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1. Identification

Product identifier used on the label

ULD BP-100 CONTACT INSECTICIDE II

Recommended use of the chemical and restriction on use

Recommended use*: insecticide

Details of the supplier of the safety data sheet

Company:
BASF Canada Inc.
100 Milverton Drive
Mississauga, ON L5R 4H1, CANADA

Contact address:
BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932

USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP (4357)

Registrant:

Whitmire Micro-Gen Research Laboratories, Inc.

3568 Tree Court Industrial Blvd.

St. Louis, MO 63122

Other means of identification

Substance number: 572429 EPA Register number: 499-514

Synonyms: Pyrethrins + Piperonylbutoxide

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Asp. Tox. 1 Aspiration hazard

^{*} The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

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Skin Sens. 1 Skin sensitization

Aquatic Acute 1 Hazardous to the aquatic environment - acute Aquatic Chronic 1 Hazardous to the aquatic environment - chronic

Label elements

Pictogram:



Signal Word:

Danger

Hazard Statement:

H317 May cause an allergic skin reaction.

H304 May be fatal if swallowed and enters airways.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280 Wear protective gloves.

P273 Avoid release to the environment.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements (Response):

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or

doctor/physician.

P303 + P352 IF ON SKIN (or hair): Wash with plenty of soap and water.
P333 + P311 If skin irritation or rash occurs: Call a POISON CENTER or

doctor/physician.

P391 Collect spillage.

P362 + P364 Take off contaminated clothing and wash before reuse.

P331 Do NOT induce vomiting.

Precautionary Statements (Storage):
P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection

point.

Hazards not otherwise classified

Labeling of special preparations (GHS):

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 0 - 1 % dermal

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 0 - 1 % oral

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 0 - 1 % Inhalation - vapour

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 1 - 2 % Inhalation - mist

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

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Emergency overview

CAUTION:

KEEP OUT OF REACH OF CHILDREN.

HARMFUL IF ABSORBED THROUGH SKIN.

Moderately irritating to the eyes.

Prolonged or repeated skin contact may cause sensitization or allergic reactions.

Avoid contact with the skin, eyes and clothing.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

CAS Number	Content (W/W)	Chemical name
8003-34-7	1.0 %	Pyrethrins
51-03-6	5.0 %	Piperonylbutoxide
64742-47-8	75.0 - 100.0 %	Distillates (petroleum), hydrotreated light

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

CAS Number	Content (W/W)	Chemical name
8003-34-7	1.0 %	Pyrethrins
51-03-6	5.0 %	Piperonylbutoxide
64742-47-8		Distillates (petroleum), hydrotreated light
	> 90.0 %	Proprietary ingredients

4. First-Aid Measures

Description of first aid measures

General advice:

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

If on skin:

Immediately wash thoroughly with soap and water, seek medical attention.

If in eves:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention. Do not induce vomiting due to aspiration hazard.

Most important symptoms and effects, both acute and delayed

Hazards: Vomiting may cause aspiration pneumonia due to the ingredients.

Indication of any immediate medical attention and special treatment needed

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Note to physician

Treat according to symptoms (decontamination, vital functions), no

known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media: foam, dry powder, water spray

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide,

If product is heated above decomposition temperature, toxic vapours will be released. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water. A spill of or in excess of the reportable quantity requires notification to state, local and national emergency authorities. This product is regulated by CERCLA ('Superfund').

Methods and material for containment and cleaning up

Dike spillage. Pick up with suitable absorbent material. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. Handling and Storage

Precautions for safe handling

RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS & WORKERS must refer to the Product Label and Directions for Use attached to the product. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition - No smoking. Keep container

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tightly sealed. Protect against heat. Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used as soon as possible. Provide means for controlling leaks and spills. Follow label warnings even after container is emptied. The substance/product may be handled only by appropriately trained personnel. Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapours. Wear suitable personal protective clothing and equipment.

Protection against fire and explosion:

The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme heat. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

Conditions for safe storage, including any incompatibilities

Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

Suitable materials for containers: High density polyethylene (HDPE), Low density polyethylene (LDPE)

Further information on storage conditions: Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. The authority permits and storage regulations must be observed.

Storage stability:

May be kept indefinitely if stored properly.

