

PROVINCE

Date: 5/27/2015

Replaces: 1/8/2013

1. PRODUCT IDENTIFICATION

Product identifier on label: **PROVINCE Insecticide**

Product No.: A12838B

Use: Insecticide

Manufacturer: Tenkoz, Inc.
1725 Windward Concourse
Alpharetta, GA 30005

Manufacturer Phone: 770-343-8509

Emergency Phone: 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classifications: Oral: Category 4
Specific Target Organ Toxicity: Repeated Category 2
Specific Target Organ Toxicity: Respiratory Irritation Category 3
Eye Damage/Irritation: Category 2B
Carcinogenicity: Category 1B

Signal Word (OSHA): Danger

Hazard Statements: Harmful if swallowed
Causes eye irritation
May cause respiratory irritation
May cause cancer
May cause damage to organs through prolonged or repeated exposure

Hazard Symbols:



Precautionary Statements: Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe mist, vapors, spray.
Wash hands and face thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves, protective clothing, eye protection.
If swallowed: Call a poison center, doctor or Syngenta if you feel unwell. Rinse mouth.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if

PROVINCE

Date: 5/27/2015
Replaces: 1/8/2013

present and easy to do. Continue rinsing.
If exposed or concerned: Get medical advice/attention.
Call a poison center, doctor or Syngenta if you feel unwell.
If eye irritation persists: Get medical advice.
Store locked up.
Dispose of contents and container in accordance with local regulations.

Other Hazard Statements: May cause temporary itching, tingling, burning or numbness of exposed skin, called paresthesia.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | Common Name | CAS Number | Concentration |
|---|--------------------|--------------|---------------|
| Naphthalene | Naphthalene | 91-20-3 | <1.5% |
| 1,2-Propanediol | Propylene Glycol | 57-55-6 | Trade Secret |
| Petroleum Solvent | Petroleum Solvent | Trade Secret | Trade Secret |
| Other ingredients | Other ingredients | Trade Secret | <87.1% |
| [1a(S*),3a(Z)]-cyano(3-phenoxyphenyl)methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate | Lambda-Cyhalothrin | 91465-08-6 | 11.4% |

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

Have the product container, label or Safety Data Sheet with you when calling a poison control center or doctor, or going for treatment.

Ingestion: If swallowed: Call a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so after calling 800-424-9300 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Eye Contact: If in eyes: 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: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation: If inhaled: 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 poison control center or doctor for further treatment advice.

Most important symptoms/effects:

Eye irritation
May cause temporary itching, tingling, burning or numbness of exposed skin, called paresthesia
Respiratory irritation

Indication of immediate medical attention and special treatment needed:

There is no specific antidote if this product is ingested.
Treat symptomatically.

PROVINCE

Date: 5/27/2015

Replaces: 1/8/2013

Skin contact paresthesia effects (itching, tingling, burning or numbness) are transient, lasting up to 24 hours. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use dry chemical, foam or CO2 extinguishing media. If water is used to fight fire, dike and collect runoff.

Specific Hazards:

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Special protective equipment and precautions for firefighters:

Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

Follow exposure controls/personal protection outlined in Section 8.

Methods and materials for containment and cleaning up:

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Precautions for safe handling:

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Conditions for safe storage, including any incompatibilities:

Store locked up.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Occupational Exposure Limits:

| Chemical Name | OSHA PEL | ACGIH TLV | Other | Source |
|-------------------|-----------------|-------------------|----------------------------------|----------------|
| Naphthalene | 10 ppm TWA | 10 ppm TWA (skin) | 10 ppm TWA | NIOSH |
| Propylene Glycol | Not Established | Not Established | 10 mg/m ³ TWA | AIHA |
| Petroleum Solvent | Not Established | Not Established | 50 mg/m ³ (8 ppm) TWA | Manufacturer |
| Other ingredients | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

PROVINCE

Date: 5/27/2015
 Replaces: 1/8/2013

| | | | | |
|--------------------|-----------------|-----------------|-----------------------------------|----------|
| Lambda-Cyhalothrin | Not Established | Not Established | 0.04 mg/m ³ TWA (skin) | Syngenta |
|--------------------|-----------------|-----------------|-----------------------------------|----------|

Appropriate engineering controls:

Use effective engineering controls to comply with occupational exposure limits (if applicable).

