

PM 23

10182-368

10-27-97

10/21

Page 1 of 21  
TYPHOON Booklet  
TYP368B.RSH - 10/16/97

**TYPHOON® Herbicide**

For Control of Grass and Broadleaf Weeds in Soybeans

**COMPLETE DIRECTIONS FOR USE****ACTIVE INGREDIENTS:****Fluazifop-P-butyl**

butyl (R)-2-[4[[5-(trifluoromethyl)-2-pyridinyl]oxy]phenoxy] propanoate ..... 5.30%

**Sodium salt of fomesafen**

5-[2-chloro-4-(trifluoromethyl)phenoxy]N-(methylsulfonyl)-2-nitrobenzamide ..... 11.03%

**INERT INGREDIENTS:** ..... 83.67%**TOTAL** ..... 100.00%

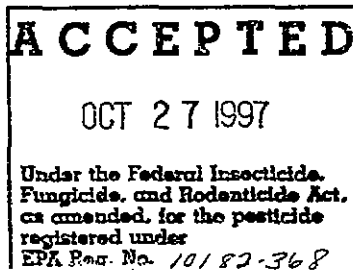
Contains 0.47 lbs. (+) isomer of fluazifop-P-butyl and the equivalent of 10.5% fomesafen or 0.94 lb. fomesafen active ingredient per gallon.

EPA Reg. No. 10182-368

**KEEP OUT OF REACH OF CHILDREN****WARNING****AVISO**

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.)

Made in U.S.A.  
ZENECA Ag Products  
ZENECA Inc.  
Wilmington, DE 19850-5458



**CONDITIONS OF SALE  
AND LIMITATION OF WARRANTY AND LIABILITY**

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**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.

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

ZENECA 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 ZENECA, and Buyer and User assume the risk of any such use. ZENECA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall ZENECA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ZENECA 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 ZENECA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

ZENECA and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of ZENECA.

3 of 21

## TABLE OF CONTENTS

	Page
STATEMENT OF PRACTICAL TREATMENT .....	
PRECAUTIONARY STATEMENTS .....	
DIRECTIONS FOR USE .....	
Agricultural Use Requirements .....	
Storage and Disposal .....	
General Information .....	
Application Directions .....	
General Use Precautions .....	
Rotational Crop Restrictions .....	
TYPHOON Use Regions .....	
Rates and Weed Growth Stages .....	
Tankmix and Sequential Applications for Soybeans .....	
Scientific Names of Weeds (Appendix) .....	

4 of 21

### STATEMENT OF PRACTICAL TREATMENT

**IF IN EYES:** Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

**IF ON SKIN:** Wash with plenty of soap and water. Get medical attention.

**IF INHALED:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

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**FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE, CALL 1-800-F-A-S-T-M-E-D (327-8633).**

**FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300.**

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## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### WARNING

This product contains fomesafen which has been determined to cause tumors in laboratory animals (mice). Risks can be reduced by closely following use directions and precautions and by wearing the protective clothing specified elsewhere on this label.

CAUSES SUBSTANTIAL, BUT TEMPORARY, EYE INJURY. HARMFUL IF ABSORBED THROUGH SKIN OR INHALED. MAY CAUSE ALLERGIC SKIN RESPONSE.

Do not get in eyes, on skin or on clothing. Avoid breathing vapors or spray mist.

#### PERSONAL PROTECTIVE EQUIPMENT

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

Applicators and other handlers (other than mixers and loaders) must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves, such as Barrier Laminate or Butyl Rubber or Nitrile Rubber or Neoprene Rubber or Polyvinyl Chloride (PVC) or Viton.
- Shoes plus socks.
- Protective eyewear.

Mixers and Loaders must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves, such as Barrier Laminate or Butyl Rubber or Nitrile Rubber or Neoprene Rubber or Polyvinyl Chloride (PVC) or Viton.
- Shoes plus socks.
- Protective eyewear.
- Chemical-resistant apron when mixing or loading.

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

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.

6021

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### User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
  - Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
  - Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.
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### ENVIRONMENTAL HAZARDS

This product is toxic to fish. 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. Do not apply when weather conditions favor drift from target area.

