



# Safety Data Sheet

Preparation Date 04-May-2015

Revision date 29-May-2025

Revision Number: 6

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

### Identification of the product

Product Description PERM-UP 3.2 EC INSECTICIDE

### Other means of identification

Internal SDS code 12U-119

UN/ID no UN1993

Registration number(s) 70506-9

### 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

UPL NA Inc.

PO Box 12219

Research Triangle Park, NC 27709-12219

### 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 and Drug Safety (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 - Oral	Category 4
Skin sensitization	Category 1
FLAMMABLE LIQUIDS	Category 3

### Label elements

#### EMERGENCY OVERVIEW

#### WARNING

#### Hazard Statements

HARMFUL IF SWALLOWED

Harmful in contact with skin

May cause an allergic skin reaction

Flammable liquid and vapor

**Appearance** amber**Physical state** Liquid**Odor** Slight Odor**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  
 Contaminated work clothing should not be allowed out of the workplace  
 Do not spray on an open flame or other ignition source  
 Keep only in original container  
 Ground/bond container and receiving equipment  
 Take precautionary measures against static discharge

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 ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

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

- Causes mild skin irritation
- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

### 3. Composition/information on Ingredients

Chemical name	CAS No	Weight-%
Permethrin technical	52645-53-1	36.8
1,2,4-trimethyl benzene	95-63-6	<4
C9aromatic hydrocarbons	64742-95-6	26

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.

<b>Skin contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Call a 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>	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.
<b>Protection of First-aiders</b>	Use personal protective equipment.

#### **Most Important Symptoms and Effects, Both Acute and Delayed**

<b>Most Important Symptoms and Effects</b>	no data available.
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#### **Indication of Any Immediate Medical Attention and Special Treatment Needed**

<b>Notes to physician</b>	Reversible skin sensations (paresthesia) may occur and ordinary skin salves have been found useful in reducing discomfort. Contains aromatic hydrocarbons that may produce a severe pneumonitis if aspirated during vomiting. Consideration should be given to gastric lavage with an endotracheal tube in place. Treatment is otherwise controlled by removal of exposure followed by symptomatic and supportive care.
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### **5. Fire-fighting measures**

#### **Suitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>).

Use: Dry chemical. Water spray. alcohol-resistant foam.

**Unsuitable extinguishing media** no data available.

#### **Specific hazards arising from the chemical**

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

**Hazardous combustion products** Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, pilot lights, and other flames and ignition sources at locations distant from material handling point.

#### **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**

<b>Personal Precautions</b>	Evacuate personnel to safe areas. Use personal protective equipment. Remove all sources of ignition. Wash thoroughly after handling. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
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#### **Environmental Precautions**

<b>Environmental precautions</b>	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.
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#### **Methods and material for containment and cleaning up**

<b>Methods for Clean-Up</b>	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder,
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sawdust). Ground and bond containers when transferring material. Sweep up and shovel into suitable containers for disposal.

## 7. Handling and Storage

### Precautions for safe handling

**Handling** Wear personal protective equipment. Keep away from open flames, hot surfaces and sources of ignition. Avoid contact with skin and eyes. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product.

### Conditions for safe storage, including any incompatibilities

**Storage** Keep away from open flames, hot surfaces and sources of ignition. 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

Chemical name	ACGIH TLV	OSHA PEL
1,2,4-trimethyl benzene	TWA: 10 ppm	

**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. If splashes are likely to occur, wear: Goggles.

#### 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. Remove and wash contaminated clothing before re-use. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

**Appearance** amber  
**Physical state** Liquid  
**Odor** Slight Odor  
**color** No information available

Property	VALUES	Remarks/ Method
pH	4.9	None known
Melting point/freezing point	5.9 °C	None known
Boiling Point/Range		None known
Flash Point	44 °C	None known

Evaporation Rate		None known
Flammability (solid, gas)		None known
Specific gravity	1.039 @20 C	None known
Bulk density	8.65 lb/gal	None known
Water solubility		None known
Solubility in Other Solvents	Emulsifies	None known
Partition coefficient: n-octanol/water		None known
Autoignition temperature		None known
Decomposition temperature		None known
Viscosity		None known

## 9.2 OTHER INFORMATION- NONE

### 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

Keep away from open flames, hot surfaces and sources of ignition.

#### Incompatible materials

Strong oxidizing agents.

#### Hazardous decomposition products

Carbon oxides.

### 11. Toxicological Information

#### Information on Likely Routes of Exposure

#### **Product information**

Perm-Up 3.2	
Acute oral LD50	1030 mg/kg (rat)
Acute dermal LD50	>2,000 mg.kg (rabbit)
Acute inhalation LC50	>25.7 mg/L/4hr(rat)
Eye irritation	Moderately irritating
Skin irritation	Moderately irritating
Dermal sensitization	Not a sensitizer

Skin sensitizations are reversible and usually subside within 12 hours. Permethrin contact with skin has rarely produced skin sensitizations such as numbing, burning, and tingling. Large doses of permethrin to laboratory animals have produced symptoms such as diarrhea, salivation, tremors, intermittent convulsions. Overexposure to animals via inhalation has also produced hyperactivity and hypersensitivity.

