



Safety Data Sheet

United Phosphorus, Inc.

Preparation Date 12-Jun-2017

Revision date 08-Dec-2017

Revision Number: 2

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

Product identifier

Product Description: STartUP T-MTYL

Other means of identification

Item#: RD-20170612C

UN-No UN3082

Registration number(s) 70506-341

Recommended use of the chemical and restrictions on use

Recommended use Solution for seed treatment.

Uses advised against Activities contrary to label recommendation

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 considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Gases)	Category 2
Acute toxicity - Inhalation (Vapors)	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin sensitization	Category 1
Germ cell mutagenicity	Category 2

Label elements

EMERGENCY OVERVIEW

DANGER

Hazard Statements

Harmful in contact with skin

Fatal if inhaled

May cause an allergic skin reaction

Suspected of causing genetic defects

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

Do not handle until all safety precautions have been read and understood

Wear cold insulating gloves/face shield/eye protection

Do not breathe dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

In case of inadequate ventilation wear respiratory protection

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

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

Immediately call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store locked up

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

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

- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

3. Composition/information on Ingredients

Chemical name	CAS-No	Weight %	Trade secret
Thiophanate-methyl	23564-05-8	46.2	
1,2-Benzisothiazolin-3-one (Proxel GXL)	2634-33-5	0.024	

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**

Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin contact

Wash off immediately with plenty of water for at least 15 minutes. Call a poison control center or doctor for treatment advice.

Inhalation	Move to fresh air in case of accidental inhalation of vapors or decomposition products. If symptoms persist, call a physician. Immediate medical attention is required. Call a physician or poison control center immediately. Toxic by inhalation.
Ingestion	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician. Clean mouth with water and drink afterwards plenty of water afterwards.

Most Important Symptoms and Effects, Both Acute and Delayed

Most Important Symptoms and Effects No information available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

Carbon dioxide (CO₂).
Use: Dry chemical. Water spray. alcohol-resistant foam.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours.

Hazardous combustion products No information available.

Explosion data**Protective equipment and precautions for firefighters**

Use personal protective equipment. 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 Avoid contact with skin and eyes. Wear protective gloves/protective clothing and eye/face protection. Wash thoroughly after handling.

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 Wear personal protective equipment. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Keep out of reach of children. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage	Keep out of the reach of children. Keep in a dry, cool and well-ventilated place.
incompatible materials	Strong oxidizing agents.

8. Exposure Controls/Personal Protection

Exposure guidelines	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
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. 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. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	Liquid suspension	Odor	No information available
Appearance	liquid		
color	Off-white to Tan		
Property	VALUES	Remarks/ • Method	
pH	6	Approximately	
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	1.220		
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	350-500 cps		
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 normal conditions. Hazardous polymerisation does not occur.

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization

Hazardous polymerisation does not occur.

Conditions to avoid

No information available.

incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Carbon oxides.

11. Toxicological Information**Information on Likely Routes of Exposure****Product information**

The toxicological data presented is for a formulated product with similar composition Single exposure studies indicate:

Oral: Practically non-toxic to rats (LD50 >5,000 mg/kg)

Dermal: No more than slightly toxic to rabbits (LD50 >2,000 mg/kg)

Inhalation: Slightly toxic to rats (4 hr LC50 1.8 mg/l)

Skin Irritation: Non-irritating to rabbits

Eye Irritation: Non-irritating to rabbits

Skin allergy was observed in guinea pigs following repeated exposure. Repeated or long-term oral administration produced effects on the thyroid, liver or kidneys in rats, mice and dogs. An increased incidence of liver tumors was observed in mice and thyroid tumors were observed in male rats following long-term oral exposure.

No effects were seen on the ability of male or female rats to reproduce when exposed orally for 2 successive generations. No birth defects were observed in the offspring of rats exposed orally during pregnancy. In rabbits, developmental effects were noted only at maternally toxic doses. No genetic changes were observed in tests using animal cells.

