

81943-36

07/10/2009

Jacket

1/14



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

EPA Reg. Number:

81943-36

Date of Issuance:

JUL 10 2009

NOTICE OF PESTICIDE:

- x Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance:

conditional

Name of Pesticide Product:

Thrasher

Name and Address of Registrant (include ZIP Code):

Phoenix Environmental Care, LLC
PO Box 370
Valdosta, GA 31603-0370

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA provided that you:

- 1. Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data.
2. Make the following label changes:
a. The PPE section must be revised to the following:
PERSONAL PROTECTIVE EQUIPMENT (PPE)
Some materials that are chemical-resistant to this product are made of any waterproof material. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.
All mixers, loaders, applicators and other handlers must wear:
Long-sleeved shirt,
Long pants,
Shoes plus socks, and
Chemical-resistant gloves (except flaggers, or applicators in cockpits, and enclosed cabs)
See engineering controls for additional requirements.

Continued on Page 2

Signature of Approving Official:

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

Date:

JUL 10 2009

- b. Revise the following statement to include the text typed in **bold**:
“Follow manufacturer’s instructions for cleaning/maintaining PPE. If no such instructions for washables **exist**, use detergent and hot water. Keep and wash PPE separately from other laundry.”
 - c. The first paragraph of the Environmental Hazards section must be revised to the following:

“This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.”
 - d. Revise the “Recommended Rates and Timings” table with the following:
 1. Change the title to “Application Rates and Timings.” The word “recommended” implies that rates listed in the table are just suggestions and therefore can not be enforced.
 2. The maximum single use rates for this product are as follows:
48.0 fl. oz per acre
1.0 fl. oz per 1000 Sq. Ft.
The table must be revised to match these maximum use rates and all conflicting text must be removed.
 3. Add the following text below the table:
“APPLICATION RESTRICTIONS:
-Maximum single application rate: 1.5 lbs a.i. (48 fl. oz of product) per acre.
-Do not apply more than 1.5 lbs a.i. (48 fl. oz product) per acre per year.
-Preharvest Interval (PHI): Allow a minimum of 16 days between product application and sod harvesting.”
 - e. Revise the rate amounts in the ‘Rate Table for THRASHER Mixtures with Liquid Fertilizers’ to be based on a field rate of 1.5 lb ai/acre. In addition, replace “...rate recommended on the THRASHER label” with “...rate specified on the THRASHER label.”
 - f. Add the following statement below the Storage and Disposal heading:
“Do not contaminate water, food, or feed by storage and disposal.”
3. Submit one (1) copy of the revised final printed label for the record.
If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

3/14

Thrasher

SUSPENSION CONCENTRATE HERBICIDE

NOT FOR USE ON COMMERCIAL SOD FARMS IN ARIZONA
For sale and use by professional applicators only. Not for sale or use by homeowners/consumers.

ACTIVE INGREDIENTS:
Ethofumesate: (2-ethoxy-2,3-dihydro-3,3-dimethyl-5-benzofuranyl methanesulfonate)* 42%
OTHER INGREDIENTS: 58%
TOTAL: 100%
*This product contains 4 lbs. active ingredient per gallon.

Keep Out of Reach of Children CAUTION

FIRST AID	
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
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 1-888-875-1724 for emergency medical treatment information.	

Phoenix Environmental Care, LLC
PO Box 370
Valdosta, GA 31603-0370

Net Contents: _____ gallons
EPA Reg. No. 81943-xxxxx
EPA Est. No. _____

ACCEPTED
with COMMENTS
In EPA Letter Dated:
JUL 10 2009

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

81943-36

cccc
ccc
c
cccc
c
cccc
c
cccc
c
cccc
c
cccc
c
cccc

4/14

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed or inhaled. Avoid breathing vapor or spray mist.

On-Site Closed Mixing and Loading System Engineering Controls for Liquid Formulations

Mixers and loaders must use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)] for dermal protection, and must: -- wear the personal protective equipment required in the PPE section of this labeling for mixers and loaders (this must consist of long-sleeve shirt, long pants, shoes, socks, chemical-resistant gloves, and chemical-resistant apron, or be listed here), -- wear protective eyewear, if the system operates under pressure, and -- be provided and must have immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown: chemical-resistant footwear, and (insert the appropriate type of respirator, if there are inhalation concerns).