Permethrin did not cause reproductive toxicity or teratogenicity. Analysis of chronic feeding studies in both mice and rats with permethrin resulted in the conclusion that permethrin's potential for induction of oncogenicity in experimental animals is low and the likelihood of oncogenic effects in human is nonexistent or extremely low. Long term feeding studies in animals resulted in increased liver and kidney weights, induction of the liver microsomal drug metabolizing enzyme system, and histopathological changes in the liver and lungs. An overall absence of genotoxicity has been demonstrated in mutagenicity testing with permethrin.

**Inhalation**

Based on available data, the classification criteria are not met.

**Eye contact**

Moderately irritating to the eyes.

**Skin contact**

Skin exposure may result in rashes, numbing, burning or tingling sensation which is reversible and usually subsides within 12 hours.  
Based on available data, the classification criteria are not met.

**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 data available.

**Carcinogenicity**

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

Chemical name	ACGIH	IARC	NTP	OSHA
Permethrin technical 52645-53-1	-	Group 3		-

**Reproductive effects**

Not Available.

**STOT - Single Exposure**

no data available.

**STOT - Repeated Exposure**

no data available.

**Chronic toxicity**

Avoid repeated exposure.

**Target organ effects**

kidney, Respiratory System, EYES, skin, Central Nervous System (CNS), blood.

**Aspiration hazard**

No information available.

**Numerical Measures of Toxicity - Product information****LD50 Oral**

1030 mg/kg (rat)

**LD50 Dermal**

&gt; 2000 mg/kg (rabbit)

**LC50 Inhalation**

Inhalation LC50 &gt; 25.7 mg/l (rat) (4-hr)

**12. Ecological Information**

Marine Pollutant. (Permethrin).

**ecotoxicity**

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 termiticidal 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. 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

**Persistence/Degradability**

no data available.

**Bioaccumulation/ Accumulation**

Bioaccumulative potential.

Chemical name	Log Pow
Permethrin technical 52645-53-1	6.5
1,2,4-trimethyl benzene 95-63-6	3.63

**Other Adverse Effects**

no data available

### 13. Disposal Considerations

**Waste Treatment Methods****Waste Disposal Method**

Pesticide wastes can be 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 IN NON-BULK packages by highway this material is classed as a combustible liquid and as such is not subject to the DOT regulations per 49 CFR 173.150(f) (2) and therefore can be designated as Not Regulated

<b>UN/ID no</b>	UN1993
<b>Proper shipping name</b>	Flammable liquid, n.o.s (hydrocarbon solvent, 1,2,4-trimethylbenzene)
<b>Hazard class</b>	3
<b>Packing group</b>	PG III
<b>IMDG - Marine Pollutant</b>	Marine Pollutant. (Permethrin).

**ICAO**

<b>UN/ID no</b>	UN1993
<b>Proper shipping name</b>	Flammable liquid, n.o.s (hydrocarbon solvent, 1,2,4-trimethylbenzene)
<b>Hazard class</b>	3
<b>Packing group</b>	PG III
<b>Description</b>	IMDG - Marine Pollutant (Permethrin)

**IATA**

<b>UN/ID no</b>	UN1993
<b>Proper shipping name</b>	Flammable liquid, n.o.s (hydrocarbon solvent, 1,2,4-trimethylbenzene)
<b>Hazard class</b>	3
<b>Packing group</b>	PG III
<b>Description</b>	IMDG - Marine Pollutant (Permethrin)

**IMDG**

<b>UN/ID no</b>	UN1993
<b>Proper shipping name</b>	Flammable liquid, n.o.s (hydrocarbon solvent, 1,2,4-trimethylbenzene)
<b>Hazard class</b>	3

<b>Packing group</b>	PG III
<b>Environmental hazards</b>	Yes (Permethrin)

### 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.

**Restricted Use Pesticide. Keep out of Reach of Children. Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. This product is highly toxic to bees. Toxic to fish and aquatic invertebrates.**

#### International Inventories

<b>USINV</b>	Not present
<b>DSL/NDSL</b>	Not present
<b>EINECS/</b>	Not Present
<b>ELINCS</b>	
<b>ENCS</b>	Not Present
<b>China</b>	Not Present
<b>KECL</b>	Not Present
<b>PICCS</b>	Not Present
<b>AICS</b>	Not Present
<b>TSCA</b>	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 Title 40 of the Code of Federal Regulations, Part 372:

##### CERCLA

Not applicable

##### CERCLA

**SARA Product RQ** 0

##### RCRA

#### Pesticide Information

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Permethrin technical			X	



52645-53-1 ( 36.8 )				
C9aromatic hydrocarbons 64742-95-6 ( 26 )			X	

**State Regulations**

California Proposition 65

**Prop 65 Pictogram**

This product contains the following Proposition 65 chemicals:

**Prop 65 Warning Statement  
California Proposition 65****WARNING**

This product can expose you to chemicals which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**State Right-to-Know**

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Permethrin technical - 52645-53-1	X	X			
1,2,4-trimethyl benzene - 95-63-6	X	X	X	X	

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

EPA Pesticide registration number 70506-9

**16. Other Information****NFPA**

HEALTH 1

flammability 2

Instability 0

Physical hazard -

Preparation Date

04-May-2015

Revision date

29-May-2025

Revision Summary

(added technical marine pollutant reference)

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**End of SDS**