect to Label Integrity
- Electronic copy of the Pylex herbicide labeling
- Pylex herbicide label

This notification does not require a PRIA fee.

Thank you for your assistance with this matter. If you should have any questions, please feel free to call me at (919) 547-2622.

Regards,

Jeffrey H. Birk, Ph.D. Regulatory Manager Phone 919-547-2622

Fax: 919-547-2850

Email: jeffrey.birk@basf.com

26 Davis Drive, Research Triangle Park, North Carolina 27709-3528 Telephone (919) 547-2830

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NOTIFICATION MAR - 7 2013

# For postemergence control of broadleaf and grass weeds in select turfgrass species on golf courses, sod farms and residential turfgrass

Active Ingredient:	
topramezone: [3-(4,5-dihydro-isoxazolyl)-2-methyl-4-(methylsulfonyl)	
ohenyl](5-hydroxy-1-methyl-1 <i>H-</i> pyrazol-4-yl)methanone	29.79
Other Ingredients:	70.39
Total:	100.09
gallon contains 2.8 pounds of topramezone free acid.	

EPA Reg. No. 7969-327

EPA Est. No.

# KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCION

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

See inside for First Aid, Precautionary Statements, Directions For Use, and Conditions of Sale and Warranty.

In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).

**Net Contents:** 



The Chemical Company

<ul> <li>Take off contamined clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have a 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>
<ul> <li>Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after first 5 minutes; then continue rinsing eyes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
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ou when calling a poison control center or doctor or going for trea

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 at 1-800-832-HELP (4357).

# **Precautionary Statements**

#### **Hazards to Humans and Domestic Animals**

**CAUTION.** Harmful if absorbed through skin. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wear long-sleeved shirt and long pants, socks, shoes, and gloves. Wear protective eyewear.

# Personal Protective Equipment (PPE)

Some materials that are chemically 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 Category A
- Shoes plus socks
- · Goggles, face shield, or safety glasses

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

#### **USER SAFETY RECOMMENDATIONS**

#### Users should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove and wash contamined clothing before reuse.

# **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.

#### **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** contaminate water when disposing of equipment washwaters or rinsate. **DO NOT** apply this product through any type of irrigation system.

This product is toxic to aquatic and terrestrial plants. Minimize exposure to nontarget plants. **DO NOT** apply when weather conditions favor drift from target areas.

Product must be used in a manner that will prevent backsiphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsate.

## **Directions For Use**

It is a violation of federal law to use this product in a manner inconsistent with its labeling. **DO NOT** apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

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

**DO NOT** enter or allow worker entry into treated areas during the restricted-entry interval (REI) of **12 hours**.

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

- Coveralls
- Chemical-resistant gloves Category A
- · Shoes plus socks

## NONAGRICULTURAL USE REQUIREMENTS

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

**DO NOT** enter or allow people or pets to enter the treated area until sprays have dried.

**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.

All applicable directions, restrictions, precautions and **Conditions of Sale and Warranty** are to be followed. This labeling must be in the user's possession during application.

#### STORAGE AND DISPOSAL

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

#### **Pesticide Storage**

Store product in original container only. Store product in a cool, dry place. **DO NOT** store this product under wet conditions. If this product has been stored where freezing temperatures have occurred, agitate or mix contents of container well before use. Avoid cross-contamination with other pesticides.

#### STORAGE AND DISPOSAL (continued)

# **Pesticide Disposal**

Wastes resulting from the use of 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.

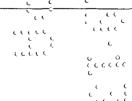
# **Container Handling**

Nonrefillable Container. DO NOT reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Triple rinse containers small enough to shake (capacity ≤ 5 gallons) as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Triple rinse containers too large to shake (capacity > 5 gallons) as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing rezz/s in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.



(continued)

# 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:

- Dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal.
- Remove contaminated clothing, and wash affected skin areas with soap and water.
- Wash clothing before reuse.
- Keep the spill out of all sewers and open bodies of water.