This product contains the active ingredient fomesafen which is known to leach through soil into ground water under certain conditions as a result of label use. Use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

### PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flame.

### 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 through any type of irrigation system.

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.

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### 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 24 hours.

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

- Coveralls.
  - Chemical-resistant gloves, such as Barrier Laminate or Butyl Rubber or Nitrile Rubber or Neoprene Rubber or Polyvinyl Chloride (PVC) or Viton.
  - Shoes plus socks.
  - Protective eyewear.
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### STORAGE AND DISPOSAL

**PROHIBITIONS:** Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

**STORAGE:** Store above 32°F in original containers only. If product freezes, return to room temperature and agitate to reconstitute. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by

use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

#### **CONTAINER DISPOSAL:**

**Metal Containers:** Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

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

**Glass Containers:** Triple rinse (or equivalent). Then dispose of in a sanitary landfill or by other approved state and local procedures.

#### **FOR BULK AND MINI-BULK CONTAINERS:**

**Container Disposal:** Reseal container and offer for reconditioning, or triple rinse (or equivalent) and offer for recycling or reconditioning, or clean in accordance with manufacturer's instructions.

**Container Precautions:** Before refilling, inspect thoroughly for damage, such as cracks, punctures, bulges, dents, abrasions and damaged or worn thread on closure devices.

**REFILL ONLY WITH TYPHOON®.** The contents of this container cannot be completely removed by cleaning. Refilling with materials other than TYPHOON herbicide will result in contamination and may weaken container. After filling and before transporting, check for leaks. Do not refill or transport damaged or leaking container.

**CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.**

#### **GENERAL INFORMATION**

Read all label directions before using.

TYPHOON herbicide is a selective early postemergence herbicide for control of grass and broadleaf weeds in soybeans.

TYPHOON herbicide has systemic activity moving from the treated foliage into the shoots, roots, rhizomes, stolons, and growing points (meristematic regions) of treated grass weeds and contact activity for broadleaf weeds. Thorough coverage of all weed plant foliage is important for good activity. Optimum weed control is achieved when young actively growing weeds are treated that are not under stress from moisture, temperature, low soil fertility, mechanical or chemical injury.

Certain germinating broadleaf weeds, grasses and sedges may be controlled or suppressed by soil residual activity from postemergent applications if rainfall occurs shortly after application. The extent and consistency of soil activity is dependent upon soil type, ground cover at time of application, amount of rainfall and the rate of TYPHOON used.

**Control Symptoms:** Growth of treated grass weeds stops soon after application. Symptoms include loss of vigor, yellowing and/or reddening, and eventual death to the treated grass plant. Symptoms on grass weeds are generally observed within one week, depending on species and environmental conditions.



9 of 21

Symptoms on broadleaf weeds occur within 3 days and appear as browning and crinkling.

Soybean plants are tolerant to TYPHOON herbicide when it is applied at the recommended rate. There may be slight bronzing, crinkling or spotting of soybean leaves but soybeans soon outgrow these effects and develop normally.

#### **Information on Weed Resistance**

Naturally occurring biotypes of certain grass species with resistance to this herbicide and related products (same mode of action) are known to exist. Selection of resistant biotypes, through repeated use of these herbicides, may result in control failures.

If poor performance cannot be attributed to adverse weather conditions or improper application methods, a resistant biotype may be present. In such a case, additional treatments with this herbicide or related products is not recommended. Consult your local company representative or agricultural advisor for assistance.

#### **APPLICATION DIRECTIONS**

**Timing** - Best broadspectrum postemergence control of susceptible weeds is obtained when TYPHOON herbicide is applied to actively growing young weeds before they exceed the recommended growth stages shown on this label. Refer to the weed tables for specific recommendations on weed growth stages. Generally, the application should occur 10 to 21 days after soybean emergence.

**Spray Additives** - Only spray additives cleared for use on growing crops under 40 CFR 180.1001 may be used in spray mixture.

For best broadspectrum postemergence control of susceptible weeds in Region 2 (see Regional Use Maps), TYPHOON can be used with a minimum of 2.5% liquid nitrogen (28% or similar) or a minimum of 10 pounds ammonium sulfate per 100 gallons of spray volume.

