Agsurf Corporation

T-PAC™ XP Herbicide

Version 1.0

Revision Date 08/04/2014 Ref. AGSURF0020

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-Pac XP herbicide

Tradename/Synonym : T-Pac XP

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-l,3,5-triazin-2-

yl)methylamino]carbonyl]- amino]sulfonyl] benzoate)

MSDS Number : AGSURF0020

Product Use : Herbicide

Distributor : 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

Causes moderate eye irritation. Avoid contact with skin, eyes and clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

Potential Health Effects

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

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Skin : May cause: Irritation with discomfort or rash.

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

Carcinogenicity

Material IARC NTP OSHA

Titanium dioxide 2B

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Tribenuron methyl	101200-48-0	37.5 %
Thifensulfuron methyl	79277-27-3	37.5 %
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.

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

Flammable Properties

Flash point : Not applicable

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.

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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

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.

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

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

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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

(AGSURF)

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.

8 & 12 hr. TWA Respirable dust.

Exposure Guidelines Exposure Limit Values

Tribenuron methyl

AEL*

AEL *	(AGSURF)	0.5 mg/m3	12 hr. TWA
AEL *	(AGSURF)	1 mg/m3	8 hr. TWA
Thifensulfuron methyl AEL *	(AGSURF)	5 mg/m3	8 & 12 hr. TWA Total dust.
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.

5 mg/m3

^{*} 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.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : solid, extruded granules

Color : light brown Odor : slight pH : 5.6 - 6.2

Bulk density : 0.66 - 0.72 g/cm3

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.

SECTION 11. TOXICOLOGICAL INFORMATION

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Inhalation 4 h LC50 : > 5.3 mg/l, Rat

Dermal LD50 : > 5,000 mg/kg , Rabbit

Oral LD50 : > 5,000 mg/kg, Rat

Skin irritation : slight irritation, Rabbit

Eye irritation : Moderate eye irritation, Rat

Sensitization : Animal test did not cause sensitization by skin contact, Guinea pig

Further information : Information given is based on data on the components and the

toxicology of similar products.

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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 tumors 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

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.

Reproductive toxicity : No toxicity to reproduction

Animal testing showed no reproductive toxicity.

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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.

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.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

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

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

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.

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.

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Container Disposal : Container Refilling and Disposal:

Refer to the product label for instructions.

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
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

Marine pollutant : yes (Thifensulfuron-methyl, Tribenuron methyl)

Not regulated as a hazardous material by DOT.

SECTION 15. REGULATORY INFORMATION

SARA 313 Regulated

Chemical(s)

: Tribenuron methyl

EPA Reg. No. : 352-617-85588

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 income with its labeling. Read and follow all label directions.

This product is excluded from listing requirements under EPA/TSCA.

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California Prop. 65 : WARNING! This product contains a chemical or chemicals known to the State

of California to cause cancer.

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

Take notice of the directions of use on the label. Before use read Agsurf's safety information. Trademark of Agsurf Corporation.

: Agsurf Corporation Contact person

1209 Orange Street Wilmington, DE, 19801 www.agsurf.com

Phone: 1-888-261-1410

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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