#### **Product Information**

**Pylex™ herbicide** may be applied postemergence to residential (spot spray only) and nonresidential turfgrass including:

- Airports
- Athletic fields
- Cemeteries
- Golf courses
- Grounds or lawns around residential and commercial establishments
- Houses of worship
- Military and other institutions
- Single/Multifamily dwellings
- Parks
- Picnic grounds
- Roadsides
- Schools
- Sod farms

**Pylex** is a broad-spectrum systemic postemergence herbicide for control or suppression of broadleaf and grass weeds in select turfgrass species:

- Bluegrass, Kentucky
- Centipedegrass
- Fescue, fine
- Fescue, tall
- Ryegrass, perennial

When applied as directed, **Pylex** will control or suppress the broadleaf and grass weeds listed in **Table 1**. Applications of **Pylex** must include spray additives for acceptable weed control. See **Spray Mix Additives** for details.

#### Mode of Action

**Pylex** is absorbed by leaves, roots, and shoots and is translocated to the growing points of susceptible weeds. **Pylex** controls weeds by inhibiting carotenoid biosynthesis [HPPD inhibitor (**Group 27**)]. Soon after application, treated weeds turn white because of chlorophyll loss and growth stops. Affected weeds then become necrotic and are controlled.

# Resistance Management

While weed resistance to HPPD-inhibiting herbicides is relatively infrequent, populations of resistant biotypes are known to exist. Resistance management practices include:

- Following labeled application rate and weed growthstage recommendations
- Avoid multiple repeat applications of herbicides with the same mode of action
- Using tank mixes and sequential applications with other effective herbicides possessing different modes of action

#### **Use Information**

Apply **Pylex** to actively growing weeds as a postemergence broadcast or spot spray in labeled turfgrass species at the specified rate and growth stage in **Table 1** and **Table 2**. **DO NOT** exceed the labeled application rate or fail to comply with use specifications in **Restrictions** and **Limitations**.

For best results, weeds should be actively growing and not under stress from lack of water, excessive water, low fertility, mowing shock, excessive hot or cold temperatures, or injury from other herbicide applications.

To achieve consistent weed control, a crop oil concentrate (COC) or methylated seed oil (MSO) adjuvant is required. See **Table 1** and **Table 2** for rates.

#### **Turfgrass Tolerance**

Apply **Pylex** during favorable growing conditions for optimum turfgrass tolerance and weed control. Turfgrass under environmental stress is more likely to show injury, such as transient bleaching, from herbicide applications. These symptoms are temporary, and turfgrass vigor is not affected.

# **Spot Applications**

Postemergence spot applications of **Pylex** may be made to susceptible weeds in tolerant turfgrass species. Apply 0.023 to 0.034 fl oz (0.7 to 1.0 mg) of **Pylex** per 1000 square feet of treated area. Spray coverage should be uniform and complete. See **Table 2** for spot spray mix amounts.

NOTE: Application to residential turfgrass and athletic fields is limited to spot spray only. Heter to Special Use Directions for Residential Turfgrass and Athletic Fields section of this label for details.

## **Mowing Information**

To maximize weed control and minimize potential turfgrass injury, **DO NOT** mow 2 days before through 2 days after applying **Pylex™ herbicide**.

#### Irrigation and Rainfall

If soil moisture is not sufficient prior to **Pylex** application, irrigation may improve weed control. For best results, **DO NOT** water or irrigate for 24 hours after application.

## **Extended Residual Grass Control**

To extend residual control of annual grass weeds, Pylex may be tank mixed with herbicides including Pendulum® 3.3 EC herbicide, Pendulum® AquaCap™ herbicide, PRE-M® 3.3 EC turf herbicide, PRE-M® AquaCap™ herbicide, or Tower® herbicide. Consult the respective tank mix labels for additional weeds controlled and follow the information in the Mixing Order section of this label.