Individual protection measures:

Ingestion:

Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact:

Where eye contact is likely, use chemical splash goggles.

Skin Contact:

Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, nitrile rubber, neoprene rubber or Viton), coveralls, socks and chemical-resistant footwear. Stringent housekeeping measures are necessary to prevent translocation of the material from contaminated work surfaces to uncontaminated surfaces (railings, doors, etc.). Unprotected contact with such translocated material can result in paresthesia effects (see Section 11 of MSDS). Do not touch unprotected skin areas (face) with contaminated gloves or clothing.

Inhalation:

A combination particulate/organic vapor respirator should be used until effective engineering controls are installed to comply with occupational exposure limits, or until exposure limits are established. Use a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE filter.

Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Blue opaque liquid (capsule suspension)

Odor: Not Available

Odor Threshold: Not Available

pH: 4.5 - 6.0 (neat)

Melting point/freezing point: Not Applicable

Initial boiling point and boiling range: Not Available

Flash Point (Test Method): > 200°F

Flammable Limits (% in Air): Not Available

Flammability: Not Applicable

Vapor Pressure: Lambda-Cyhalothrin 1.5 x 10⁻⁹ mmHg @ 68°F (20°C)

Vapor Density: Not Available

Relative Density: 1.060 - 1.070 g/ml

Solubility (ies): Lambda-Cyhalothrin 0.004 mg/l

Partition coefficient: n-octanol/water: Not Available

Autoignition Temperature: Not Available

Decomposition Temperature: Not Available

Viscosity: Not Available

PROVINCE

Date: 5/27/2015

Replaces: 1/8/2013

Other: None

10. STABILITY AND REACTIVITY

Reactivity: Not reactive.

Chemical stability: Stable under normal use and storage conditions.

Possibility of hazardous reactions: Will not occur.

Conditions to Avoid: Not Available

Incompatible materials: None known.

Hazardous Decomposition Products: Not Available

11. TOXICOLOGICAL INFORMATION

Health effects information

Likely routes of exposure: Dermal, Inhalation

Symptoms of exposure: Eye irritation, Respiratory irritation, Itching, tingling, burning or numbness

Delayed, immediate and chronic effects of exposure: Possible carcinogenicity, Eye irritation, Respiratory system effects, Paresthesia

Numerical measures of toxicity (acute toxicity/irritation studies (finished product))

| | | |
|---------------------|------------------------------|--------------------------|
| Ingestion: | Oral (LD50 Male Rat) : | 351 mg/kg body weight |
| Dermal: | Dermal (LD50 Rat) : | > 2000 mg/kg body weight |
| Inhalation: | Inhalation (LC50 Rat) : | > 2.5 mg/l air - 4 hours |
| Eye Contact: | Mildly Irritating (Rabbit) | |
| Skin Contact: | Slightly Irritating (Rabbit) | |
| Skin Sensitization: | Not Available | |

Reproductive/Developmental Effects

Lambda-Cyhalothrin : Not a developmental or reproductive toxicant.

Chronic/Subchronic Toxicity Studies

Lambda-Cyhalothrin : Reversible paresthesia (abnormal skin sensation).
Reversible clinical signs of neurotoxicity in mammals.

Carcinogenicity

Lambda-Cyhalothrin : No treatment-related tumors in rats or mice.

| | |
|---------------|--------------------------|
| Chemical Name | NTP/IARC/OSHA Carcinogen |
| Naphthalene | See "Toxicity", Sec. 11 |

PROVINCE

Date: 5/27/2015

Replaces: 1/8/2013

| | |
|---|----|
| 1,2-Propanediol | No |
| Petroleum Solvent | No |
| Other ingredients | No |
| [1a(S*),3a(Z)]-cyano(3-phenoxyphenyl)methyl- 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2- dimethylcyclopropanecarboxylate | No |

Other Toxicity Information

In humans, contact with exposed skin may result in temporary itching, tingling, burning or numbness, called paresthesia. The effect may result from splash, aerosol, or hot vapor contact, or transfer to the face from contaminated gloves and hands. The symptoms normally disappear within 24 hours. Face and genital areas are especially susceptible to this effect. Paresthesia involving the face is also known as "subjective facial sensation" or SFS.

