



The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries.

DuPont  
Material Safety Data Sheet

Page 1

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 "DuPont" "FirstShot" SG Burndown Herbicide (with "TotalSol" soluble granules)  
 M0000706 Revised 6-NOV-2007  
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 CHEMICAL PRODUCT/COMPANY IDENTIFICATION  
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Material Identification

"TotalSol" is a registered trademark of DuPont.

"DuPont", "FirstShot" are trademarks of DuPont.

Tradenames and Synonyms

B12014143

Company Identification

MANUFACTURER/DISTRIBUTOR

DuPont  
 1007 Market Street  
 Wilmington, DE 19898

PHONE NUMBERS

Product Information : 1-800-441-7515 (outside the U.S.  
 302-774-1000)  
 Transport Emergency : CHEMTREC 1-800-424-9300(outside U.S.  
 703-527-3887)  
 Medical Emergency : 1-800-441-3637 (outside the U.S.  
 302-774-1000)

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 COMPOSITION/INFORMATION ON INGREDIENTS  
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Components

Material	CAS Number	%
THIFENSULFURON METHYL	79277-27-3	25
Methyl 3-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]amino]sulfonyl]-2-thiophenecarboxylate		
*TRIBENURON METHYL	101200-48-0	25
Methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)methylamino]carbonyl] amino]sulfonyl] benzoate		
INERT INGREDIENTS		50

\* Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

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HAZARDS IDENTIFICATION  
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## Emergency Overview

CAUTION! Avoid contact with eyes, skin, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling.

For medical emergencies involving this product, call toll-free 1-800-441-3637.

## Potential Health Effects

Based on animal data, skin contact may cause skin irritation with discomfort or rash and skin sensitization with allergic rashes.

Based on animal data, eye contact may cause eye irritation with discomfort, tearing, or blurring of vision.

Based on animal data, inhalation may cause irritation of the upper respiratory tract, with coughing and discomfort.

## Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

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FIRST AID MEASURES  
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## First Aid

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF IN EYES: No specific intervention is indicated, as the product is not likely to be hazardous to the eyes. Consult a physician if necessary.

IF INHALED: No specific intervention is indicated, as the product is not likely to be hazardous by inhalation. Consult a physician if necessary.

IF SWALLOWED: No specific intervention is indicated, as the product is not likely to be hazardous by ingestion. Consult a physician if necessary.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-441-3637 for emergency medical

## (FIRST AID MEASURES - Continued)

treatment information.

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FIRE FIGHTING MEASURES  
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## Flammable Properties

Not a fire or explosion hazard.

LEL is 0.1 - 0.23 g/L

Minimum ignition energy is >1 joules

Like most organic powders or crystals, under severe dusting conditions, this material may form explosive mixtures in air.

## Extinguishing Media

Water Spray, Foam, Dry Chemical, CO2.

## Fire Fighting Instructions

Evacuate personnel to a safe area. Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment. Runoff from fire control may be a pollution hazard.

If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the contamination hazard.

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ACCIDENTAL RELEASE MEASURES  
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## Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

## Spill Clean Up

Shovel or sweep up. Avoid causing dust. Do not allow to contaminate ground or surface water systems.

For minor spills, leaks, etc., follow all precautions indicated on the product label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire or other emergency, call 1-800-441-3637 day or night.

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HANDLING AND STORAGE  
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## Handling (Personnel)

USERS SHOULD: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

## Handling (Physical Aspects)

Avoid dust generation.

## Storage

Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in a cool, dry place.

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EXPOSURE CONTROLS/PERSONAL PROTECTION  
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## 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 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 (such as butyl rubber, natural rubber, neoprene rubber or nitrile rubber) greater than or equal to 14 mils.

Shoes plus socks.

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

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 (such as butyl rubber, natural rubber, neoprene rubber or nitrile rubber) greater than or equal to 14 mils.

Shoes plus socks.

## Exposure Guidelines

## Applicable Exposure Limits

## THIFENSULFURON METHYL

PEL (OSHA) : None Established  
TLV (ACGIH) : None Established  
AEL \* (DuPont) : 5 mg/m<sup>3</sup>, 8 & 12 Hr. TWA

## TRIBENURON METHYL

PEL (OSHA) : None Established  
TLV (ACGIH) : None Established  
AEL \* (DuPont) : 1 mg/m<sup>3</sup>, 8 Hr. TWA

\* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

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PHYSICAL AND CHEMICAL PROPERTIES  
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## Physical Data

Color : Light Brown  
Form : Solid Granules  
Odor : Slight, Non-descript  
pH : 8.6 - 9.4  
Bulk Density : 0.65 - 0.73 g/mL

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STABILITY AND REACTIVITY  
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## Chemical Stability

Stable at normal temperatures and storage conditions.

## Incompatibility with Other Materials

None reasonably foreseeable.

## Decomposition

Decomposition will not occur.

## Polymerization

Polymerization will not occur.