#### **Always Add One of the Following:**

**Crop Oil Concentrate (COC)** - Use a non-phytotoxic COC, or a once-refined vegetable oil concentrate (VOC, MSO) containing 15-20% approved emulsifier at 0.5-1% (1-2 pints per 25 gallons) of the finished spray volume. COC can improve weed control but may slightly reduce crop tolerance.

**Nonionic Surfactant (NIS)** - Use NIS containing at least 75% surface active agent, at 0.25 - 0.5% (1/2 - 1 pint per 25 gallons) of the finished spray volume (Region 1 and Region 2 East of Interstates 79 and 77 only).

**Other Adjuvants** - Adjuvants other than COC or NIS may be used providing the product meets the following criteria:

1. Contains only EPA exempt ingredients.
2. Is nonphytotoxic to the target crop.
3. Is compatible in mixture. (May be established through a jar test).

4. Is supported locally for use with TYPHOON on the target crop through proven field trials and through university and extension recommendations.

**Recommended Mixing Order:**

1. Half required amount of water, begin agitation.\*
2. Dry pesticide formulations.
3. TYPHOON herbicide.
4. Liquid pesticide formulations.
5. Adjuvant (COC or NIS) and fertilizer.

\*Compatibility agent, 1 gallon/500 gallons of water or 0.2% v/v, may be added as needed.

**GROUND APPLICATION** - Use sufficient spray volume and pressure to ensure complete coverage of the target weeds. A spray volume of 10-20 gallons per acre at 30-60 psi at the nozzle tip is recommended. On large weeds and/or dense foliage, use 60 PSI and a minimum of 20 gallons per acre to ensure coverage of weed foliage.

Use only hollow cone or flat fan nozzles. The sprayer must be calibrated to provide the proper volume and rate per acre. In addition, the boom and nozzle height must be adjusted to provide complete coverage of all weeds.

**DO NOT USE FLOOD TYPE OR OTHER SPRAY NOZZLE TIPS WHICH DELIVER COARSE, LARGE DROPLET SPRAYS.**

**DO NOT APPLY TYPHOON WITH RECIRCULATING SPRAYERS, ROPEWICK APPLICATORS, CONTROLLED DROPLET APPLICATORS (CDA) OR ANY SIMILAR DEVICE.**

**DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.**

**BAND APPLICATION** - Adjust band application equipment to provide thorough weed coverage. Best coverage is obtained by using a minimum of two nozzles, one directed to each side of the planted row. A single nozzle directed over the top of the row will not provide adequate coverage and is not recommended. Cultivation of untreated areas may be needed following band applications. When making band applications and cultivating in the same operation, position nozzles in advance of the cultivation device. This will reduce dust in the spray area. Dust can intercept the spray, reducing weed coverage resulting in less than adequate weed control.

Calculate the amount of herbicide and water volume needed for band treatment by the following formulas:

$\frac{\text{Band width in inches}}{\text{row width in inches}}$	X	broadcast rate per acre	=	Band herbicide rate per acre
$\frac{\text{Band width in inches}}{\text{row width in inches}}$	X	broadcast volume per acre	=	Band water volume per acre

**AERIAL APPLICATION** - Use sufficient spray volume and pressure to ensure complete coverage of the target weeds. A minimum of 5 gallons per acre of spray mixture should be applied with a

maximum of 40 PSI pressure. When broadleaf weed or grass foliage is dense, use a minimum of 10 gallons per acre to ensure coverage of weed foliage.

**CULTIVATION** - Cultivation within 7 days prior to or within 7 days after application is not recommended as weeds may be put under stress reducing weed control. Timely cultivation 1-3 weeks after applying TYPHOON may assist weed control.

## GENERAL USE PRECAUTIONS

TYPHOON herbicide can be applied only in the states or part of states listed under TYPHOON USE REGIONS.

A maximum of 1.6 quarts of TYPHOON herbicide (or a maximum of 0.375 lb ai/A of fomesafen from any product containing fomesafen) may be applied per acre per year in Region 1 (see Regional Use Map).

