

Nichino America, Inc.
Portal® Miticide/Insecticide

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product: Portal® Miticide/Insecticide
Synonyms: NNI-850
General Use: Miticide/Insecticide
Product Description: Emulsifiable concentrate
EPA Registry Number: 71711-19
MSDS Identification Code/Number: 017

Manufacturer

Main Headquarter: Nihon Nohyaku Co., Ltd., Kyobashi OM Bldg.
19-8 Kyobashi 1 chome, Chuo-ku, Tokyo 104-8386, JAPAN

Non-emergency information:

Phone: 81-3-6361-1423
Facsimile: 81-3-6361-1451

Emergency information:

Phone: 81-3-3281-1887

US Connection: Nichino America Inc., 4550 New Linden Hill Road,
Suite 501, Wilmington, Delaware 19808, USA
Phone: 302-636-9001
Facsimile: 302-636-9122

Emergency and Health and Safety Inquiries: 1-800-348-5832 (24-hours)
In case of fire or spills, information may be obtained by calling (800) 424-9300.
In case of international shipments, call (703) 527-3887.

2. HAZARD IDENTIFICATION

Emergency Overview:

- Warning! Causes substantial but temporary eye injury. Harmful if inhaled or swallowed. Do not get into eyes, skin, or clothing.
Toxic to aquatic organisms (fish, invertebrates, estuarine and marine organisms).

Potential Health Effects:

Primary route(s) of entry: Ingestion, eye contact, skin contact
Eyes: Causes reversible eye injury.

Skin Contact: May cause slight skin irritation. Does not cause skin sensitization in animal studies.
Ingestion: May be harmful if swallowed.
Inhalation: Do not breathe vapors or spray mist.
Chronic (Cancer): EPA has determined there is no evidence of carcinogenicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Ingredients:

Active Ingredient:	Fenpyroximate	5%
Inert Ingredients*:	Total	95%

* Contains petroleum distillates

Chemical Name of Active Ingredient (IUPAC):

tert-butyl (*E*)- α -(1,3-dimethyl-5-phenoxy-pyrazol-4-ylmethyleneaminoxy)-*p*-toluate

CAS Registry No.: 134098-61-6

4. 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 the first five minutes, then continue rinsing eye. 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 poison control center or doctor for further treatment advice.

Ingestion: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

Skin Contact: 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.

5. FIRE-FIGHTING MEASURES

Flash Point: 85.0°C (185°F) (closed cup)

Extinguishing Media: Water spray, foam, dry chemical, and carbon dioxide

Special Fire-Fighting Procedure: Firefighters and others that may be exposed should wear fully protective clothing and self-contained breathing apparatus. Due to the danger of acute toxicity to aquatic organisms, avoid permitting extinguishing media, such as

water, foam, and dry chemicals, flow into ponds, rivers, and lakes.

Unusual Fire or Explosion Hazard: None

Hazardous Combustion Products: Carbon dioxide, carbon monoxide, and nitrogen oxides

6. ACCIDENTAL RELEASE MEASURE

General and Disposal: Use proper protective equipment to minimize personal exposure (see Section 8). Take all necessary action to prevent and to remedy the effects of the spill. Ensure that the disposal is in compliance with federal or local disposal regulations (see Section 13).

Notify the appropriate authorities immediately (see Section 15 for any applicable Reportable Quantity (RQ)). Report to authorities if water enters watercourse or sewer.

Land Spill or Leak: Keep unauthorized people away. Isolate hazard area. Avoid direct contact with spilled product or contaminated surfaces. Liquid spills on the floor or other impervious surfaces should be contained or diked and then absorbed with sawdust, sand, bentonite, or other absorbent clay. Collect contaminated absorbent, and place it in a properly labeled metal drum with lid. Thoroughly scrub the floor or other impervious surface with a strong industrial-type detergent and rinse with water.