# Seeding/Overseeding/ New Seeding/Renovation

**Pylex** can be used for weed control during turf establishment.

Pylex Use During Tolerant Turfgrass Establishment.

When establishing new turfgrass from seed, **Pylex** can be applied anytime before or after seeding with the exception of a 28-day period after seeding. **DO NOT** apply **Pylex** for a period of 28 days after seeding tolerant turfgrass.

	Days After Seeding	
Apply	DO NOT Apply	Apply
D	ay 1 C	ay 28

# **Spray Mix Additives**

Crop oil concentrate or methylated seed oil are the preferred adjuvants for postemergence applications. See **Table 1** and **Table 2** for adjuvant rates. **Pylex** use with nonionic surfactants (NIS) or blends is not recommended because it may not provide satisfactory weed control.

Crop oil concentrate or methylated seed oil used as an adjuvant with **Pylex** must meet all the following criteria:

- Nonphytotoxic
- · Provide good mixing quality in the jar test
- Successful in local experience

The exact composition of suitable products will vary; however, any COC or MSO used should contain emulsifiers to provide good mixing quality.

When an adjuvant (or a specific adjuvant product, such as a drift control agent) is to be used with this product, the use of a Chemical Producers and Distributors Association (CPDA) certified adjuvant is recommended. Consult your local BASF representative or distributor for instructions for your area.

# **Compatibility Test for Mix Components**

Add components in the following sequence using 2 teaspoons for each pound or 1 teaspoon for each pint of labeled rate per acre.

- Water For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Use only water from the intended source at the source temperature.
- 2. Products in PVA bags Cut an opening in the water-soluble PVA bag just large enough to use a teaspoon for measuring purposes. Use the opened water-soluble PVA bag first when preparing spray solution. Boron-containing fertilizers may be incompatible with PVA material. Include PVA material if a boron fertilizer is intended to be used. Cap the jar and invert 10 cycles.
- Water-dispersible products (dry flowables, wettable powders, suspension concentrates including Pylex, or suspo-emulsions) - Cap the jar and invert 10 cycles.
- 4. Water-soluble products Cap the jar and invert 10 cycles.
- Emulsifiable concentrates (including COC or MSO) -Cap the jar and invert 10 cycles.
- 6. **Water-soluble additives** Cap the jar and invert 10 cycles.

Let the solution stand for 15 minutes and evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface or thick (clabbered) texture. For water-dispersible granule (WG) or wettable powder (WP) products, a fine precipitate that is easily resuspended is normal; large, nondispersible particles (> 300 microns) that precipitate on standing are a sign of tank mix incompatibility. **DO NOT** use any spray solution that could clog spray nozzles.

#### **Mixing Order**

Thoroughly mix **Pylex** before dispensing from container.

Maintain constant agitation throughout mixing and application.

- Water Begin by agitating a thoroughly clean sprayer tank 3/4 full of clean water.
- 2. **Inductor** If an inductor is used, rinse it thoroughly after each component has been added.
- 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 tark before continuing.
- 4. Water-dispersible products (dry flowables, wettable powders, suspension concentrates including Pylex, or suspo-emulsions)
- 5. Water-soluble products
- 6. Emulsifiable concentrates (including COC or MSO)
- 7. Water-soluble additives (including chelated inor or soluble nitrogen fertilizer when applicable; not all chelated iron or sprayable nitrogen fertilizers are compatible with Pylex) Always perform a compatibility fest to ensure proper mixing. See Compatibility Test for Mix Components section of label for directions.

8. Remaining quantity of water

Maintain constant agitation during application.

# **Cleaning Spray Equipment**

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

# **Application Instructions**

Apply with properly calibrated ground equipment in sufficient water per acre to provide uniform spray distribution (at least 30 gallons of water per acre or at least 0.75 gallon per 1000 sq ft). Use low-pressure sprayers delivering between 20 and 40 psi. Maintain continuous agitation during spraying with good mechanical or bypass agitation. Nozzle screens must be no finer than 50 mesh (100 mesh is finer than 50 mesh).