A maximum of 1.6 quarts of TYPHOON herbicide (or a maximum of 0.375 lb ai/A of fomesafen from any product containing fomesafen) may be applied per acre in ALTERNATE years in Region 2 (see Regional Use Map).

- Apply TYPHOON herbicide before soybeans bloom.
- Apply postemergence to actively growing weeds. Avoid applying TYPHOON to weeds or soybeans which are under stress from moisture, temperature, low soil fertility, mechanical or chemical injury, as reduced weed control and/or increased crop injury may result.
- For mixed weed populations, apply when the first weed species reaches the recommended growth stage for treatment.
- Where irrigation is used as part of normal cropping practice, best results are usually obtained when TYPHOON herbicide is applied within 7 days after irrigation.
- Thoroughly clean the TYPHOON spray system with water and a commercial tank cleaner before and after each use. TYPHOON herbicide spray mixture may resuspend any tank residues from previous products and result in crop damage.
- Tankmixes of TYPHOON herbicide with other pesticides, fertilizers or any other additives except as specified on this label or other approved ZENECA supplemental labels may result in tankmix incompatibility, unsatisfactory performance and/or unsatisfactory crop injury.
- TYPHOON herbicide requires a 1-hour rain-free period for best results.
- Avoid overlapping spray swaths, as injury may occur to rotational crops.
- Avoid drift to all other crops and nontarget areas. Crops other than soybeans may be severely injured by drift. Do not apply when wind velocity exceeds 15 MPH. Do not make ground or aerial application during temperature inversions.

- To provide adequate coverage, it is recommended that ground speed not exceed 10 MPH during application.
- Do not graze treated areas or harvest for forage or hay.

**ROTATIONAL CROP RESTRICTIONS**

The following rotational crops may be planted after applying TYPHOON herbicide at recommended rates in soybeans:

<u>Crops To Be Planted</u>	<u>Minimum Rotational Interval (Months After Last TYPHOON Application)</u>
Small grains such as wheat, barley, rye .....	4
Beans and peas, corn, cotton, peanuts, rice .....	10
To avoid crop injury do not plant alfalfa, seed corn, sunflowers, sugar beets, sorghum* or any other crop within .....	18

Do not graze rotated small grain crops or harvest for livestock forage or straw. In the event of a crop loss due to weather conditions soybeans can be replanted.

\*Sorghum may be planted back after 10 months in Region 1.

**TYPHOON USE REGIONS**

**REGION 1**  
(Maximum Rate 1.6 quarts per acre per year)

**REGION 1** - Includes the following states or portion of states where TYPHOON may be applied: Alabama, Arkansas, Georgia, Louisiana, Mississippi, Missouri (Counties of Bollinger, Butler, Cape Girardeau, Dunklin, Madison, Mississippi, New Madrid, Pemiscot, Perry, Ripley, Scott, Stoddard and Wayne), North Carolina, Oklahoma (East of U. S. Highway 75 and East of Indian Nation Parkway), South Carolina, Tennessee and Texas (all areas East of U.S. Highway 77 to State Road 239, including all of Calhoun County).

**REGION 2**  
(Maximum Rate 1.6 quarts per acre, alternate years)

**REGION 2** - Includes the following states or portion of states where TYPHOON may be applied: Delaware, Kentucky, Maryland, Virginia and West Virginia, South of Interstate 70 in the following states: Illinois, Indiana and Ohio and Pennsylvania (all areas South of Interstate 80 to the intersection of U.S. Highway 15 and East of U.S. Highway 15 and U.S. Highway 522).