Enclosed Cabs for Aerial Applicators

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (6)].

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

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.

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

All mixers, loaders, applications, and other handlers must wear:

Long sleeved shirt, long pants, shoes and socks and chemical resistant gloves (except flaggers, or applicators in cockpits and enclosed cabs).

See engineering controls for additional requirements.

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 outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below mean high water mark. Do not apply when weather conditions favor drift from target area.

This pesticide is toxic to fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a

5/14

National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA. Do not contaminate water when disposing of equipment wastewaters.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not graze livestock on treated turf. Do not feed treated grass clippings to livestock. Read entire "Use Precautions," "Directions for Use," and "Disclaimer of Warranties" before using this product. 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.

Sod Farm Turf: Do not harvest treated sod for 16 days following application. For any requirements specific to your State or Tribe, consult the agency in your State responsible for pesticide regulation.

SPRAY DRIFT MANAGEMENT

This chemical can contaminate surface water through spray drift. A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of applications (e.g., ground, aerial) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Wind Speed: Do not apply at winds speeds greater than 15 mph.

Temperature Inversions: Do not make applications into areas of temperature inversion or stable atmospheric conditions.

SHAKE CONTAINER WELL BEFORE USING

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 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 for all crops, except turf grown for sod. The REI for turf is 9 days. The REI for each crop is listed in the directions for use associated with each crop.

For minimum early entry PPE use the following:

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
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material.

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated area.

6/14

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard 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.

Keep unprotected persons out of treated area until sprays have dried.

Professional pesticide applicators applying to residential turf, including home lawns, parks, and recreation areas must inform their customers that all persons and pets must be kept off the treated turf until sprays have dried.

GENERAL INFORMATION

THRASHER Herbicide is a suspension concentrate formulation containing 4 lbs. active ingredient per U.S. gallon for use on established perennial ryegrass, Kentucky bluegrass, creeping bentgrass, turf-type tall fescue, St. Augustinegrass, and dormant bermudagrass for the control and/or suppression of specific annual grasses and broadleaf weeds. It may also be used, as directed, after overseeding specific grasses.

THRASHER is intended for professional use only on the ornamental turf of sites such as golf courses, sod farms, parks, cemeteries, lawn of commercial establishments and homeowner lawns (see "Use Precautions" below).

THRASHER has both preemergent and early (2-leaf stage) postemergent activity; it is used most effectively in programs emphasizing both approaches.

WEED SPECIES CONTROLLED

PREEMERGENCE

Annual Grasses

Annual bluegrass	<i>Poa annua</i>	Green foxtail	<i>Setaria viridis</i>
Large crabgrass	<i>Digitaria sanguinalis</i>	Yellow foxtail	<i>Setaria glauca</i>
Smooth crabgrass	<i>Digitaria ischaemum</i>	Canarygrass	<i>Phalaris canariensis</i>
Barnyardgrass	<i>Echinochloa crus-galli</i>		

Annual Broadleaves

Burclover	<i>Medicago</i> sp.	Common purslane	<i>Portulaca oleracea</i>
Common chickweed	<i>Stellaria media</i>	Redroot pigweed	<i>Amaranthus retroflexus</i>

THRASHER will also reduce competition from:

Yellow nutsedge	<i>Cyperus esculentus</i>	Purple nutsedge	<i>Cyperus rotundus</i>
-----------------	---------------------------	-----------------	-------------------------

POSTEMERGENCE

Annual Grasses

Annual bluegrass	<i>Poa annua</i>
------------------	------------------

Annual Broadleaves

Common chickweed	<i>Stellaria media</i>	White clover	<i>Trifolium repens</i>
------------------	------------------------	--------------	-------------------------

PREEMERGENCE/EARLY POSTEMERGENCE

Annual Grasses

Smooth crabgrass	<i>Digitaria ischaemum</i>	Large crabgrass	<i>Digitaria sanguinalis</i>
------------------	----------------------------	-----------------	------------------------------

USE PRECAUTIONS

- THRASHER should be used only for recommended purposes and at the recommended rates (DO NOT OVERAPPLY).

