

**DuPont™ Upbeet® Herbicide**

Version 2.0

Revision Date 07/12/2013

Ref. 13000000832

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™ Upbeet® Herbicide
Tradename/Synonym : B10048183
DPX-66037 50WG
Triflusulfuron methyl: Methyl 2-[[[[[4-(dimethylamino)-6-(2,2,2-trifluoroethoxy)-1,3,5-triazin-2-yl]-amino]carbonyl]amino]sulfonyl]-3-methylbenzoate

MSDS Number : 13000000832

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

Avoid contact with skin, eyes and clothing. In case of contact with eyes, immediately flush with plenty of water. Get medical attention if irritation persists.

Potential Health Effects

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.

Inhalation



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Triflusulfuron-methyl : May cause: Respiratory irritation, Cough, Discomfort.

Repeated exposure
Quartz : DuPont has classified this material as a known human carcinogen.

Carcinogenicity Material	IARC	NTP	OSHA
Quartz	1	X	

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Triflusulfuron-methyl	126535-15-7	50 %
Other Ingredients		50 %

Present as an impurity in the clay component of this product:

Quartz		<1 %
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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.

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

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Water spray, Dry chemical, Foam, Carbon dioxide (CO2)
Unsuitable extinguishing media	: High volume water jet, (contamination risk)
Firefighting Instructions	: Wear full protective clothing and self-contained breathing apparatus. (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.

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.

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.
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



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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.
- Handling (Physical Aspects) : Keep away from heat and sources of ignition. Avoid dust formation in confined areas. Under severe dusting conditions, this material may form explosive mixtures in air.
- Storage : Store in original container. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in a cool, dry place. Keep out of the reach of children.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering controls : Ensure adequate ventilation.
- 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
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 : Use this product in accordance with its label. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. 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.



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Exposure Guidelines
Exposure Limit Values

Triflusulfuron-methyl AEL *	(DUPONT)	2 mg/m3	8 & 12 hr. TWA Total dust.
Quartz PEL:	(OSHA)	2.4 millions of particles per cubic foot of air Respirable.	TWA Remarks The exposure limit is calculated from the equation, $250/(\%SiO_2+5)$, using a value of 100% SiO ₂ . Lower percentages of SiO ₂ will yield higher exposure limits.
PEL:	(OSHA)	0.1 mg/m3 Remarks	TWA Respirable. The exposure limit is calculated from the equation, $10/(\%SiO_2+2)$, using a value of 100% SiO ₂ . Lower percentages of SiO ₂ will yield higher exposure limits.
PEL:	(OSHA)	0.3 mg/m3 Remarks	TWA Total dust. The exposure limit is calculated from the equation, $30/(\%SiO_2+2)$, using a value of 100% SiO ₂ . Lower values of % SiO ₂ will give higher exposure limits.
TLV	(ACGIH)	0.025 mg/m3	TWA Respirable fraction.
AEL *	(DUPONT)	0.01 mg/m3	12 hr. TWA Respirable dust.
AEL *	(DUPONT)	0.02 mg/m3	8 hr. TWA Respirable dust.

* 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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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: solid, granules
Color	: brown
Odor	: none
pH	: 8.6
Density	: 0.5 GJ
Bulk density	: 35 lb/ft ³ loose
Water solubility	: dispersible

SECTION 10. STABILITY AND REACTIVITY

Stability	: Stable at normal temperatures and storage conditions.
Conditions to avoid	: None reasonably foreseeable.
Incompatibility	: No materials to be especially mentioned.
Hazardous reactions	: Polymerization will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

DuPont™ Upbeet® Herbicide	
Inhalation 4 h LC50	: > 6.1 mg/l , rat
Dermal LD50	: > 2,000 mg/kg , rabbit
Oral LD50	: > 5,000 mg/kg , rat
Skin irritation	: No skin irritation, rabbit
Eye irritation	: Moderate eye irritation, rabbit
Sensitisation	: Does not cause skin sensitisation., guinea pig



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Triflurosulfuron-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, Liver effects, Abnormal decrease in number of red blood cells

Carcinogenicity

: An increased incidence of tumours was observed in laboratory animals.

Mutagenicity

: Did not show mutagenic effects in animal experiments.

Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Did not cause genetic damage in animals.

Reproductive toxicity

: Animal testing did not show any effects on fertility.

Teratogenicity

: Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

Quartz

Repeated dose toxicity

: The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.

Inhalation
Fluid retention in lungs (pulmonary oedema), lung effects,
Inflammation, Chronic lung disease, Fibrosis

Carcinogenicity

: Human carcinogen.

DuPont has classified this material as a known human carcinogen.


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SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity	
Triflurosulfuron-methyl	
96 h LC50	: Oncorhynchus mykiss (rainbow trout) 730 mg/l
72 h EC50	: Pseudokirchneriella subcapitata 0.50 mg/l
48 h EC50	: Daphnia magna (Water flea) > 960 mg/l
21 d	: NOEC Oncorhynchus mykiss (rainbow trout) > 210 mg/l OECD Test Guideline 204
21 d	: NOEC Daphnia magna (Water flea) 11 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 or disposing of equipment washwaters or rinsate. Do not apply where/when conditions favour runoff. See product label for additional application instructions relating to environmental precautions.

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


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IATA_C	UN number	: 3077
	Proper shipping name	: Environmentally hazardous substance, solid, n.o.s. (Triflusulfuron methyl)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9MI
IMDG	UN number	: 3077
	Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Triflusulfuron methyl)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9

Not regulated as a hazardous material by DOT.

SECTION 15. REGULATORY INFORMATION

SARA 313 Regulated Chemical(s)	: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
Title III hazard classification	: Acute Health Hazard: Yes Chronic Health Hazard: No Fire: No Reactivity/Physical hazard: No Pressure: No
EPA Reg. No.	: 352-569 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.
California Prop. 65	: WARNING! This product contains a chemical or chemicals known to the State of California to cause cancer.



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PA Right to Know : Substances on the Pennsylvania Hazardous Substances List present at
 Regulated Chemical(s) a concentration of 1% or more (0.01% for Special Hazardous
 Substances): Talc (Mg3H2(SiO3)4) (asbestos-free) , Sucrose

SECTION 16. OTHER INFORMATION

	NFPA	HMIS
Health :	1	1
Flammability :	0	0
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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