13021

### RATES AND WEED GROWTH STAGES

TYPHOON USE RATE - 1.6 QUARTS/ACRE	
WEEDS CONTROLLED <sup>a</sup>	MAXIMUM GROWTH STAGE (NO. OF LEAVES) <sup>c</sup>
<b>BROADLEAF WEEDS</b>	
Anoda, Spurred	2
Carpetweed	Unlimited Size
Citron (Wild Watermelon)	2-4
Cocklebur, Common <sup>b</sup>	2-4
Copperleaf, Hophornbeam	2-4
Copperleaf, Virginia	2-4
Crotalaria, Showy	4-6
Croton, Tropic	2-4
Cucumber, Volunteer	4-6
Eclipta	2-4
Groundcherry, Cutleaf	4
Hemp	4-6 Suppression Only
Horsenettle	2-4 Suppression Only
Jimsonweed	4-8
Ladysthumb	2-4
Lambsquarters, Common	2 Suppression Only
Mexicanweed	2
Morningglory spp.	
Cypressvine	4-6
Entireleaf var. <i>integriuscula</i>	2-3
Ivyleaf var. <i>hederacea</i>	2-3
Purple Moonflower	2-4
Scarlet	2-4
Smallflower	2-4
Smallwhite (pitted)	2-4
Tall (Common)	2-4
Willowleaf (Palmleaf)	2-4
Mustard, Wild	4-8

140721

TYPHOON USE RATE - 1.6 QUARTS/ACRE	
WEEDS CONTROLLED <sup>a</sup>	MAXIMUM GROWTH STAGE (NO. OF LEAVES) <sup>c</sup>
Nightshade, Black	4
Nutsedge, Yellow	Suppression Only
Pigweed, spp.	
Amaranth, Palmer	4-6
Amaranth, Spiny	2
Redroot	4-6
Smooth	4-6
Waterhemp, Tall	2-4
Poinsettia, Wild	2-3
Purslane, Common	6"-8" Diameter
Pusley, Florida	2
Ragweed, Common	4-6
Ragweed, Giant	2-4
Redweed	2-3 Suppression Only
Sesbania, Hemp	6-12
Sicklepod	Suppression Only Cotyledon
Sida, Prickly	Suppression Only Cotyledon
Smartweed, Pennsylvania	4
Smellmelon	2
Spurge, Prostrate	Suppression Only 1" Diameter
Spurge, Spotted	2 Suppression Only
Starbur, Bristly	2-4
Velvetleaf	2 Suppression Only
Venice Mallow	4-6
Witchweed	Multi-leaf Up to 10"
Yellow Rocket	4-6

150/21

TYPHOON USE RATE - 1.6 QUARTS/ACRE		
WEEDS CONTROLLED <sup>a</sup>	MAXIMUM HEIGHT (INCHES)	MAXIMUM GROWTH STAGE (NO. OF LEAVES) <sup>c</sup>
<b>ANNUAL GRASSES</b>		
Barnyardgrass	2-3	3
Broadleaf signalgrass	2-4	5
Crabgrass		
Large crabgrass	1-2	4
Smooth crabgrass	1-2	4
Southern crabgrass	1-2	4
Tropical crabgrass	1-2	4
Downy Brome	2-6	4
Fall panicum	2-6	6
Field Sandbur	2-4	4
Foxtails		
Giant foxtail	2-6	4
Green foxtail	2-4	4
Yellow foxtail	2-4	4
Goosegrass	2-4	6
Italian Ryegrass	2-4	4
Itchgrass	4-24	6
Johnsongrass, Seedling	2-8	4
Junglerice	2-3	3
Shattercane	6-12	8
Sorghum	6-12	8
Southern sandbur	2-6	6
Texas panicum	2-8	8
Volunteer cereals		
V. Barley	2-6	6
V. Corn	12-24	10
V. Milo	6-12	4
V. Oats	2-6	6
V. Rye	2-6	6

TYPHOON USE RATE - 1.6 QUARTS/ACRE		
WEEDS CONTROLLED <sup>a</sup>	MAXIMUM HEIGHT (INCHES)	MAXIMUM GROWTH STAGE (NO. OF LEAVES) <sup>c</sup>
V. Wheat	2-6	6
Wild Oats	2-6	6
Wild Proso Millet	4-8	6
Witchgrass	2-4	6
Wooly cupgrass	2-4	6

<sup>a</sup> Scientific names for weeds are listed in the Appendix (Page \_\_\_\_\_).

<sup>b</sup> Do not apply TYPHOON to cotyledon stage.

