



# Safety Data Sheet

United Phosphorus, Inc.

Preparation Date 04-May-2015

Revision date 02-May-2015

Revision Number: 1

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

### Product identifier

Product Description: Perm-Up 25DF

### Other means of identification

Item#: 12U-120  
UN-No UN3077  
Synonyms Not Available  
Registration number(s) 70506-66

### Recommended use of the chemical and restrictions on use

Recommended use Insecticide.  
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)

Skin sensitization

Category 1

### Label elements

### EMERGENCY OVERVIEW

#### WARNING

#### hazard statements

May cause an allergic skin reaction  
Very toxic to aquatic life



appearance Off-white

Physical state powder

Odor faint

**Precautionary Statements - Prevention**

Do not get in eyes, on skin, or on clothing  
 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

**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
Silicon dioxide	112926-00-8	10	
Permethrin technical	52645-53-1	25	
Sucrose	57-50-1	42	

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**

<b>Eye contact</b>	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.
<b>Skin contact</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call poison control center or doctor for treatment advice.
<b>Inhalation</b>	Move person 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 physician or poison control center immediately.
<b>Ingestion</b>	Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

**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** No information available.

### 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** Carbon monoxide. Carbon dioxide (CO2). Chlorine. Hydrogen chloride. Sulfur oxides.

**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** Use personal protective equipment. Remove all sources of ignition. Avoid dust formation. Avoid contact with the skin and the eyes.

**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. Local authorities should be advised if significant spillages cannot be contained.

**Methods and material for containment and cleaning up**

**Methods for Clean-Up** Sweep up and shovel into suitable containers for disposal. Shovel or sweep up.

**7. Handling and Storage**

**Precautions for safe handling**

**Handling** Do not eat, drink or smoke when using this product. Keep out of reach of children. Remove all sources of ignition. Wear personal protective equipment. Avoid dust formation in confined areas.

**Conditions for safe storage, including any incompatibilities**

**Storage** Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur. Keep containers tightly closed in a cool, well-ventilated place.

**incompatible materials** No materials to be especially mentioned.

**8. Exposure Controls/Personal Protection**

**Exposure guidelines**

Chemical name	ACGIH TLV	OSHA PEL
Silicon dioxide		(vacated) TWA: 6 mg/m <sup>3</sup> TWA: 20 mppcf : (80)/(% SiO <sub>2</sub> ) mg/m <sup>3</sup> TWA
Sucrose	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction

**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. 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.

**Personal protective equipment**

**Eye/Face Protection**

Where there is potential for eye contact have eye flushing equipment available. Use eye

<b>Skin protection</b>	protection to avoid eye contact.
<b>Respiratory protection</b>	Long sleeved clothing. Long pants. Chemical resistant gloves. Socks and footwear. Avoid breathing dust. When airborne exposure limits are exceeded (see below), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer.

**General hygiene considerations**

Do not eat, drink or smoke when using this product. Wash hands and face before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

## 9. Physical and Chemical Properties

**Information on basic physical and chemical properties**

<b>Physical state</b>	powder	<b>Odor</b>	faint
<b>appearance</b>	Off-white		
<b>color</b>	No information available		

<u>Property</u>	<u>VALUES</u>	<u>Remarks/ • Method</u>
<b>pH</b>	7.95	
<b>Melting point/freezing point</b>	8.95 °C / 48 °F	
<b>Boiling Point/Range</b>	No information available	
<b>Flash Point</b>	No information available	
<b>Evaporation Rate</b>	No information available	
<b>flammability (solid, gas)</b>	No information available	
<b>Flammability limit in air</b>		
<b>Upper Flammability Limit</b>	No information available	
<b>Lower Flammability Limit</b>	No information available	
<b>vapor pressure</b>	No information available	
<b>Vapor Density</b>	No information available	
<b>Specific gravity</b>	0.34 g/mL (tap)	
<b>Water solubility</b>	No information available	
<b>Solubility in Other Solvents</b>	No information available	
<b>Partition coefficient: n-octanol/water</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>decomposition temperature</b>	No information available	
<b>Viscosity, kinematic</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	

**OTHER INFORMATION**

<b>Softening point</b>	No information available
<b>molecular weight</b>	No information available
<b>VOC Content</b>	No information available
<b>density</b>	No information available
<b>Bulk density</b>	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**

Extremes of temperature and direct sunlight.

**incompatible materials**

No materials to be especially mentioned.

**Hazardous decomposition products**

Toxic gases and fumes may be formed if product is involved in fire.

## 11. Toxicological Information

**Information on Likely Routes of Exposure**

<b>Inhalation</b>	HARMFUL IF INHALED.
<b>Eye contact</b>	Causes substantial but temporary eye injury.
<b>Skin contact</b>	May be harmful if absorbed through the skin.
<b>Ingestion</b>	HARMFUL IF SWALLOWED.

**Component Information**

Permethrin - has low mammalian toxicity and virtually no allergic side effects and is not a skin or eye irritant. However, prolonged exposure might result in parathesia (tingling sensation), which is reversible within 12 hours. Exposure to permethrin is via dermal contact and inhalation. In repeat patch tests in humans, dermal applications of permethrin at 1% for up to 9 days did not result in irritation or sensitization. The clinical manifestations of inhalation exposure are confined to the upper respiratory tract and include rhinitis, sneezing, cough, and scratchy throat.

