

Safety Data Sheet

Preparation Date 04-May-2015 Revision date 06-Jan-2019 Revision Number: 3

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

Product identifier

Product Description: Perm Up

Other means of identification

Product code 12U-119CA UN/ID no. UN1993

Registration number(s) PCPA Canada Registration No 28877

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.

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 - Oral	Category 4
Acute toxicity - Dermal	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 CO2, 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
Varsol	8052-41-3	26
1,2,4-trimethyl benzene	95-63-6	<4

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 soap and plenty of water removing all contaminated clothes and

shoes. Call a poison control center or doctor for treatment advice.

Inhalation 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.

Ingestion Do not induce vomiting without medical advice. Never give anything by mouth to an

unconscious person. Call a physician or poison control center immediately.

Protection of First-aidersUse personal protective equipment.

Most Important Symptoms and Effects, Both Acute and Delayed

Most Important Symptoms and

no data available.

Effects

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician Reversible skin sensations (parethesia) 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 lavagewith an endotracheal tube in place. Treatment is otherwise controlled by removal of

exposure followed by symptomatic and supportive care.

5. Fire-fighting measures

Suitable extinguishing media

Carbon dioxide (CO2).

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

Personal Precautions 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).

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). 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

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

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
Varsol	TWA: 100 ppm	TWA: 500 ppm TWA: 2900 mg/m ³
		(vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m ³

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 eve protection to avoid eve contact. Where there is potential for eve contact have eve flushing equipment available. Safety glasses with side-shields. If splashes are likely to

occur, wear:. Goggles.

Skin protection

Respiratory protection

Wear protective gloves/clothing. Socks and footwear.

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

Information on basic physical and chemical properties

Physical state Liquid **Appearance** amber

Slight Odor Odor

No information available color

Property VALUES Remarks/ • Method

4.9

5.9 °C / 43 °F Melting point/freezing point

Boiling Point/Range No information available Flash Point 44 °C / 111 °F **Evaporation Rate** No information available

Flammability (solid, gas) No information available Flammability limit in air

Upper Flammability Limit

No information available No information available **Lower Flammability Limit** vapor pressure No information available Vapor Density No information available

Specific gravity 1.039 @20 C

Water solubility No information available

Solubility in Other Solvents
Partition coefficient: n-octanol/waterNo information available
Autoignition temperature
Decomposition temperature
Viscosity, kinematic
Dynamic viscosity
Explosive properties
No information available

OTHER INFORMATION

Softening pointNo information availablemolecular weightNo information availableVOC ContentNo information availableLiquid DensityNo information available

Bulk density 8.65 lb/gal

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 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 dirrhea, salivation, tremors, intermittent convulsions. Overexposure to animals via inhalation has also produced hyperactivity and hypersensitivity.

Permethrin did not cause resproductive 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 May cause respiratory irritation.

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.

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

arcinogen

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

Reproductive effects
STOT - Single Exposure
STOT - Repeated Exposure
Chronic toxicity

Not Available.
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 > 2000 mg/kg (rabbit) 2.18064 mg/l (mist) (dust) mg/m³

LC50 Inhalation Inhalation LC50 > 25.7 mg/l (rat) (4-hr)

12. Ecological Information

Marine Pollutant.

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 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. 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.

Extrememly 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 arthopods. 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 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 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

UN/ID no. UN1993

Proper shipping name Flammable liquid, n.o.s (hydrocarbon solvent, 1,2,4-trimethylbenzene)

Hazard class 3
Packing group PG

IMDG - Marine Pollutant Marine Pollutant.

TDG Use IMDG description

<u>ICAO</u>

UN/ID no. UN1993

Proper shipping name Flammable liquid, n.o.s (hydrocarbon solvent, 1,2,4-trimethylbenzene)

Hazard class 3
Packing group PG II

Description IMDG - Marine Pollutant (Permethrin)

<u>IATA</u>

UN/ID no. UN1993

Proper shipping name Flammable liquid, n.o.s (hydrocarbon solvent, 1,2,4-trimethylbenzene)

Hazard class 3
Packing group PG III

Description IMDG - Marine Pollutant (Permethrin)

IMDG

UN/ID no. UN1993

Proper shipping name Flammable liquid, n.o.s (hydrocarbon solvent, 1,2,4-trimethylbenzene)

Hazard class3Packing groupPG IIIEnvironmental hazardsYes

15. Regulatory Information

This chemical/product is a pesticide product registered by the PMRA and is subject to specific label requirements under these regulations. The requirements may differ classification and hazard information required for safety data sheets and for labels of non-pesticide products. The following is information as required on the registered product label.***

signal word WARNING***

Keep out of Reach of Children. Harmful if swallowed. Skin and Eye Irritant.***

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

CERCLA

Not applicable

CERCLA

SARA Product RQ 0

<u>RCRA</u>

Pesticide Information

State Regulations

State Right-to-Know

Not applicable

International regulations

U.S. EPA Label information

EPA Pesticide registration number 28877***

16. Other Information

NFPA HEALTH 1 flammability 2 Instability 0 Physical hazard -

Preparation Date 04-May-2015 Revision date 04-May-2019

Revision Summary

Update logo Update section 1 Update Section 16***

Disclaimer

UPL NA Inc. believes that the information and recommendations container 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 UPL NA Inc. and UPL NA 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 SDS