<sup>c</sup> **USE DIRECTIONS FOR SPECIAL RATE**

The rates of TYPHOON herbicide/acre can be reduced to 1.3 qts under the following conditions:

- Application under favorable soil moisture and humidity conditions, normally within a few days after rainfall or irrigation. Avoid extreme air temperatures.
- Application at earliest growth stages indicated on rate tables.
- Application in highly competitive crop stands such as narrow row or drilled soybeans, or where cultivation is planned.
- Application to light or moderate weed densities.
- Application with 1% v/v crop oil concentrate only.
- Application alone, avoiding tank mixes with other pesticides.

TYPHOON can be used for the control of rhizome johnsongrass (height 8-18 inches) and bermudagrass (runner length 4-8 inches) and should be used at a rate of 1.6 quarts per acre. In case a second application needs to be made, use FUSILADE DX at a rate of 8 oz. per acre and apply before johnsongrass reaches a height of 12 inches or before bermudagrass reaches a runner length of 8 inches.



17021

## TANKMIX AND SEQUENTIAL APPLICATIONS FOR SOYBEANS

TYPHOON can be used sequentially or in tankmix with one or more of the following products: FUSILADE<sup>®</sup> DX, FUSION<sup>®</sup>, Basagran<sup>®</sup>, Butyrac<sup>®</sup>, Classic<sup>®</sup>, Concert<sup>®</sup>, Pinnacle<sup>®</sup>, Pursuit<sup>®</sup>, Reliance<sup>™</sup> STS<sup>®</sup> SP, Raptor<sup>®</sup>, Resource<sup>®</sup>, Scepter<sup>®</sup>, Synchrony<sup>®</sup> STS<sup>®</sup>.

Under certain conditions, the mixture of TYPHOON with one or more of the above mentioned broadleaf herbicides may cause a reduction in activity of any postemergence grass herbicide in the mixture.

For sequential applications allow 2-3 days after the application of the grass herbicide before applying TYPHOON or TYPHOON mixtures. In case TYPHOON or the TYPHOON mixture is applied first apply the grass herbicide when the grass weeds begin to develop new leaves (generally around 7 days).

Always read and follow the recommendations, restrictions and limitations for all products whether used alone, sequentially or in a tankmix. The most restrictive labeling of any product used applies.

\*Do not apply more than a total of 0.5 pounds of the active ingredient fluazifop-p-butyl per acre per year to soybeans.

**NOTE:** Tankmix applications can result in increases in crop injury as compared to either product used alone.

**NOTE:** Tankmix applications sometimes have resulted in reduced grass weed control. A tankmix application is not recommended if perennial grass weeds are the predominant grasses to be controlled. If grass regrowth occurs following an application of the tankmix or an additional flush of grasses emerges, make an application of FUSILADE DX OR FUSION herbicide to actively growing grass weeds according to label recommendations.

## APPENDIX

Scientific names are listed for annual grass and broadleaf weeds referred to in the TYPHOON label.

COMMON NAME	SCIENTIFIC NAME
<b>BROADLEAF WEEDS</b>	
Amaranth, Palmer	<i>Amaranthus palmeri</i>
Amaranth, Spiny	<i>Amaranthus spinosus</i>
Anoda, Spurred	<i>Anoda cristata</i>
Carpetweed	<i>Mollugo verticillata</i>
Citron (Wild Watermelon)	<i>Citrullus vulgaris</i>
Cocklebur, Common	<i>Xanthium pennsylvanicum</i>
Copperleaf, Hophornbeam	<i>Acalypha ostryaefolia</i>
Copperleaf, Virginia	<i>Acalypha virginica</i>
Crotalaria, Showy	<i>Crotalaria spectabilis</i>
Croton, Tropic	<i>Croton glandulosus</i>
Cucumber, Volunteer	<i>Cucumis sativas</i>
Eclipta	<i>Eclipta prostrata</i>
Groundcherry, Cutleaf	<i>Physalis angulata</i>
Hemp	<i>Cannabis sativa</i>
Horsenettle	<i>Solanum carolinense</i>
Jimsonweed	<i>Datura stramonium</i>
Ladysthumb	<i>Polygonum persicaria</i>
Lambsquarters, Common	<i>Chenopodium album</i>
Mexicanweed	<i>Caperonia castanaefolia</i>
Morningglory spp.	
Cypressvine	<i>Ipomoea quamoclit</i>
Entireleaf var. <i>integriscula</i>	<i>Ipomoea hederacea</i>
Ivyleaf var. <i>hederacea</i>	<i>Ipomoea hederacea</i>
Purple Moonflower	<i>Ipomoea turbinata</i>
Scarlet	<i>Ipomoea coccinea</i>
Smallflower	<i>Jacquemontia tamnifolia</i>
Smallwhite (Pitted)	<i>Ipomoea lacunosa</i>
Tall (Common)	<i>Ipomoea purpurea</i>