- Avoid spray overlap or turf injury may occur.
- Use of a spray colorant or indicator in the spray tank is recommended so that spray pattern overlapping can be avoided.
- Do not apply with flood jet nozzles and hand-held sprayers, since treatments may not be uniform.
- DO NOT apply this product through any type of irrigation system.
- THRASHER application is most effective on healthy, vigorously growing turf.
- THRASHER may be applied to homeowner lawns by licensed or certified applicators. THRASHER is not intended for use by homeowners.
- Overseeding is recommended in conjunction with THRASHER applications to achieve conversion to desired turfgrass species and to avoid stand thinning due to annual bluegrass loss.
- When overseeding, use the rate of THRASHER recommended for the overseeded species. In mixed stands of established turfgrasses, use the rate recommended for the least tolerant species.
- Do not apply THRASHER within 8 weeks following the application of a Plant Growth Regulator. A THRASHER program may be initiated on creeping bentgrass 3 weeks after a single application of PRIMO* has been applied.
- THRASHER application is recommended for golf course fairways, roughs, and tees but at fairway-height only. Do not apply to putting greens.
- Do not apply THRASHER to zoysiagrass and hard or fine fescue; serious injury may result.

Spray Equipment, Application, and Precautions

Apply THRASHER Herbicide using standard, low pressure (20 to 50 psi) spray equipment. Spray equipment should be carefully calibrated before use and checked frequently during application. Addition of a spray indicator may improve treatment uniformity. The tank and line should be cleaned and rinsed **before and after** using THRASHER.

Varietal Tolerance

The following turfgrass cultivars have shown tolerance to THRASHER Herbicide; however, all species and varieties have not been tested.

Ethofumesate has been used safely on the following turfgrass cultivars, but its use is not strictly limited to these. Before large scale use of THRASHER on other cultivars, a tolerance test on a small area is recommended.

- **PERENNIAL RYEGRASS** – Acclaim, Blazer, Dasker, Derby, Elka, Fiesta, Goalie, Hunter, Linn, Loretta, Manhattan II, Palmer, Pennfine, Regal, Yorktown
- **KENTUCKY BLUEGRASS** – Adelphi, American, Aspen, Asset, Challenger, Classic, Emundi, Huntsville, Georgetown, Glade, Haga, Julic, Liberty, Merit, Midnight, Monopoly, Mystic, Parade, Rugby, Sydsport, Touchdown.

DO NOT APPLY to the following cultivars: Northstar, Explorer, Limousine, RAN I and Total Eclipse.

- **CREEPING BENTGRASS** – Carmen, Cobra, Highland, Lopez, Mariner, National, Penncross, Providence, Putter, Southshore, SR1020, and Viper have shown good to excellent tolerance to THRASHER Herbicide. Injury has been noted on Emerald, Penneagle, and Pennlinks occasionally. THRASHER may cause serious injury to Cohansey, Colonial, south German varieties, Egmont, Bardot, Tracenta, Allure, Astoria, and SR7100.
- **TURF-TYPE FALL FESCUE** – America, Arid, Mustang
- **ST. AUGUSTINEGRASS** – Raleigh
- **DORMANT BERMUDAGRASS** – Tifgreen, Tidwarf, Common bermudagrass is more susceptible to THRASHER than hybrid bermudagrass.

General Recommendations

Fall applications to turfgrass sites to control annual bluegrass are most effective if application is initiated during the period of maximum weed germination and ended as close to the first killing freeze as possible. Spring applications may be made during the period of maximum weed germination. Consult the university extension service or weed science specialist for these dates in your locality. Spring applications are most effective following fall applications.

SEE CHART FOR USE RATES AND TIMINGS. READ TEXT BELOW FOR SPECIFIC RECOMMENDATIONS FOR EACH TYPE OF GRASS!

8/14

COOL SEASON TURFGRASSES

I. Perennial Ryegrass

Application to perennial ryegrass is recommended in fall and/or spring during the primary period of annual bluegrass germination, and up to 30 days after annual bluegrass emergence. Annual bluegrass is easiest to control when young and newly emerged. Spring applications should be used in conjunction with fall applications. Consult Extension Service or University weed specialists for date(s) annual bluegrass germinates in your area.

