

**DuPont™ Affinity® TankMix Herbicide (with TotalSol® soluble granules)**

Version 2.0

Revision Date 06/26/2015

Ref. 130000015716

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™ Affinity® TankMix Herbicide (with TotalSol® soluble granules)
Tradename/Synonym : DPX-JMQ48 50SG
B11984502
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)

Product Use : Herbicide

Restrictions on use :
Do not use product for anything outside of the above specified uses

Manufacturer/Supplier : DuPont
4417 Lancaster Pike
Wilmington, DE 19805, USA

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

Not classified as a hazardous substance or mixture according to the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard 2012.

Other hazards

No applicable data available.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Tribenuron methyl	101200-48-0	10 %
Thifensulfuron methyl	79277-27-3	40 %
Trisodium phosphate dodecahydrate	10101-89-0	1 - 5 %
Sodium carbonate	497-19-8	10 - 15 %

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4. FIRST AID MEASURES

- 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.
- Inhalation : No specific intervention is indicated as the compound is not likely to be hazardous. Consult a physician if necessary.
- 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 : 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.
- Most important symptoms/effects, acute and delayed : No applicable data available.
- Protection of first-aiders : No applicable data available.
- Notes to physician : No applicable data available.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray, Dry chemical, Carbon dioxide (CO₂)
- Unsuitable extinguishing media : High volume water jet, (contamination risk)
- Specific hazards : Hazardous decomposition products formed under fire conditions. Carbon dioxide (CO₂) Nitrogen oxides (NO_x)
- Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.
- Further information : 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.

- Safeguards (Personnel) : Wear personal protective equipment.
- Environmental precautions : Prevent material from entering sewers, waterways, or low areas.

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- Spill Cleanup : Sweep up and shovel into suitable containers for disposal.
- Accidental Release Measures : Follow applicable Federal, State/Provincial and Local laws/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 the outside of gloves before removing. Wash thoroughly and put on clean clothing.
- Handling (Physical Aspects) : Keep away from heat and sources of ignition.
- Dust explosion class : No applicable data available.
- Storage : Store in a place accessible by authorized persons only. Store in original container. Keep in properly labelled containers. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in original container. Keep tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. No special restrictions on storage with other products. Stable under recommended storage conditions.
- Storage period : No applicable data available.
- Storage temperature : No applicable data available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering controls : 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


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Skin and body protection : Applicators and other handlers must wear:
 Chemical resistant gloves made of any waterproof material
 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 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.

**Exposure Guidelines
 Exposure Limit Values**

Tribenuron methyl			
AEL *	(DUPONT)	0.5 mg/m3	12 hr. TWA
AEL *	(DUPONT)	1 mg/m3	8 hr. TWA
Thifensulfuron methyl			
AEL *	(DUPONT)	5 mg/m3	8 & 12 hr. TWA Total dust.
Trisodium phosphate dodecahydrate			
No applicable data available.			
Sodium carbonate			
AEL *	(DUPONT)	5 mg/m3	8 & 12 hr. TWA Total 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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
 Physical state : solid

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Form	: granular
Color	: light brown
Odor	: slight
Odor threshold	: No applicable data available.
pH	: 8.6 at 10 g/l 20 °C (68 °F) Method: CIPAC MT 75
Melting point/range	: No applicable data available.
Boiling point/boiling range	: No applicable data available.
Flash point	: No applicable data available.
Evaporation rate	: No applicable data available.
Flammability (solid, gas)	: No applicable data available.
Upper explosion limit	: No applicable data available.
Lower explosion limit	: No applicable data available.
Vapour Pressure	: No applicable data available.
Vapor density	: Not applicable
Specific gravity (Relative density)	: Not applicable
Bulk density	: 688 kg/m ³ packed
Water solubility	: soluble
Solubility(ies)	: No applicable data available.
Partition coefficient: n-octanol/water	: No applicable data available.
Auto-ignition temperature	: Auto-ignition temperature Not available for this mixture.


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Decomposition temperature : No applicable data available.

Viscosity, kinematic : No applicable data available.

Viscosity, dynamic : No applicable data available.

Oxidizing Substance : The product is not oxidizing.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No applicable data available.

Chemical stability : No decomposition if stored and applied as directed. Stable at normal temperatures and storage conditions.

Possibility of hazardous reactions : Hazardous decomposition products formed under fire conditions. Polymerization will not occur.

Conditions to avoid : To avoid thermal decomposition, do not overheat.

Incompatible materials : No materials to be especially mentioned.

Hazardous decomposition products : Hazardous decomposition products: Carbon oxides, Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

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Inhalation 4 h LC50 : > 5.0 mg/l , Rat

Dermal Acute toxicity estimate : > 5,000 mg/kg , Rat

Oral Acute toxicity estimate : > 5,000 mg/kg , Rat

Skin irritation : No skin irritation, Rabbit

Eye irritation : No eye irritation, Rabbit

Sensitisation : Did not cause sensitisation on laboratory animals., Mouse

Further information : Components influencing toxicology

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 - feed
 Mouse
 - 90 d
 NOAEL: 500 mg/kg
 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

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.

Teratogenicity : Did not show teratogenic effects in animal experiments.


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

Sodium carbonate

- Repeated dose toxicity : Inhalation
Rat
-
Respiratory tract irritation
- Mutagenicity : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Evidence suggests this substance does not cause genetic damage in animals.
- Reproductive toxicity : Animal testing showed no reproductive toxicity.
- Teratogenicity : Animal testing showed no developmental toxicity.

Carcinogenicity

The carcinogenicity classifications for this product and/or its ingredients have been determined according to HazCom 2012, Appendix A.6. The classifications may differ from those listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

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 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


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14 d EC50 : Lemna minor (duckweed) 0.0013 mg/l
 48 h EC50 : Daphnia magna (Water flea) 470 mg/l
 28 d : NOEC Americamysis bahia (mysid shrimp) 7.93 mg/l

Trisodium phosphate dodecahydrate

96 h EC50 : Gambusia affinis (Mosquito fish) 151 mg/l

96 h EC50 : Daphnia magna (Water flea) 126 mg/l

Sodium carbonate

96 h LC50 : Lepomis macrochirus (Bluegill sunfish) 300 mg/l

48 h LC50 : Ceriodaphnia dubia (water flea) 200 - 227 mg/l

4 d : EC50 Daphnia magna (Water flea) 228 - 297 mg/l

Environmental Fate

Sodium carbonate

Biodegradability : The methods for determining biodegradability are not applicable to inorganic substances.

Bioaccumulation : Does not bioaccumulate.

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.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods - Product : 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.

Waste disposal methods - Container : Refer to the product label for instructions.
 Container Refilling and Disposal:


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The container must only be refilled with this pesticide product.
DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE.
 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.

Contaminated packaging : No applicable data available.

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

Marine Pollutants assigned UN number 3077 and 3082 in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code, IATA special provision A197, and ADR/RID special provision 375.

SECTION 15. REGULATORY INFORMATION

Other regulations : This Safety Data Sheet is for a pesticide product registered by the US Environmental Protection Agency (USEPA) and is therefore also subject to certain labeling requirements under US pesticide law (FIFRA). These requirements differ from the classification criteria and hazard information required by OSHA for safety data sheets, and for workplace labels of non-


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pesticide chemicals. The following is the mandatory hazard information required by USEPA on the pesticide label:

CAUTION!

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

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. : 352-641
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.

SECTION 16. OTHER INFORMATION

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

Before use read DuPont's safety information.

Take notice of the directions of use on the label.

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

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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