Check sprayer routinely to determine proper calibration. Flat fan, flood, or cone nozzles may be used. Arrange nozzles for uniform coverage of turfgrass and weeds. Adjust boom height, nozzle selection, and pressure to provide uniform coverage and minimize spray drift. Prevent overlaps that will increase rates above those labeled for use. Avoid application when winds may cause drift.

# Spray Drift Management

Many factors including weather conditions (e.g. wind direction, wind speed, temperature, relative humidity) and method of application can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Use only medium or coarser spray nozzles according to ASAE (S572) definition of standard nozzles.

For ground-boom applications, **DO NOT** apply with a nozzle height greater than 2 feet above the target site.

**DO NOT** apply at wind speeds greater than 10 mph.

When applying at wind speeds less than 3 mph, the applicator must determine if conditions of temperature inversion exist or stable atmospheric conditions exist at or below nozzle height. **DO NOT** make applications into areas of temperature inversion or stable atmospheric conditions.

#### **Restrictions and Limitations**

- DO NOT apply more than 2.0 fl ozs of Pylex™
   herbicide per acre (0.046 fl oz per 1000 sq ft) per application.
- DO NOT apply more than 4.0 fl ozs Pylex (0.089 lb ai) per acre (0.092 fl oz per 1000 sq ft) per year.
- DO NOT apply to golf course collars or greens.
- Maintain a 5-ft buffer between treated areas and bentgrass greens.
- DO NOT make applications of Pylex to droughtstressed turfgrass and/or drought-stressed weeds.

- Except for control or suppression of the following, DO NOT apply to Bahiagrass, Bermudagrass, buffalograss, carpetgrass, creeping bentgrass, St. Augustinegrass, seashore paspalum, zoysiagrass, dichondra, or desirable clover.
- Direct spray, drift, or runoff will injure nontolerant turfgrass and ornamentals. DO NOT apply during conditions favoring drift from the target area. DO NOT apply within ornamental beds or to areas where runoff into those areas is likely to occur.
- DO NOT apply to exposed feeder roots of trees or ornamentals or within the dripline of trees and other ornamental species.
- **DO NOT** use clippings as mulch around flowers, ornamentals, trees, or in vegetable gardens.
- **DO NOT** apply through any type of irrigation system.
- **DO NOT** use to formulate or reformulate any other pesticide product that is not registered by EPA.
- DO NOT apply Pylex by air.
- DO NOT apply an organophosphate or carbamate insecticide within 7 days of applying Pylex or turfgrass injury may result.
- To reduce movement into sensitive species such as bentgrass, avoid foot and vehicle traffic until spray has dried.

#### **Turfgrass Tank Mixes**

Read and follow the applicable restrictions and limitations and directions for use on all products involved in tank mixing. The most restrictive label applies to any tank mix. To control additional broadleaf weed species, a tank mix with **Onetime® herbicide**; 2,4-D; triclopyr; or other broadleaf herbicide may be used. To increase control of grass weeds, a tank mix with **Drive® XLR8 herbicide** or **Onetime** may be used. For extended residual control, apply **Pylex** with **Pendulum® 3.3 EC herbicide**, **Pendulum® AquaCap™** herbicide, **PRE-M® 3.3 EC turf herbicide**, **PRE-M® AquaCap™** herbicide, or **Tower®** herbicide.

The transitory whitening (bleaching) intensity of susceptible weed species from **Pylex** can be reduced with tank mix mixtures of **Drive XLR8**, **Onetime**, or triclopyr. Consult labels for turfgrass tolerance when tank mixing.

Physical incompatibility, reduced week control, or turfgrass injury may result from mixing **Pylox** with other pesticides (fungicides, herbicides, insecticides, ear miticides); additives, or fertilizers. Before tank mixing, a jar test is required to ensure compatibility of herbicides or, other pesticides and/or additives. Refer to manufacturer's labels for specific use directions, precautions, and limitations before tank mixing with **Pylex**. Follow those that are most restrictive.