When overseeding with perennial ryegrass, apply THRASHER Herbicide to the seeded area 1 to 2 weeks after emergence of the ryegrass seedlings, when the seedlings are approximately 1" tall or after the first cutting. For overseeding, the soil should be prepared according to recommended practice. Remove or thoroughly work thatch, as it can reduce the effectiveness of the THRASHER treatment. Delay application of straw or other mulch until after THRASHER application. Application to overseeded perennial ryegrass in the fall or spring will also reduce competition from selected broadleaf weeds and crabgrass.

II. Kentucky Bluegrass

Apply THRASHER Herbicide to bluegrass not less than 8 weeks after emergence. Bluegrass overseeded with ryegrass may be treated one to 2 weeks after ryegrass emergence.

Do not reseed with Kentucky bluegrass until 6 weeks after the last THRASHER application. For fall application programs of THRASHER, alternatives are to seed dormant bluegrass in the late fall or to delay reseeding until the spring. Kentucky bluegrass sod quality during the spring may be reduced following fall applications of THRASHER.

III. Creeping Bentgrass

THRASHER Herbicide may be applied safely to bentgrass cut at fairway height. THRASHER use should be avoided in poorly drained and/or heavily shaded turf areas which are more prone to herbicide injury. Tank mixing with soluble or controlled release nitrogen at (0.1 to 0.25 lb. N per 11,000 ft²) with THRASHER may improve creeping bentgrass turf tolerance and improve creeping bentgrass conversion.

A spring application of THRASHER following fall applications is useful in further reducing populations of annual bluegrass. Apply THRASHER in the spring after creeping bentgrass has resumed active growth and has achieved full green-up.

Do not apply THRASHER to renovated or overseeded bentgrass fairway turf less than three (3) to four (4) weeks after seedling emergence.

Do not overseed with creeping bentgrass until three (3) to four (4) weeks after the last THRASHER application.

IV. Turf-Type Tall Fescue

Apply THRASHER Herbicide to turf-type tall fescue in the fall. If overseeding with turf-type tall fescue, THRASHER application and the seeding may be simultaneous.

9/14

WARM SEASON TURFGRASSES

I. St. Augustinegrass (Established Turf)

Apply THRASHER Herbicide to St. Augustinegrass in the spring and early summer to suppress bermudagrass and Bermudagrass seedhead formation or control annual bluegrass. Best results are achieved when multiple applications are made. THRASHER suppresses the development of actively growing Bermudagrass in established St. Augustine sod. Begin THRASHER applications when Bermudagrass first breaks dormancy in the spring. Application timing is critical to achieve optimum results and will vary depending on location and temperature. A second application of THRASHER should be made 21-28 days after the first application. For optimum suppression, a third application may be necessary 21-28 days after the second application. Temporary stunting and minor discoloration of St. Augustinegrass may occur after application. To improve suppression, THRASHER may be tank-mixed with Atrazine in each application (Atrazine at up to 2 lb ai/A for first application and 0.75 lb - 1 lb ai/A triazine for second or third application). DO NOT treat St. Augustinegrass that has not been established for six months. DO NOT treat St. Augustinegrass that is under stress or injury may occur. If the St. Augustinegrass shows signs of severe yellowing or stunting, discontinue applications.

II. Overseeded Dormant Bermudagrass

Apply THRASHER Herbicide to overseeded bermudagrass in late fall, one to two weeks after emergence of overseeded perennial ryegrass to control annual bluegrass. Treatment to turf that is not fully dormant may cause early injury and/or delayed spring green-up. Applications of 32 to 36 oz. of THRASHER per acre have shown acceptable control of annual bluegrass with minimum injury to nondormant (or predormant) bermudagrass when applied in late November or early December. Lower rates have shown lesser annual bluegrass control and higher rates have shown more bermudagrass injury when the bermudagrass is not fully dormant. The onset of dormancy will vary according to location and yearly weather. One or two supplemental applications at 21- to 28-day intervals may be required to maintain control through the winter months. DO NOT APPLY more than two applications of THRASHER when treating nondormant bermudagrass. The final THRASHER application should be made to bermudagrass no later than February 1st or 4 weeks prior to breaking of winter dormancy. Late applications (within 4 weeks of breaking dormancy) to turf that will be breaking dormancy may temporarily delay resumption of active growth (spring green-up) of bermudagrass in the spring. The breaking of winter dormancy will vary according to location and yearly weather. Application of THRASHER Herbicide to bermudagrass that is stressed due to shade, poorly drained soils, and high traffic may result in increased turf injury. Avoid use of THRASHER or use lower rates under these conditions. Care should be taken to keep the THRASHER in the overseeded areas during the applications (particularly when making applications to nondormant bermudagrass) so that the ryegrass will mask any early injury or late transition in the spring. Higher seeding rate may also be helpful to minimize a thin stand appearance since annual bluegrass will be removed. Common bermudagrass in fairways or roughs may be more susceptible to herbicide injury than hybrid bermudagrass.

