

**Panoflex™ Herbicide (with TotalSol® soluble granules)**

Version 1.0

Revision Date 02/01/2018

Ref. 130000118503

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 : Panoflex™ Herbicide (with TotalSol® soluble granules)  
Tradename/Synonym : DPX-SBN49 Herbicide (with TotalSol® soluble granules)  
Tribenuron Methyl: Methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)methylamino]carbonyl]amino]sulfonyl]benzoate  
Thifensulfuron Methyl: Methyl 3-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]amino] sulfonyl]-2-thiophenecarboxylate

Product Use : Herbicide

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

Manufacturer/Supplier : FMC Corporation  
2929 Walnut Street  
Philadelphia, PA 19104, USA  
(215) 299-6000 (General Information)  
msdsinfo@fmc.com (E-Mail General Information)

Medical Emergencies : 1 800 / 331-3148 (ProPharma Group - U.S.A. & Canada)  
1 651 / 632-6793 (ProPharma Group - All Other Countries - Collect)

For leak, fire, spill or  
accident emergencies, call : 1 800 / 424 9300 (CHEMTREC - U.S.A.)  
1 703 / 741-5970 (CHEMTREC - International)  
1 703 / 527 3887 (CHEMTREC - Alternate)

**SECTION 2. HAZARDS IDENTIFICATION**

**Product hazard category**  
Skin sensitisation Category 1

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**Label content**

Pictogram

:



Signal word

: Warning

Hazardous warnings

: May cause an allergic skin reaction.

Hazardous prevention measures

: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
Contaminated work clothing should not be allowed out of the workplace.  
Wear protective gloves.  
IF ON SKIN: Wash with plenty of soap and water.  
If skin irritation or rash occurs: Get medical advice/ attention.  
Wash contaminated clothing before reuse.  
Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

No applicable data available.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS-No.	Concentration
Tribenuron methyl	101200-48-0	40 %
Thifensulfuron methyl	79277-27-3	10 %

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Trisodium phosphate dodecahydrate	10101-89-0	5 - 10 %
Sodium carbonate	497-19-8	5 - 10 %
Other Ingredients		30 - 40 %

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.  
See Section 1 for emergency phone numbers.  
See Label for Additional Precautions and Directions for Use.
- Inhalation : Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.
- 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.
- 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.

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**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Water spray, Foam, Dry chemical, Carbon dioxide (CO2)
- Unsuitable extinguishing media : High volume water jet, (contamination risk)
- Specific hazards : No applicable data available.
- Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.
- Further information : (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.
- Environmental precautions : Prevent material from entering sewers, waterways, or low areas.
- Spill Cleanup : Sweep up and shovel into suitable containers for disposal.
- Accidental Release Measures : 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

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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.
- Dust explosion class : No applicable data available.
- 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.
- Storage period : No applicable data available.
- Storage temperature : No applicable data available.

**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 made of any waterproof material  
 Polyvinylchloride  
 Shoes plus socks  
 Personal protective equipment required for early entry:  
 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. Use this product in accordance with its label.

**Exposure Guidelines**  
**Exposure Limit Values**

Tribenuron methyl			
AEL *	(FMC)	0.5 mg/m3	12 hr. TWA
AEL *	(FMC)	1 mg/m3	8 hr. TWA

Sodium carbonate

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AEL *	(FMC)	5 mg/m3	8 & 12 hr. TWA Total dust.
Thifensulfuron methyl AEL *	(FMC)	5 mg/m3	8 & 12 hr. TWA Total dust.
Trisodium phosphate dodecahydrate			
No applicable data available.			

\* AEL is FMC'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
Form	: solid, granular
Color	: light brown

Odor : none

Odor threshold : No applicable data available.

pH : 9.4

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.

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Vapour density	: No applicable data available.
Specific gravity (Relative density)	: No applicable data available.
Water solubility	: No applicable data available.
Solubility(ies)	: No applicable data available.
Partition coefficient: n-octanol/water	: No applicable data available.
Auto-ignition temperature	: No applicable data available.
Decomposition temperature	: No applicable data available.
Viscosity, kinematic	: No applicable data available.
Viscosity, dynamic	: No applicable data available.

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: No applicable data available.
Chemical stability	: Stable at normal temperatures and storage conditions.
Possibility of hazardous reactions	: Polymerization will not occur.
Conditions to avoid	: None reasonably foreseeable.
Incompatible materials	: No materials to be especially mentioned.
Hazardous decomposition products	: No applicable data available.

**SECTION 11. TOXICOLOGICAL INFORMATION**

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Inhalation 4 h Acute toxicity estimate	: > 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

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- Eye irritation : No eye irritation, Rabbit
- Sensitisation : Causes sensitisation., Guinea pig
- Further information : Information given is based on data on the components.

**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**

- 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 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 : Container Refilling and Disposal:  
Refer to the product label for instructions.  
Do not transport if this container is damaged or leaking.
- Contaminated packaging : See Section 1 for emergency phone numbers.  
: No applicable data available.

**SECTION 14. TRANSPORT INFORMATION**



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

Not regulated as a hazardous material by DOT.

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

**Caution**

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

SARA 313 Regulated Chemical(s) : Tribenuron methyl

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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

EPA : 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**

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