Toxicity of Other Components

Naphthalene

Exposure to naphthalene can cause cataracts, liver damage, kidney failure, respiratory failure, hematuria, anemia, damage to red blood cells, leukocytosis, or coma.

Carcinogen Status:

NTP: Anticipated Carcinogen

IARC: Group 2B Possible Human Carcinogen

Other ingredients

Not Applicable

Petroleum Solvent

Repeated exposure may cause skin dryness or cracking. If swallowed, may be aspirated and cause lung damage. May be irritating to the eyes, nose, throat and lungs.

Breathing of high vapor concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination.

Propylene Glycol

Reported to cause central nervous system depression (anesthesia, dizziness, confusion), headache and nausea. Also, eye irritation may occur with lacrimation but no residual discomfort or injury. Prolonged contact to skin may cause mild to moderate irritation and possible allergic reactions. Chronic dietary exposure caused kidney and liver injury in experimental animals.

Target Organs

Active Ingredients

Lambda-Cyhalothrin : Liver, nervous system

Inert Ingredients

Naphthalene: Eye, liver, kidney, respiratory tract, blood, CNS

Other ingredients: Not Applicable

Petroleum Solvent: Respiratory tract, stomach, liver, thyroid, urinary bladder, CNS, skin

Propylene Glycol: CNS, kidney, liver

12. ECOLOGICAL INFORMATION

Eco-Acute Toxicity

Lambda-Cyhalothrin :

Fish (Rainbow Trout) 96-hour LC50 0.19 ppb

Bird (Mallard Duck) LD50 Oral > 3950 mg/kg

Invertebrate (Water Flea) 48-hour EC50 0.04 ppb

PROVINCE

Date: 5/27/2015

Replaces: 1/8/2013

Environmental Fate

Lambda-Cyhalothrin :

The information presented here is for the active ingredient, lambda-cyhalothrin.
Not persistent in soil or water. Immobile in soil. Sinks in water (after 24 h).

13. DISPOSAL CONSIDERATIONS

Disposal:

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification

Ground Transport - NAFTA

Proper Shipping Name: Pyrethroid Pesticides, Liquid, Toxic, (contains Lambda-Cyhalothrin)

Hazard Class or Division: 6.1

Identification Number: UN 3352

Packing Group: PG III

Comments

Water Transport - International

Proper Shipping Name: Pyrethroid Pesticides, Liquid, Toxic, (contains Lambda-Cyhalothrin), Marine Pollutant

Hazard Class or Division: 6.1

Identification Number: UN 3352

Packing Group: PG III

Air Transport

Proper Shipping Name: Pyrethroid Pesticides, Liquid, Toxic, (contains Lambda-Cyhalothrin)

Hazard Class or Division: 6.1

Identification Number: UN 3352

Packing Group: PG III

15. REGULATORY INFORMATION

Pesticide Registration:

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:

Warning: May be fatal if swallowed. Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse. Skin exposure may also result in a sensation described as a tingling, itching, burning, or prickly feeling. Onset may occur immediately to 4 hrs. after exposure and may last 2-30 hrs., without damage. Wash exposed areas once with soap and water. Relief from the skin sensation may be obtained by applying an oil-based cream.

EPA Registration Number(s):

100-1112-55467

EPCRA SARA Title III Classification:

PROVINCE

Date: 5/27/2015

Replaces: 1/8/2013

Section 311/312 Hazard Classes: Acute Health Hazard
Chronic Health Hazard

Section 313 Toxic Chemicals: Naphthalene <1.5% (CAS No. 91-20-3)

CERCLA/SARA 304 Reportable Quantity (RQ):

Report product spills > 800 gal. (based on naphthalene [RQ = 100 lbs.] content in the formulation)

RCRA Hazardous Waste Classification (40 CFR 261):

Not Applicable

TSCA Status:

Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 2
Flammability: 1
Instability: 0

HMIS Hazard Ratings

Health: 2
Flammability: 1
Reactivity: 0

| | |
|---|----------|
| 0 | Minimal |
| 1 | Slight |
| 2 | Moderate |
| 3 | Serious |
| 4 | Extreme |
| * | Chronic |

Syngenta Hazard Category: D,S

Original Issued Date: 1/6/2009

Revision Date: 5/27/2015

Replaces: 1/8/2013

Section(s) Revised: 1-16

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.