

**DuPont™ Harmony® Extra SG Herbicide (with TotalSol® soluble granules)**

Version 2.0

Revision Date 05/05/2011

Ref. 130000012163

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	DuPont™ Harmony® Extra SG Herbicide (with TotalSol® soluble granules)
Tradename/Synonym	:	Harmony Extra Herbicide (with TotalSol soluble granules) DPX-R9674 50SG Refine Extra 50 SG Refine Extra SG Refine SG B11645335 THIFENSULFURON METHYL: (Methyl 3-[[[(4-methoxy-6-methyl-1,3,5- triazin-2-yl)amino]carbonyl]amino] sulfonyl]-2-thiophenecarboxylate) TRIBENURON METHYL: (Methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)methylamino]carbonyl]- amino]sulfonyl] benzoate)
MSDS Number	:	130000012163
Product Use	:	Herbicide
Manufacturer	:	DuPont 1007 Market Street Wilmington, DE 19898
Product Information	:	1-800-441-7515 (outside the U.S. 1-302-774-1000)
Medical Emergency	:	1-800-441-3637 (outside the U.S. 1-302-774-1139)
Transport Emergency	:	CHEMTREC: 1-800-424-9300 (outside the U.S. 1-703-527-3887)

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Caution

Causes moderate eye irritation. Avoid contact with skin, eyes and clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Potential Health Effects

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This section includes potential acute adverse effects which could occur if this material is not used according to the label.

Skin : May cause: Irritation with discomfort or rash.

Eyes : May cause: Irritation with discomfort, pain, redness, or visual impairment.

Carcinogenicity

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Thifensulfuron methyl	79277-27-3	33.33 %
Tribenuron methyl	101200-48-0	16.67 %
Other Ingredients		50 %

SECTION 4. FIRST AID MEASURES

Skin contact : Take off all contaminated clothing immediately. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Eye contact : Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Inhalation : No specific intervention is indicated as the compound is not likely to be hazardous. Consult a physician if necessary.

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- Ingestion : No specific intervention is indicated as the compound is not likely to be hazardous. Consult a physician if necessary.
- General advice : For medical emergencies involving this product, call toll free 1-800-441-3637. See Label for Additional Precautions and Directions for Use. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
- Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Flammable Properties

- Flash point : not applicable
- Ignition temperature : 385 °C (725 °F)
- Suitable extinguishing media : Water spray, Foam, Dry chemical, Carbon dioxide (CO2)
- Unsuitable extinguishing media : High volume water jet, (contamination risk)
- Firefighting Instructions : Wear full protective clothing and self-contained breathing apparatus. Prevent fire extinguishing water from contaminating surface water or the ground water system. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
(on small fires) If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Cool containers / tanks with water spray.
Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6. ACCIDENTAL RELEASE MEASURES

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



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- Safeguards (Personnel) : Evacuate personnel, thoroughly ventilate area, use self-contained breathing apparatus. Use personal protective equipment.
- Spill Cleanup : Sweep up and shovel into suitable containers for disposal. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.
- Accidental Release Measures : Prevent material from entering sewers, waterways, or low areas. Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

SECTION 7. HANDLING AND STORAGE

- Handling (Personnel) : Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/PPE immediately if material gets inside. Wash thoroughly and put on clean clothing. Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.
- Handling (Physical Aspects) : Keep away from heat and sources of ignition. Avoid dust formation in confined areas. During processing, dust may form explosive mixture in air.
- Storage : Store in original container. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Keep out of the reach of children.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Personal protective equipment
- Skin and body protection : 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), all greater than or equal to 14 mils
 - Shoes plus socks
 - 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


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Chemical-resistant gloves, Category A (such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber), all greater than or equal to 14 mils
Shoes plus socks

Protective measures : 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.

Exposure Guidelines

Exposure Limit Values

Thifensulfuron methyl

AEL *

(DUPONT)

5 mg/m3

8 & 12 hr. TWA

Tribenuron methyl

AEL *

(DUPONT)

1 mg/m3

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : extruded granules
Color : light brown
Odor : slight, slightly sour
pH : 9.2 - 9.8
Density : 0.63 - 0.7 g/ml
Water solubility : soluble

SECTION 10. STABILITY AND REACTIVITY

Stability : Stable at normal temperatures and storage conditions.
Incompatibility : No materials to be especially mentioned.
Hazardous decomposition products : Decomposes slowly on exposure to water.