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Table 1. Postemergence Weed Control\* in Turfgrass

Weed Species	Broadcast Application Rate	Additive Rate		
Annual Grass Weeds Controlled				
Barnyardgrass Crabgrass, large Crabgrass, smooth Crabgrass, southern Cupgrass, woolly Foxtail, giant Foxtail, green Foxtail, yellow Goosegrass Johnsongrass, seedling Millet, wild proso Panicum, fall Shattercane	1.0 to 1.5** fl ozs/A or 0.023 to 0.034 fl oz/1000 sq ft (0.7 to 1.0 ml)	COC or MSO 0.5 to 1% volume/volume (v/v) (2 to 4 qts/100 gallons of spray)		
Signalgrass, broadleaf Stiltgrass, Japanese				
Perennial Grass Weeds Controlle	d/Suppressed			
Bentgrass, creeping <sup>2</sup> Bermudagrass, common <sup>2</sup> Dallisgrass Nimblewill	Option A  3 applications at 1.0 to 1.33 fl ozs/A or 0.023 to 0.030 fl oz/1000 sq ft (0.7 to 0.9 ml) applied on a 3 to 4 week spray interval Initiate first application mid-to-late summer or approximately 9 weeks to 12 weeks prior to fall reseeding period for cool-season grasses. Reseeding will aid in the percent conversion of ground cover back to the desired cool-season grass species.  Option B  2 applications at 1.5** fl ozs/A or 0.034 fl oz/1000 sq ft (1.0 ml) applied on a 3 to 4 week spray interval Initiate first application late summer or approximately 6 weeks to 8 weeks prior to fall reseeding period for cool-season grasses.	COC or MSO 0.5 to 1% v/v (2 to 4 qts/100 gallons of spray)		



Table 1. Postemergence Weed Control\* in Turfgrass (continued)

Weed Species	Broadcast Application Rate	Additive Rate		
Broadleaf Weeds Controlled <sup>3</sup>		1		
Amaranth, Palmer	1.0 to 1.5** fl ozs/A	COC or MSO		
Amaranth, Powell	or	0.5 to 1% v/v		
Burcucumber	0.023 to 0.034 fl oz/1000 sq ft	(2 to 4 qts/100 gallons of spray)		
Carpetweed	(0.7 to 1.0 ml)			
Chickweed, common				
Clover, large hop				
Clover, white				
Cocklebur, common				
Dandelion, common				
Galinsoga, hairy				
Ground ivy				
Horseweed (Marestail)				
Jimsonweed		ļ		
Kochia		1		
Lambsquarters, common				
Mallow, common	·			
Mallow, Venice				
Morningglory spp.				
Mustard spp.				
Nightshade, black				
Nightshade, Eastern black				
Nightshade, hairy				
Oxalis (Yellow wood sorrel)				
Pigweed, prostrate				
Pigweed, redroot				
Pigweed, smooth	·			
Pigweed, tumble				
Prickly lettuce				
Ragweed, common				
Ragweed, giant		· ·		
Shepherd's-purse				
Sida, prickly				
Smartweed, ladysthumb				
Smartweed, Pennsylvania				
Speedwell (Veronica spp.)				
Sunflower, wild (common)				
Thistle, Canada		İ		
Thistle, Russian				
Velvetleaf				
	}			
Waterhemp				

<sup>\*</sup> Under certain conditions, a single application of **Pylex<sup>TM</sup> herbicide** may not provide complete control. A şequential application of an additional 1.0 to 1.5 fl ozs/A of **Pylex** 2 to 3 weeks after initial treatment may be necessary.

<sup>\*\*</sup>Use rate may be increased up to 2.0 fl ozs/A (0.046 fl oz/1000 sq ft) in Kentucky bluegrass only.