Silicon dioxide(crystalline quartz) - prolonged inhalation of dusts containing free silica may result in the development of pulmonary fibrosis known as silicosis. The initial symptom associated with silicosis is shortness of breath. Progression of the condition results on marked fatigue, dyspnea and cyanosis, loss of appetite, and plueritic pain.

**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** The information below indicates whether any agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Silicon dioxide 112926-00-8	-	Group 3		-
Permethrin technical 52645-53-1	-	Group 3		-

*IARC: (International Agency for Research on Cancer)  
Listed (Silica)*

<b>Reproductive effects</b>	Not Available.
<b>STOT - Single Exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Target organ effects</b>	Respiratory System, EYES.
<b>Aspiration hazard</b>	No information available.

**Numerical Measures of Toxicity - No information available**

## 12. Ecological Information

Marine Pollutant.

**ecotoxicity**

Permethrin has a low Pow of 6.1 but a low potential to bioconcentrate (BCF=500) due to the ease with which it is metabolized.

Extremely toxic to fish = 0.05 ug/L to 315 ug/L

Extremely toxic to aquatic arthropods LC50 = 0.02 ug/L to 7.6 ug/L

Marine species are often more sensitive than freshwater species. Bacteria, algae, mollusks and amphibians are much more tolerant of permethrin than the fish and arthropods. Care should be taken to avoid contamination of the aquatic environment. Permethrin is slightly toxic to birds and oral L50 values are greater than 3,600 mg/kg. Longer dietary studies showed that concentrations of up to 500 ppm in the diet had no effect on bird reproduction. Permethrin is extremely toxic to fish, aquatic invertebrates and honey bees.

rainbow trout 96 hr LC50 = 2.5 ug/L

Bluegill sunfish 95 hr LC50 = 1.8 ug/L

Japanese quail LD50 = 23,000 mg/kg

Mallard duck LD50 = 11,257 mg/kg Permethrin in soil is stable over a wide range of pH values when applied at agricultural use rates. Permethrin has moderate rate of degradation in soil, At termicidal use rates, permethrin degrades at a slower rate which is governed by soil characteristics such as soil type, microbial population concentration in soil and aerobic conditions of the soil. Due to its high affinity for organic matter, there is little potential for movement in soil or entry into ground water.

**Persistence/Degradability**

No information available.

**Bioaccumulation/ Accumulation**

Bioaccumulative potential.

Chemical name	Log Pow
Permethrin technical 52645-53-1	6.5

**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**

When shipped domestically by highway in non-bulk containers this product can be shipped as not regulated.

**UN-No**

UN3077

**Proper shipping name**

Environmentally hazardous substances, solid, n.o.s (Permethrin)

**Hazard class**

9

**Packing group**

PG III

**Marine Pollutant**

Marine Pollutant.

**ICAO**

**UN-No**

UN3077

**Proper shipping name**

Environmentally hazardous substance, solid, n.o.s (Permethrin)

**Hazard class**

9

**Packing group**

PG III

**Description**

Marine Pollutant

**IATA**

**UN-No**

UN3077

<b>Proper shipping name</b>	Environmentally hazardous substances, solid, n.o.s (Permethrin)
<b>Hazard class</b>	9
<b>Packing group</b>	PG III
<b>Description</b>	Marine Pollutant

**IMDG/IMO**

<b>UN-No</b>	UN3077
<b>Proper shipping name</b>	Environmentally hazardous substances, solid, n.o.s (Permethrin)
<b>Hazard class</b>	9
<b>Packing group</b>	PG III
<b>EmS No.</b>	F-A, S-F
<b>Marine Pollutant</b>	Yes

## 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** WARNING!

**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.

**Restricted Use Pesticide. Causes substantial but temporary eye injury. Harmful if swallowed. Harmful if inhaled or absorbed through skin. Toxic to fish and aquatic invertebrates. This product is highly toxic to bees.**

**International Inventories**

<b>USINV</b>	Not determined
<b>DSL/NDSL</b>	Not determined
<b>EINECS/ELINCS</b>	Does not comply
<b>ENCS</b>	Does not comply
<b>China</b>	Does not comply
<b>KECL</b>	Does not comply
<b>PICCS</b>	Does not comply
<b>AICS</b>	Does not comply
<b>TSCA</b>	Does not comply

**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 Title 40n of the Code of Federal Regulations, Part 372:

Chemical name	SARA 313 - Threshold Values
Permethrin technical - 52645-53-1	1.0

**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**

SARA Product RQ 0

**RCRA****Pesticide Information****State Regulations****State Right-to-Know**

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Silicon dioxide	X	X	X		
Permethrin technical	X	X		X	
Sucrose	X		X		

**International regulations****U.S. EPA Label information**

EPA Pesticide registration number 70506-66

**16. Other Information**

**NFPA** HEALTH 1 flammability 1 Instability 0 Physical hazard -

Preparation Date 04-May-2015

Revision date 02-May-2015

**Revision Summary**

Update to GHS format

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**End of MSDS**