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SECTION 11. TOXICOLOGICAL INFORMATION

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Inhalation 4 h LC50	: > 5.0 mg/l , rat Active ingredient
Dermal LD50	: > 5,000 mg/kg , rat
Oral LD50	: > 5,000 mg/kg , rat
Skin irritation	: No skin irritation, rabbit
Eye irritation	: No eye irritation, rabbit
Sensitisation	: Causes sensitization., guinea pig
Further information	: Information given is based on data on the components and the toxicology of similar products.
Thifensulfuron methyl	
Repeated dose toxicity	: The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions. Oral - feed multiple species Reduced body weight gain
Carcinogenicity	: Animal testing did not show any carcinogenic effects.
Mutagenicity	: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Reproductive toxicity	: Animal testing showed no reproductive toxicity.
Teratogenicity	: Did not show teratogenic effects in animal experiments. Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.
Tribenuron methyl	
Repeated dose toxicity	: The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.


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	Oral Adverse body weight effects, altered blood chemistry
Carcinogenicity	: An increased incidence of tumours was observed in laboratory animals. Target(s): Mammary glands
Mutagenicity	: Did not cause genetic damage in cultured bacterial cells. Did not cause genetic damage in cultured mammalian cells. Did not cause genetic damage in animals.
Reproductive toxicity	: Animal testing showed no reproductive toxicity.
Teratogenicity	: Animal testing showed effects on embryo-foetal development at levels below those causing maternal toxicity.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity	
Thifensulfuron methyl	
96 h LC50	: Oncorhynchus mykiss (rainbow trout) 91 mg/l
336 h EC50	: Lemna gibba (duckweed) 0.00129 mg/l
48 h EC50	: Daphnia magna (Water flea) 250 mg/l
Tribenuron methyl	
96 h LC50	: Oncorhynchus mykiss (rainbow trout) 738 mg/l
14 d EC50	: Lemna gibba (duckweed) 0.00424 mg/l
120 h EC50	: Pseudokirchneriella subcapitata 0.0208 mg/l
48 h EC50	: Daphnia magna (Water flea) > 894 mg/l
Additional ecological information	: 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

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or disposing of equipment washwaters or rinsate.

SECTION 13. DISPOSAL CONSIDERATIONS

- Waste Disposal : Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.
- Container Disposal : Container Refilling and Disposal:
Refer to the product label for instructions.
Do not transport if this container is damaged or leaking.
- In the event of a major spill, fire or other emergency, call 1-800-441-3637 day or night.

SECTION 14. TRANSPORT INFORMATION

- | | | |
|--------|----------------------|--|
| IATA_C | UN number | : 3077 |
| | Proper shipping name | : Environmentally hazardous substance, solid, n.o.s.
(Thifensulfuron-methyl, Tribenuron methyl) |
| | Class | : 9 |
| | Packing group | : III |
| | Labelling No. | : 9MI |
| IMDG | UN number | : 3077 |
| | Proper shipping name | : Environmentally hazardous substance, solid, n.o.s.
(Thifensulfuron-methyl, Tribenuron methyl) |
| | Class | : 9 |
| | Packing group | : III |
| | Labelling No. | : 9 |

Not regulated as a hazardous material by DOT.


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SECTION 15. REGULATORY INFORMATION

SARA 313 Regulated Chemical(s) : Tribenuron methyl

Title III hazard classification : Acute Health Hazard: Yes
Chronic Health Hazard: No
Fire: No
Reactivity/Physical hazard: No
Pressure: No

EPA Reg. No. : 352-714
In the United States this product is regulated by the US Environmental Protection Agency (EPA) under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

PA Right to Know Regulated Chemical(s) : Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances): Trisodium phosphate dodecahydrate

SECTION 16. OTHER INFORMATION

	NFPA	HMIS
Health :	1	1
Flammability :	1	1
Reactivity/Physical hazard :	0	0

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Contact person : DuPont Crop Protection, Wilmington, DE, 19898, Phone: 1-888-638-7668



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