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TOXICOLOGICAL INFORMATION  
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## Animal Data

## Based on product components:

Oral LD50: > 5000 mg/kg in rats  
Dermal LD50: > 5000 mg/kg in rats  
4-Hour Inhalation LC50: > 6.0 mg/L in rats  
(technical material)

## (TOXICOLOGICAL INFORMATION - Continued)

Based on data from components, this product is not a skin or eye irritant, but is a skin sensitizer in animals.

## THIFENSULFURON METHYL

Repeated ingestion exposures to Thifensulfuron Methyl caused decreased body weight and organ weight changes, and some blood chemistry changes, including increased blood urea nitrogen and decreased protein and globulins. Long-term exposures caused an increase in liver weights, decreased body weight gain, and a decreased level of sodium in the blood when compared to the control group.

No carcinogenic effects were observed in animal tests with Thifensulfuron Methyl. Animal data show developmental effects only at exposure levels producing toxic effects in the adult animal. Tests in animals demonstrate no reproductive toxicity. Thifensulfuron Methyl does not produce genetic damage in bacterial or mammalian cell cultures or animals.

## TRIBENURON METHYL

Repeated ingestion of high doses of Tribenuron Methyl caused body weight loss, increased liver and thyroid/parathyroid weights, altered clinical chemical parameters, but no significant gross or microscopic treatment related effects were noted. Long-term dosing caused body weight loss, alteration in clinical chemical parameters, and testicular atrophy (considered to be biologically insignificant).

Tribenuron Methyl produced an increased incidence of mammary tumors in female rats at dose levels also producing other significant effects. Developmental effects occurred in the rat, but only at a dose also toxic to the dam. No reproductive effects were observed in rats. Tribenuron Methyl did not produce genetic damage in bacterial or mammalian cell cultures or in animals.

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ECOLOGICAL INFORMATION  
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## Ecotoxicological Information

## AQUATIC TOXICITY:

## THIFENSULFURON METHYL

96 hour LC50 - Rainbow trout: > 100 mg/L.

96 hour LC50 - Bluegill sunfish: > 100 mg/L.

96 hour EC50 - Freshwater algae: 0.840 - 1.03 mg/L.

## AVIAN TOXICITY:

Acute Oral LD50 - Mallard Duck: > 2510 mg/kg.

Acute Dietary LC50 - Mallard Duck: > 5620 mg/kg.

Acute Dietary LC50 - Bobwhite Quail: > 5620 mg/kg.

## AQUATIC TOXICITY:

## (ECOLOGICAL INFORMATION - Continued)

## TRIBENURON METHYL

96 hour LC50 - Rainbow trout: &gt; 1000 mg/L.

120 hour, EC50, Freshwater algae: 2.6 - 13.1 mg/L.

## AVIAN TOXICITY:

Acute Oral LD50 - Bobwhite Quail: &gt; 2250 mg/kg.

Acute Dietary LC50 - Bobwhite Quail: &gt; 5620 ppm.

Acute Dietary LC50 - Mallard Duck: &gt; 5620 ppm

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DISPOSAL CONSIDERATIONS  
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## Waste Disposal

Do not contaminate water, food, or feed by disposal. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

## 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 cleaning equipment or disposing of equipment washwaters.

## Container Disposal

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

For Fiber Sacks: Completely empty fiber sack by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into manufacturing or application equipment. Then dispose of sack in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Container Refilling and Disposal (For Containers up to 250 gal): Refer to the product label for instructions. If the container is to be refilled, do not rinse with any material or introduce any pesticide other than this product.

Container Disposal for Bulk Containers: Refer to the product label for instructions. The container must only be refilled with this pesticide product. DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Do not transport if this container is damaged or leaking. Disposal of this container must be in compliance with State and local regulations.

For minor spills, leaks, etc., follow all precautions indicated on the product label and clean up immediately.

## (DISPOSAL CONSIDERATIONS - Continued)

Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire or other emergency, call 1-800-441-3637 day or night.

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TRANSPORTATION INFORMATION  
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## Shipping Information

DOT  
Proper Shipping Name : NOT REGULATED BY D.O.T.

DOT/IMO  
Proper Shipping Name : NOT REGULATED

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REGULATORY INFORMATION  
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## U.S. Federal Regulations

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

Acute : Yes  
Chronic : No  
Fire : No  
Reactivity : No  
Pressure : No

In the United States this product is regulated by the US Environmental Protection Agency under the Federal Insecticide, Fungicide and Rodenticide Act. It is a violation of federal law to use this product in a manner inconsistent with its labeling.

EPA Reg. No. 352-755

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OTHER INFORMATION  
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## NFPA, NPCA-HMIS

NFPA Rating  
Health : 1  
Flammability : 1  
Reactivity : 0

NPCA-HMIS Rating  
Health : 1  
Flammability : 1  
Reactivity : 0

Personal Protection rating to be supplied by user depending on use conditions.

(Continued)

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The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS: DuPont Crop Protection  
Address : Wilmington, DE 19898  
Telephone : 1-888-638-7668

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

End of MSDS