



Safety Data Sheet

United Phosphorus, Inc.

Preparation Date 18-Oct-2016

Revision date 30-Jul-2015

Revision Number: 1

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier

Product Description: Trionic 4 SC

Other means of identification

Item#: RD-TL20151

UN-No UN3082

Registration number(s) 70506-328

Recommended use of the chemical and restrictions on use

Recommended use Fungicide.

Uses advised against Activities contrary to label recommendation labeled activities

Details of the Supplier of the Safety Data Sheet

Supplier Address

United Phosphorus Inc.
630 Freedom Business Center
Suite 402
King of Prussia, PA 19406

Emergency telephone number

Company Phone Number

1-800-438-6071

Emergency telephone number

Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887

Medical: Rocky Mountain Poison Control Center
(866) 673-6671 (24hrs)

2. Hazards Identification

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Vapors)	Category 3
Skin sensitization	Category 1

Label elements

EMERGENCY OVERVIEW

DANGER

Hazard Statements

HARMFUL IF SWALLOWED

Harmful in contact with skin

Toxic if inhaled

May cause an allergic skin reaction

**Appearance** No information available**Physical state** Liquid**Odor** Mild**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Wear protective gloves/protective clothing/eye protection/face protection
 Do not get in eyes, on skin, or on clothing
 Use only outdoors or in a well-ventilated area
 Contaminated work clothing should not be allowed out of the workplace

IF ON SKIN: Wash with plenty of soap and water
 Call a POISON CENTER or doctor if you feel unwell
 Wash contaminated clothing before reuse
 If skin irritation or rash occurs: Get medical advice/attention
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Call a POISON CENTER or doctor/physician
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed
 Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)**OTHER INFORMATION**

3. Composition/information on Ingredients

Chemical name	CAS-No	Weight %	Trade secret
Triflumizole	99387-89-0	42.14	
Silicon dioxide	112926-00-8	2.2	

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. First aid measures

FIRST AID MEASURES

Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a poison control center or doctor for treatment advice.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Seek medical attention if skin irritation, swelling or redness develops and persists.
Inhalation	If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.

Ingestion Call a physician or poison control center immediately. Clean mouth with water. Never give anything by mouth to an unconscious person.

Most Important Symptoms and Effects, Both Acute and Delayed

Most Important Symptoms and Effects Medical conditions aggravated by contact: Dermatitis, Skin disorders, allergies.
Target organs: Skin; Immune system; Liver; Kidney.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

No information available.

Hazardous combustion products After evaporation of water, combustion will generate: Carbon oxides. Oxides of nitrogen. Hydrogen halides.

Explosion data

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions Provide adequate ventilation.

Environmental Precautions

Environmental precautions Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

Methods and material for containment and cleaning up

Methods for Clean-Up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling

Handling Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Wear personal protective equipment. Remove and wash contaminated clothing before re-use. Keep away from heat, sparks and open flame. - No smoking.

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed in a dry and well-ventilated place.

incompatible materials No information available.

8. Exposure Controls/Personal Protection

Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL
Silicon dioxide		(vacated) TWA: 6 mg/m ³ TWA: 20 mppcf : (80)/(%) SiO ₂ mg/m ³ TWA

Engineering controls Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Personal protective equipment

Eye/Face Protection

Use eye protection to avoid eye contact. Where there is potential for eye contact have eye flushing equipment available. Safety glasses with side-shields.

Skin protection

Wear protective gloves/clothing. Long sleeved clothing. Socks and footwear.

Respiratory protection

Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134.

General hygiene considerations

Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection. Wash hands and face before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Mild
Appearance	No information available		
color	Off-white to Tan		

<u>Property</u>	<u>VALUES</u>	<u>Remarks/ • Method</u>
pH	No information available	
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash Point	No information available	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability limit in air		
Upper Flammability Limit	No information available	
Lower Flammability Limit	No information available	
vapor pressure	No information available	
Vapor Density	No information available	
Specific gravity	1.139 @20 C	
Water solubility	No information available	
Solubility in Other Solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity, kinematic	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

OTHER INFORMATION

Softening point	No information available
molecular weight	No information available
VOC Content	No information available
density	No information available
Bulk density	No information available

10. Stability and Reactivity

Reactivity

no data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Burning produces obnoxious and toxic fumes.

incompatible materials

No information available.

Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx). Hydrogen halides.

11. Toxicological Information

Information on Likely Routes of Exposure

Product information

Trionic 4SC
 Acute oral LD50 (rat) = 550 mg/kg
 Acute dermal LD50 (rat) = >2,000 mg/kg
 Acute inhalation LC50 (rat) = > 2.08 mg/L - 4 hour

Inhalation	Inhalation of vapors in high concentration may cause irritation of respiratory system.
Eye contact	May cause slight irritation.
Skin contact	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
Ingestion	HARMFUL IF SWALLOWED. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Information on Toxicological Effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
Mutagenic effects No information available.
Carcinogenicity There are no known carcinogenic chemicals in this product.

Chemical name	ACGIH	IARC	NTP	OSHA
Silicon dioxide 112926-00-8	-	Group 3		-

Reproductive effects Not Available.
STOT - Single Exposure No information available.
STOT - Repeated Exposure No information available.

Aspiration hazard No information available.

Numerical Measures of Toxicity - Product information

LD50 Oral 550 mg/kg (rabbit)
LD50 Dermal > 2,000 mg/kg (rabbit)
LC50 Inhalation > 8.32 mg/l

12. Ecological Information

Marine Pollutant.

ecotoxicity

Triflumizole 42% formulation:
 Rainbow trout 96 hr LC50 = 0.76 mg/L
 Carp 96 hr LC50 = 1.2 mg/L
 Daphnia Magna 48 hr EC50 = 1.42 mg/L
 Mysid shrimp 96 hr = 0.62 mg/L

Persistence/Degradability

No information available.

Bioaccumulation/ Accumulation

Bioaccumulative potential.

Other Adverse Effects

No information available

13. Disposal Considerations

Waste Treatment Methods

Waste Disposal Method Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Contaminated packaging Refer to product label.

14. Transport Information

DOT Not regulated when shipped domestically by highway in non-buk containers as per 49 CFR 171.4

UN-No UN3082
Proper shipping name Environmentally hazardous substance, liquid, n.o.s (Triflumizole)
Hazard class 9
Packing group PG III
Marine Pollutant Marine Pollutant.

TDG When shipped in Canada domestic highway non-bulk this product can be shipped as Not regulated as per TDG 1.45.1

UN-No UN3082
Proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Triflumizole)
Hazard class 9
Packing group PG III

IATA

UN-No	UN3082
Proper shipping name	Environmentally hazardous substances, liquid, n.o.s (Triflumizole)
Hazard class	9
Packing group	PG III
Description	Marine Pollutant

IMDG/IMO

UN-No	UN3082
Proper shipping name	Environmentally hazardous substances, liquid, n.o.s (Triflumizole)
Hazard class	9
Packing group	PG III
Marine Pollutant	Marine Pollutant

15. Regulatory Information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

signal word CAUTION

Ventilation Control PESTICIDE APPLICATORS & WORKERS THESE WORKERS MUST REFER TO PRODUCT LABELING AND DIRECTIONS FOR USE IN ACCORDANCE WITH EPA WORKER PROTECTION STANDARD 40 CFR PART 170.

Keep out of Reach of Children. Harmful if swallowed or absorbed through the skin. Toxic to fish.

International Inventories

USINV	Does not comply
DSL/NDSL	Does not comply
EINECS/ ELINCS	Does not comply
ENCS	Does not comply
China	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply
TSCA	Does not comply

This product is a registered pesticide and therefore is exempt from TSCA requirements.

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous**Categorization**

Acute health hazard	yes
Chronic health hazard	NO
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CERCLA**RCRA****Pesticide Information****State Regulations****State Right-to-Know****International regulations****U.S. EPA Label information**

EPA Pesticide registration number 70506-328

16. Other Information

<u>NFPA</u>	HEALTH 1	flammability 0	Instability 0	Physical hazard -
--------------------	-----------------	-----------------------	----------------------	--------------------------

Preparation Date 18-Oct-2016

Revision date 30-Jul-2015

Revision Summary

Add to system

Disclaimer

United Phosphorus, Inc. believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with other materials or in any process. Further, since the conditions and methods of use are beyond the control of United Phosphorus, Inc. and United Phosphorus Inc. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

End of MSDS