¹To improve control of annual grass weeds, make applications before the fourth tiller growth stage. Use the 1.0 fl oz/A rate for annual grass weeds up to the second tiller growth stage. For annual grass weeds in the 2 to 4 tiller stage, apply 1.5 fl ozs/A.

<sup>&</sup>lt;sup>2</sup> Control of these species requires a tank mix with triclopyr ester at 32 fl ozs/A (1 lb ae/A).

<sup>&</sup>lt;sup>3</sup> To improve control of broadleaf weeds, make applications at early growth stages. To increase breadleaf weed species control spectrum, a tank mix with **Onetime® herbicide**; 2,4-D; triclopyr; or other broadleaf herbicide may be used.

# Special Use Directions for Residential Turfgrass and Athletic Fields

**Pylex™ herbicide** may be used in residential turfgrass areas and athletic fields on Kentucky bluegrass, centipedegrass, fine fescue, tall fescue, and perennial ryegrass to control weeds listed in **Table 1**. However, applications **must be** limited to **spot applications** according to the following instructions.

Apply 0.023 to 0.034 fl oz (0.7 to 1.0 ml) **Pylex/1000** sq ft of treated area as follows in **Table 2** for spot spray mixture amounts.

Table 2. Spot Spraying with Pylex at 1 gallon/1000 sq ft Spray Volume

Spray Mix	Pylex in Mix				COC or MSO	Area Covered
Volume	0.023 fl oz per 1000 sq ft¹         0.030 fl oz per 1000 sq ft²         0.034 fl oz per 1000 sq ft³         0.046 fl oz per 1000 sq ft³		in Mix			
(gallons)	(ml)	(ml)	(ml)	(ml)	(ml)	(sq ft)
1	0.7	0.9	1.0	1.4	30 (2 Tbls*)	1000
2	1.4	1.8	2.0	2.8	60 (4 Tbls*)	2000
3	2.1	2.7	3.0	4.2	90 (6 Tbls*)	3000
4	2.8	3.6	4.0	5.6	120 (8 Tbls*)	4000

<sup>&</sup>lt;sup>1</sup> Equivalent to 1.0 fl oz of product per acre

# Mixing Instructions for Backpack and Pump-up Type Sprayers

Begin with a clean spray tank. Fill the spray tank 1/2 full with clean water. Add the required amount of **Pylex**. Because a small amount of **Pylex** is required for spot applications, use the following directions to ensure proper mixing. Measure **Pylex** required for specific spray volume according to **Table 2**. **DO NOT** add directly to the spray tank. Pre-mix in a small, sealable container (e.g. 8 to 16 fl ozs) filled 1/2 to 3/4 with water. Add contents to the spray tank. Cap sprayer and agitate to ensure mixing. Uncap sprayer and add appropriate amount of COC or MSO. Cap sprayer and agitate again. Uncap sprayer and finish filling tank to desired level. During application, periodically agitate the mixture to ensure mixing. If the mixture is allowed to settle for any period of time, thorough agitation is essential before spraying is resumed.

Apply spray mixture directly on sporadically occurring susceptible turfgrass weeds (see **Table 1**). For best results, apply on a spray-to-wet basis. Follow-up applications may be made if necessary (see **Table 1**). Use a spray colorant or indicator in the spray tank for more efficient spot applications.

DO NOT apply more than 4.0 fl ozs Pylex (0.089 lb ai) per acre (0.092 fl oz per 1000 sq ft) per year.



<sup>&</sup>lt;sup>2</sup> Equivalent to 1.33 fl ozs of product per acre

<sup>&</sup>lt;sup>3</sup> Equivalent to 1.5 fl ozs of product per acre

<sup>&</sup>lt;sup>4</sup> Equivalent to 2.0 fl ozs of product per acre; for use in Kentucky bluegrass only

<sup>\*</sup>Tbls = Tablespoons

# **Conditions of Sale and Warranty**

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 must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Plant 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. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

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