10/14

RECOMMENDED RATES AND TIMINGS¹

Turf Type	Main Target Pests	Start	# Apps	Application INT (Days)	Use Rate		Overseeding Safety Interval ³ (Weeks After Treatment)	Application Safety Interval ⁵ (Weeks After Treatment)
					Oz/Acre	Oz/1,000 Sq. Ft.		
Ryegrass	Annual Bluegrass	Fall Spring ⁴	2-3 1-2	21-28 21-28	32-64	¾ - 1 ½	1-2	1 -2
Kentucky Bluegrass	Annual Bluegrass	Fall	2-3	21-28	24	9/16	6	8
Creeping Bentgrass	Annual Bluegrass	Fall Spring ⁴	2-3 1-2	21-28	24 24	9/16 9/16	4	4
Turf-Type Tall Fescue	Annual Bluegrass	Fall	2-3	21-28	24-48	¾ - 1 ½	0	2-3
St. Augustinegrass (Est. Turf)	Bermudagrass Suppression	Spring	2-3	21-28	48-64	1 1/8 - 2 ¼	NA	NA
Overseeded (ryegrass) Dormant Bermudagrass	Bermudagrass: Annual Bluegrass	Fall	2-3	21-28	24-64	9/16- 1 ½	NA	NA
Nondormant Bermudagrass	Annual Bermudagrass	Fall	2	21-28	32-36	¾ - 7/8	NA	NA

¹ Refer to label text for further instructions regarding each grass species.

² Apply recommended rate of THRASHER in 20 to 60 gallons of water per acre or 1 to 3 gallons of water per 1,000 ft².

³ Interval applies to overseeding specific grass on same type of grass after last THRASHER treatment.

⁴ Use spring application after previous fall treatments only.

⁵ Refers to interval in which THRASHER may be safely applied to specific grass following seed emergence.

NA – Not applicable.

THRASHER MIXTURES WITH FERTILIZERS

THRASHER Impregnation on Dry Bulk Fertilizers

THRASHER Herbicide may be impregnated on many dry bulk fertilizers (see "1" below.) and applied for the control of labeled grasses and broadleaf weeds. All THRASHER label and supplementary literature instructions and precautions regarding rates per acre, soil type, application, and other directions must be followed. All individual State regulations relating to dry bulk fertilizer blending, registration, labeling and application are the responsibility of the individual and/or company selling the THRASHER fertilizer mixtures. A minimum of 200 pounds and a maximum of 700 pounds of approved fertilizer ingredients impregnated with the appropriate amount of THRASHER must be applied per acre. For impregnating the pesticide on dry fertilizers, use a closed rotary drum type mixer equipped with suitable spraying equipment. The spray nozzles should be positioned inside of the mixer to provide uniform spray coverage of the tumbling fertilizer. The THRASHER should be sprayed uniformly onto the fertilizer using a fine spray pattern.

The physical properties of fertilizers vary, particularly in liquid absorptive capacity. When absorptivity is sufficient, simple spray impregnation of the fertilizer with THRASHER provides a satisfactory dry mixture. If the absorptivity is not adequate, use of a highly absorptive powder is required to provide a dry, free-flowing mixture. Microcel E (Johns-Manville Products Corporation) is the recommended absorbent powder. It should be added separately and uniformly to the prepared pesticide/fertilizer mixture in a

11/14

quantity that is sufficient to provide a suitably freeflowing mixture. Generally, less than 2% by weight of Microcel E is required.

The amount of THRASHER actually required in the formulation of specific fertilizer mixtures should be calibrated carefully for each production operation. This is necessary to ensure that the amount of THRASHER actually contained in the fertilizer mixture applied to the soil represents the correct dosage rate.

Bulk fertilizers impregnated with THRASHER should be applied immediately, NOT STORED.