If an expiry date is mentioned on the packaging/label this takes priority over the statements on storage duration in this safety data sheet.

8. Exposure Controls/Personal Protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Components with occupational exposure limits

Pyrethrins OSHA PEL PEL 5 mg/m3; TWA value 5 mg/m3;

ACGIH TLV TWA value 5 mg/m3;

Distillates (petroleum),

hydrotreated light ACGIH TLV TWA value 200 mg/m3 Non-aerosol (total

hydrocarbon vapor);

Application restricted to conditions in which there

are negligible aerosol exposures. Skin Designation Non-aerosol (total

hydrocarbon vapor);

The substance can be absorbed through the skin.

Advice on system design:

Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

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Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:

Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

Eye protection:

Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS Wear long sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance with good industrial hygiene and safety practice. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. No eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Form: liquid

Odour: of petroleum distillate (e.g. gasoline, kerosene)

Odour threshold: Not determined due to potential health

hazard by inhalation.

Colour: yellow

pH value: approx. 5.5 - 7.5 (22.5 °C) (pH Meter)

pour point: $-32 \, ^{\circ}\text{C}$ Information applies to the solvent. Boiling point: $> 227 \, ^{\circ}\text{C}$ Information applies to the solvent. Flash point: $> 85 \, ^{\circ}\text{C}$ (ASTM D56) No flash point -

Management made up to the indi

Measurement made up to the indicated temperature, pilot light extinguishes.

Flammability: not highly

flammable

Lower explosion limit: As a result of our experience with this

product and our knowledge of its composition we do not expect any hazard

composition we do not expect any nazard

as long as the product is used

appropriately and in accordance with the

intended use.

Upper explosion limit: As a result of our experience with this

product and our knowledge of its

composition we do not expect any hazard

as long as the product is used

appropriately and in accordance with the

intended use.

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approx. 215 °C Autoignition: Information applies to the solvent. 0.04 hPa Vapour pressure:

Information applies to the (20 °C)

solvent.

approx. 0.80 (20°C) Density:

q/cm3

6.7147 Lb/USg (20°C)

Vapour density: not applicable Self-ignition not self-igniting

temperature:

Thermal decomposition: carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen

oxide

Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released. To

avoid thermal decomposition, do not overheat.

(22.5°C) Viscosity, dynamic: 2.51 cps (22.5 °C) 2.51 mPa.s

Solubility in water: miscible Evaporation rate: not applicable

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties: not fire-propagating

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

The product is chemically stable.

Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame. Avoid prolonged storage. Avoid electro-static discharge. Avoid contamination. Avoid prolonged exposure to extreme heat. Avoid extreme temperatures.

Incompatible materials

strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

Decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated., Prolonged thermal loading can result in products of degradation being given off.

Thermal decomposition:

Possible thermal decomposition products:

carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide

Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released. To avoid thermal decomposition, do not overheat.

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11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Relatively nontoxic after single ingestion. Slightly toxic after short-term skin contact. Relatively nontoxic after short-term inhalation.

Oral

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg

No mortality was observed. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Inhalation

Type of value: LC50

Species: rat Value: > 5.06 mg/l

Value: > 5.06 mg/l Exposure time: 4 h

An aerosol with respirable particles was tested.

No mortality was observed. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Dermal

Type of value: LD50 Species: rabbit Value: > 2,000 mg/kg

No mortality was observed. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Irritation / corrosion

Assessment of irritating effects: May cause slight irritation to the skin. May cause slight but temporary irritation to the eyes.

Skin

Species: rabbit Result: non-irritant

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

<u>Eye</u>

Species: rabbit Result: non-irritant

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

Buehler test

Species: guinea pig

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Result: Caused skin sensitization in animal studies.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Chronic Toxicity/Effects

Genetic toxicity

Information on: pyrethrum

Assessment of mutagenicity: Mutagenicity tests revealed no genotoxic potential. The product has not been tested. The statement has been derived from the properties of the individual components. No mutagenic effects reported.

Information on: Piperonyl butoxide

Assessment of mutagenicity: Mutagenicity tests revealed no genotoxic potential.

