

T-MIX™ XP Herbicide

Version 1.0

Revision Date: 09/16/2014

Ref. AGSURF0021

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 : T-MIX™ XP Herbicide
Tradename/Synonym : T-MIX™ XP
DuPont DPX-JMQ48 75XP Herbicide
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 : AGSURF0021

Product Use : Herbicide

Manufacturer : Agsurf Corporation
1209 Orange Street
Wilmington, DE 19801

Product Information : 1-888-261-1410
Medical Emergency : 1-888-261-1410
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.

Potential Health Effects

Skin

Thifensulfuron methyl : May cause skin irritation.
May cause: Irritation with discomfort or pain, redness or rash, itching or swelling.

Tribenuron methyl : May cause allergic skin reaction.

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Eyes : Moderate eye irritation

Inhalation

Thifensulfuron methyl : May cause: Respiratory irritation, Discomfort, Cough.

Carcinogenicity

Material

IARC

NTP

OSHA

Titanium dioxide

2B

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Thifensulfuron methyl	79277-27-3	60 %
Tribenuron methyl	101200-48-0	15 %
Other Ingredients		25 %

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

Titanium Dioxide		<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 1-888-261-1410. See Label for Additional Precautions and Directions for Use. |

SECTION 5. FIREFIGHTING MEASURES

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|--------------------------------|--|
| 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. (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.

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|-----------------------------|---|
| Safeguards (Personnel) | : Evacuate personnel to safe areas. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Wear suitable 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 with local regulations. |

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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.
- Storage : Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in original container. Store in a cool, dry place. Keep out of the reach of children.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering controls : Ensure adequate ventilation. 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. IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified for "Applicators and Other Handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.
- Personal protective equipment
- Skin and body protection : Applicators and other handlers must wear:
Long sleeved shirt and long pants
Chemical resistant gloves made of any waterproof material
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. Use this product in accordance with its label.

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Exposure Guidelines

Exposure Limit Values

Thifensulfuron methyl AEL *	(AGSURF)	5 mg/m3	8 & 12 hr. TWA Total dust.
Tribenuron methyl AEL *	(AGSURF)	0.5 mg/m3	12 hr. TWA
AEL *	(AGSURF)	1 mg/m3	8 hr. TWA
Titanium dioxide Permissible exposure limit:	(OSHA)	15 mg/m3	8 hr. TWA Total dust.
TLV	(ACGIH)	10 mg/m3	TWA
AEL *	(AGSURF)	10 mg/m3	8 & 12 hr. TWA Total dust.
AEL *	(AGSURF)	5 mg/m3	8 & 12 hr. TWA Respirable dust.

* AEL is Agsurf'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	: granules
Color	: light brown
Odor	: none
pH	: 5.1 - 6.2
Oxidising Substance	: The product is not oxidizing.
Density	: 0.6 - 0.7 g/cm3
Water solubility	: dispersible

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SECTION 10. STABILITY AND REACTIVITY

Stability	: Stable at normal temperatures and storage conditions.
Conditions to avoid	: None reasonably foreseeable.
Incompatibility	: None reasonably foreseeable.
Hazardous reactions	: Polymerization will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

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Inhalation 4 h LC50	: > 5.3 mg/l , Rat
Dermal LD50	: > 5,000 mg/kg , Rat
Oral LD50	: > 5,000 mg/kg , Rat
Skin irritation	: Moderate skin irritation, Rat
Eye irritation	: Moderate eye irritation, Rabbit
Sensitisation	: Does not cause skin sensitisation., Guinea pig
Further information	: Information given is based on data on the components.

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. Animal testing did not show any mutagenic effects.

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- Reproductive toxicity : No toxicity to reproduction
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.
- Oral - feed
Mouse
90 d
Reduced body weight gain
- Oral
Rat
28 d
Reduced body weight gain
- Carcinogenicity : Not classifiable as a human carcinogen.
An increased incidence of tumours was observed in laboratory animals.
Target(s):
Mammary glands
- Mutagenicity : Animal testing did not show any mutagenic effects.
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
- Reproductive toxicity : No toxicity to reproduction

Titanium Dioxide

- Carcinogenicity : Based upon all available study results, Agsurf scientists conclude that titanium dioxide will not cause lung cancer or chronic respiratory diseases in humans at concentrations experienced in the workplace.

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SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity	
Thifensulfuron methyl	
96 h LC50	: Oncorhynchus mykiss (rainbow trout) > 100 mg/l
14 d EC50	: Lemna minor (duckweed) 0.0013 mg/l
48 h EC50	: Daphnia magna (Water flea) 470 mg/l
Tribenuron methyl	
96 h LC50	: Oncorhynchus mykiss (rainbow trout) 738 mg/l
120 h EC50	: Pseudokirchneriella subcapitata (microalgae) 0.0208 mg/l
14 d EC50	: Lemna gibba (duckweed) 0.00424 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 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. No data is available on the product itself.

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 1-888-261-1410 day or night.

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SECTION 14. TRANSPORT INFORMATION

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

SECTION 15. REGULATORY INFORMATION

SARA 313 Regulated Chemical(s)	: Tribenuron methyl
EPA Reg. No.	: 352-899-85588 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): Kaolin

SECTION 16. OTHER INFORMATION

™ Trademark of Agsurf Corporation

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Contact person : Agsurf Corporation, Wilmington, DE, 19801, Phone: 1-888-261-1410

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