190421

COMMON NAME	SCIENTIFIC NAME
Willowleaf (Palmleaf)	<i>Ipomoea wrightii</i>
Mustard, Wild	<i>Brassica kaber</i>
Nightshade, Black	<i>Solanum nigrum</i>
Nutsedge, Yellow	<i>Cyperus esculentus</i>
Pigweed, Redroot	<i>Amaranthus retroflexus</i>
Pigweed, Smooth	<i>Amaranthus hybridus</i>
Poinsettia, Wild	<i>Euphorbia heterophylla</i>
Purslane, Common	<i>Portulaca oleracea</i>
Pusley, Florida	<i>Richardia scabra</i>
Ragweed, Common	<i>Ambrosia artemisiifolia</i>
Ragweed, Giant	<i>Ambrosia trifida</i>
Redweed	<i>Melochia corchorifolia</i>
Sesbania, Hemp	<i>Sesbania exaltata</i>
Sicklepod	<i>Cassia obtusifolia</i>
Sida, Prickly	<i>Sida spinosa</i>
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>
Smellmelon	<i>Cucumis melo</i>
Spurge, Prostrate	<i>Euphorbia supina</i>
Spurge, Spotted	<i>Euphorbia maculata</i>
Starbur, Bristly	<i>Acanthospermum hispidum</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Venice Mallow	<i>Hibiscus trionum</i>
Waterhemp, Tall	<i>Amaranthus tuberculatos</i>
Witchweed	<i>Striga asiatica</i>
Yellow Rocket	<i>Barbarea vulgaris</i>
<b>GRASS WEEDS</b>	
Barnyardgrass	<i>Echinochloa crus-galli</i>
Bermudagrass	<i>Cynodon dactylon</i>
Broadleaf signalgrass	<i>Bracharia platyphylla</i>
Crabgrass	
Large	<i>Digitaria sanguinalis</i>
Smooth	<i>Digitaria ischaemum</i>

20921

COMMON NAME	SCIENTIFIC NAME
Southern	<i>Digitaria ciliaris</i>
Tropical	<i>Digitaria bicornis</i>
Downy Brome	<i>Bromus tectorum</i>
Fall Panicum	<i>Panicum dichotomiflorum</i>
Field Sandbur	<i>Cenchrus incertus</i>
Foxtails	
Giant	<i>Setaria faberi</i>
Green	<i>Setaria viridis</i>
Yellow	<i>Setaria lutescens</i>
Goosegrass	<i>Eleusine indica</i>
Italian Ryegrass	<i>Lolium multiflorum</i>
Itchgrass	<i>Rottboellia exaltata</i>
Johnsongrass, rhizome	<i>Sorghum halepense</i>
Johnsongrass, seedling	<i>Sorghum halepense</i>
Junglerice	<i>Echinochloa colonum</i>
Shattercane	<i>Sorghum bicolor</i>
Sorghum	<i>Sorghum alnum</i>
Southern sandbur	<i>Cenchrus echinatus</i>
Texas panicum	<i>Panicum texanum</i>
Volunteer Cereals	
V. Barley	<i>Hordeum vulgare</i>
V. Corn	<i>Zea mays</i>
V. Milo	<i>Sorghum bicolor</i>
V. Oats	<i>Avena sativa</i>
V. Rye	<i>Secale cereale</i>
V. Wheat	<i>Triticum aestivum</i>
Wild Oats	<i>Avena fatua</i>
Wild Proso Millet	<i>Panicum miliaceum</i>
Witchgrass	<i>Panicum capillare</i>
Wooly cupgrass	<i>Eriochloa villosa</i>

21 of 21

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