Information on: Distillates (petroleum), hydrotreated light

Assessment of mutagenicity: The substance was not mutagenic in bacteria. The substance was not genotoxic in mammalian cell culture. The substance was not mutagenic in mammalian cell culture. The substance was not genotoxic in a test with mammals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Carcinogenicity

Information on: pyrethrum

Assessment of carcinogenicity: The results of various animal studies gave no indication of a carcinogenic effect. The product has not been tested. The statement has been derived from the properties of the individual components.

Not Likely to Be Carcinogenic to Humans.

Information on: Piperonyl butoxide

Assessment of carcinogenicity: In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. The US EPA has classified this substance with the rating of 'C', possible human carcinogen.

Reproductive toxicity

Information on: pyrethrum

Assessment of reproduction toxicity: No reproductive toxic effects reported.

Information on: Piperonyl butoxide

Assessment of reproduction toxicity: No reproductive toxic effects reported. The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity

Information on: pyrethrum

Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Information on: Piperonyl butoxide

Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies.

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Information on: Distillates (petroleum), hydrotreated light

Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen

in animal studies. The product has not been tested. The statement has been derived from

substances/products of a similar structure or composition.

Symptoms of Exposure

12. Ecological Information

Toxicity

Toxicity to fish

Information on: pyrethrum

LC50 (96 h) 0.0052 mg/l, Oncorhynchus mykiss (static)

LC50 (96 h) 0.01 mg/l, Lepomis macrochirus

Information on: piperonyl butoxide

LC50 (96 h) 5.37 mg/l, Lepomis macrochirus

Aquatic invertebrates

Information on: pyrethrum

EC50 (48 h) 0.012 mg/l, Daphnia magna EC50 (48 h) 0.0014 mg/l, Mysidopsis bahia

Information on: Piperonyl butoxide

EC50 (48 h) 0.51 mg/l, Daphnia magna (other)

Aquatic plants

Information on: pyrethrum

No toxic effects occur within the range of solubility.

Information on: piperonyl butoxide EC50 14.9 mg/l, Chlorella fusca

Chronic toxicity to fish

Information on: pyrethrum

No observed effect concentration 0.0019 mg/l, Pimephales promelas

Information on: piperonyl butoxide

Chronic toxicity to aquatic invertebrates

Information on: pyrethrum

No observed effect concentration (28 d) 0.00086 mg/l, Daphnia magna

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Information on: piperonyl butoxide

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Poorly biodegradable.

Bioaccumulative potential

Assessment bioaccumulation potential

The product has not been tested. The statement has been derived from the properties of the individual components.

Mobility in soil

Assessment transport between environmental compartments

The product has not been tested. The statement has been derived from the properties of the individual components.

13. Disposal considerations

Waste disposal of substance:

Pesticide wastes are regulated. If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container disposal:

Rinse thoroughly at least three times (triple rinse) in accordance with EPA recommendations. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport

USDOT

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Hazard class: 9
Packing group: III

ID number: UN 3082 Hazard label: 9, EHSM Marine pollutant: YES

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (contains KEROSENE (PETROLEUM),

PIPERONYLBUTOXIDE)

Air transport

IATA/ICAO

Hazard class: 9 Packing group: III

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ID number: UN 3082 Hazard label: 9, EHSM

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (contains KEROSENE (PETROLEUM),

PIPERONYLBUTOXIDE)

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US blocked / not listed

Crop Protection TSCA, US released / exempt

EPCRA 311/312 (Hazard categories): Acute; Chronic

EPCRA 313:

CAS Number Chemical name 51-03-6 Piperonylbutoxide

Chemical name CERCLA RQ CAS Number 1 LBS 8003-34-7 **Pyrethrins**

State regulations

State RTK **CAS Number** Chemical name MA, NJ, PA 8003-34-7 **Pyrethrins** 51-03-6 Piperonylbutoxide NJ

MA, NJ, PA 64742-47-8 Distillates (petroleum), hydrotreated light

Labeling requirements under FIFRA

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 workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

CAUTION:

KEEP OUT OF REACH OF CHILDREN.

HARMFUL IF ABSORBED THROUGH SKIN.

May cause moderate but temporary irritation to the eyes.

Prolonged or repeated skin contact may cause sensitization or allergic reactions.

Avoid contact with the skin, eyes and clothing.

16. Other Information

SDS Prepared by:

BASF NA Product Regulations SDS Prepared on: 2015/04/29

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We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

END OF DATA SHEET