1. Approved dry fertilizer ingredients for use with THRASHER

THRASHER Impregnation on Dry Bulk Fertilizers

	N	P	K
Ammonium nitrate	34	0	0
Ammonium sulfate	21	0	0
Ammonium phosphate-sulfate	16	20	0
Diammonium phosphate	18	46	0
Monoammonium phosphate	11	56	0
Potassium chloride	0	0	60
Potassium sulfate	0	0	52
Single superphosphate	0	20	0
Triple superphosphate	0	46	0
Urea	45	0	0

THRASHER Physical Data

Density	1.14 g/cm ³
Pounds/gallon	9.50
Flashpoint	Non-combustible

THRASHER with Liquid Fertilizer

The following procedure is suggested for evaluation of physical compatibility of THRASHER Herbicide in mixtures with liquid fertilizers for spray tank applications.

Material Required

1. THRASHER – components of tank sizes if intended for use
2. Liquid fertilizer to be used
3. Adjuvant for fertilizer tank mix: Compex* or E-Z Mix**
4. Two (or more) one quart, wide mouth containers with lids or stoppers
5. Measuring spoons (25 mL pipette or graduated cylinder provides more accurate measurement)
6. Measuring cup, 8 fl. oz. (237 mL)

*Compex, Kalo Laboratories, Inc., Kansas City, MO

**E-Z Mix, United Agri-Products, Greeley, CO

Procedure

1. Pour one pint (473 mL) of the liquid fertilizer into each of the quart containers.
2. Add adjuvant(s) to one or more of the containers and mix; follow label directions of adjuvant.
3. Add the THRASHER and tank mix components to the containers (see rate table below).
4. Close the containers with lids or stoppers and mix contents by inverting the containers ten times.
5. Inspect the surface and body of mixture:
 - a. immediately after mixing,
 - b. after allowing mixtures to stand quietly for 30 minutes,

12/14

c. immediately after mixing again (invert the containers ten more times).

If uniform mixture does not occur, the spray tank mixture should not be used. If any of the mixtures remain uniform for 30 minutes, that mixture may be used in spray tank applications. Should any of the mixtures separate after 30 minutes but remix readily into a uniform mixture with inversion of the container, the mixture may be used provided that the adequate agitation is maintained in the spray tank. If a THRASHER + fertilizer mixture utilizing an adjuvant is satisfactory, but the one without adjuvant is not, be sure to use the adjuvant in the spray tank at the rate recommended on the label which was used in the test.

If non-dispersible oil, sludge, or clumps of solids form in the mixtures, those combinations should not be used for spray tank application.

**Rate Table for THRASHER Mixtures
 with Liquid Fertilizers**

gal. of Liquid Fertilizer to be applied per acre	mL or tsp. of THRASHER to be added to 1 pint of fertilizer	
	mL	tsp.
20	17.6	3.6
30	12.0	2.4
40	9.0	1.9
50	7.1	1.5
60	6.0	1.2

*Based on field rate of 3.0 lb. ai/acre (3/4 gal/acre) in the fertilizer volumes indicated. Adjust amount of THRASHER added proportionately to correspond with intended field use rate recommended on THRASHER label. Add the proportionate amount of tank mix component.

13/14

STORAGE AND DISPOSAL

Storage: Protect THRASHER Herbicide from freezing temperatures.

Pesticide Disposal: Do not contaminate water, food, or feed by storage or disposal. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Disposal: Non-refillable container. Do not reuse or refill this container. Triple rinse (or equivalent), promptly after emptying. Triple rinse 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 ¼ 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. Offer for recycling, if available or reconditioning, if appropriate. Then puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

DO NOT REUSE EMPTY CONTAINER

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Phoenix Environmental Care, LLC or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Phoenix Environmental Care, LLC and Seller harmless for any claims relating to such factors.

Phoenix Environmental Care, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Phoenix Environmental Care, LLC, and Buyer and User assume the risk of any such use. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, PHOENIX ENVIRONMENTAL CARE, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.**

To the extent consistent with applicable law, neither Phoenix Environmental Care, LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF PHOENIX ENVIRONMENTAL CARE, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF PHOENIX ENVIRONMENTAL CARE, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

14/14

Phoenix Environmental Care, LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of Phoenix Environmental Care, LLC.