Polyglycol

Repeated exposure of rats to aerosol of some block polymers produced an inflammatory response and slight fibrosis in the lung. Long-term dietary administration of a block polymer to dogs produced no adverse effects. Some block polymers have produced genetic changes in tests using bacteria or animal cells.

Single exposure studies indicate that this material is practically non-toxic if swallowed (mouse LD50 >15,000 mg/kg) or absorbed through skin (rabbit LD50 2,000 mg/kg) moderately toxic if inhaled (rat 4 hr LC50 0.1-0.34 mg/l) and practically non irritating to rabbit eyes (10% aqueous solution).

Inhalation

HARMFUL IF INHALED.

Eye contact	May cause irritation.
Skin contact	May be harmful if absorbed through the skin.
Ingestion	MAY BE HARMFUL IF SWALLOWED.

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.
Reproductive effects	Not Available.
STOT - Single Exposure	No information available.
STOT - Repeated Exposure	No information available.
Chronic toxicity	Avoid repeated exposure.
Aspiration hazard	No information available.

Numerical Measures of Toxicity - Product information

The following values are calculated based on chapter 3.1 of the GHS document .

LD50 Oral	5000 mg/kg (rat)
LD50 Dermal	> 2000 mg/kg (rat)
LC50 Inhalation	Inhalation LC50 7.2 mg/l

12. Ecological Information

ecotoxicity

Thiophanate methyl
 Carp 96 hr LC50 = >100 mg/L
 Fiddler crab 96 hr LC50 = >560 mg/L
 Bluegill 96 hr LC50 = 15.8 mg/L
 Daphnid 48 hr EC50 = 15.6 mg/L
 Shrimp 96 hr LC50 = 25.1 mg/L
 Trout 96 hr LC50 - 2.2 mg/L
 Oyster 96 hr LC50 = 4.6 ppm
 Highly toxic to catfish

16.64% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence/Degradability

No information available.

Bioaccumulation/ Accumulation

Bioaccumulative potential.

Chemical name	Log Pow
1,2-Benzisothiazolin-3-one (Proxel GXL) 2634-33-5	1.3

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	Packages which contain an amount equal to or exceeding the RQ value of the technical ingredient must be labeled with the following shipping description:
UN-No	UN3082
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s (Thiophanate methyl)
Hazard class	9
Packing group	PG III
Reportable Quantity (RQ):	10 lbs (Thiophanate methyl)

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

IMDG/IMO	
UN-No	UN3082
Proper shipping name	Environmentally hazardous substances, liquid, n.o.s (Thiophanate-methyl)
Hazard class	9
Packing group	PG III
Marine Pollutant	This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO

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. Harmful if inhaled or absorbed through skin.	

International Inventories	
USINV	Not present
DSL/NDSL	Not present
EINECS/	Not Present
ELINCS	
ENCS	Not Present

China	Not Present
KECL	Not Present
PICCS	Not Present
AICS	Not Present
TSCA	Not Present

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

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 contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

SARA 311/312 Hazardous

Categorization

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

CERCLA

Not applicable

Chemical name	RQ	CERCLA EHS RQs	RQ
Thiophanate-methyl 23564-05-8	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ

CERCLA

Component	RQ
Thiophanate-methyl 23564-05-8 (46.2)	10 lb

SARA Product RQ 0

RCRA

Component	RCRA - D Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Thiophanate-methyl 23564-05-8 (46.2)			U409

Pesticide Information

State Regulations

Not applicable

Component	CAS-No	CATEGORY	California Prop. 65	Non-additive, corrosive chemical type
Thiophanate-methyl 23564-05-8 (46.2)	23564-05-8		Female Reproductive Male Reproductive	Female Reproductive Male Reproductive

State Right-to-Know

Not applicable

International regulations

U.S. EPA Label information

EPA Pesticide registration number 70506-341

16. Other Information

NFPA **HEALTH 3** **flammability 0** **Instability 0** **Physical hazard -**

Preparation Date 12-Jun-2017
Revision date 08-Dec-2017

Revision Summary
Update section 1 Update section 3 Update section 15

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End of MSDS