Liquid spills that soak into the ground should be dug up and placed in metal drums. When a large spill or leakage is found, wear protective clothing and respirator to avoid exposure.

Avoid letting contaminated absorbents or water flow into ponds, rivers, and lakes, due to the danger of acute toxicity to aquatic organisms.

7. HANDLING AND STORAGE

Handling Procedures:

- Open container with care.
- Use adequate ventilation.
- Avoid handling near an open flame or heat source or ignition source.
- Do not contaminate water by cleaning of equipment or disposal of waste.
- Avoid contact with skin, eyes, or clothing.
- Do not eat, drink, smoke, or chew gum or tobacco while handling this product and until hands and face are thoroughly washed with soap and water.
- Do not use the toilet before thoroughly washing hands.
- Remove contaminated clothing immediately and wash thoroughly before reuse.

- Keep container closed. Store in original container.
- Store product between the temperatures of 0° C to 38° C.
- Avoid storage in direct sunlight, excessive heat or cold.

- Storage Precautions:**
- Keep container closed.
 - Store in original container.
 - Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed.
 - Avoid storage in direct sunlight, excessive heat or cold.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

General Protection: Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

Engineering Controls: Local exhaust ventilation may be necessary under certain confined conditions. If practical use ventilation at the sources of air contamination.

Personal Protective Equipment:

Eye Protection: Wear protective eyewear (safety glasses, goggles or face shield) to prevent eye contact.

Skin Protection: Wear long-sleeved shirt, long pants, shoes plus socks and chemical-resistant gloves (such as barrier laminate or Viton[®]) to prevent skin contact. Wash contaminated skin promptly. Launder contaminated clothing and clean protective equipment. Wash thoroughly after handling.

Respiratory Protection: Avoid breathing mist. Use approved respiratory protection equipment (combination or gas/vapor respirator) when handling large quantities without proper ventilation or handling large spills.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Pale yellow liquid
Specific Gravity: 1.0061 20° C
Bulk Density: 8.37 lb/US gal
Flash Point: 85.0°C (185°F) (closed cup)
pH: 6.13 at 25° C
Viscosity: 5.9 cP at 30 rpm at 20° C

Vapor Pressure (tech): <7.50 x 10⁻⁸ torr

10. STABILITY AND REACTIVITY

Flash Point: 75.5°C (167.9°F) (closed cup)
Auto Ignition: None
Storage Stability: This product is stable for at least 12 months under normal storage conditions 25°± 2° C.
Incompatibility With Other Materials: Not known
Hazardous Decomposition Products: None
Hazardous Polymerization: None

11. TOXICOLOGICAL INFORMATION

Oral	Rat LD ₅₀	Male: 810 mg/kg Female: 1004 mg/kg
Dermal	Rat LD ₅₀	Male: > 5,000 mg/kg Female: > 5,000 mg/kg
Inhalation	Rat LD ₅₀	Male: 0.63 mg/l (4 hrs) Female: 0.51mg/kg (4 hrs)
Eye Irritation	Rabbit	Moderately irritating MMTS 30.0
Skin Irritation	Rabbit	Moderately irritating PDII 4.6
Skin Sensitization	Guinea Pig	Non Sensitizing

*The following data were developed with **Fenpyroximate Technical**, the active ingredient of FujiMite® 5EC:*

Sub-Chronic and Chronic Effects (Target Organ Effects)

Fenpyroximate technical was shown to have no target organ effects in the 90-day animal studies. Effects of decreased body weight and food consumption was observed in rats at 7.4 mg/kg/day and in dogs at 2 mg/kg/day.

In long-term chronic studies no target organ toxicity was observed. Reduction in body weight was seen at 3-4 mg/kg/day in the rat in a 2-year study. Similarly weight loss was observed after a one-year exposure to dogs at 15 mg/kg/day and after an 18-month exposure to mice at 9.5 mg/kg/day.

Cancer Effects

Fenpyroximate was tested in lifetime studies in rats and mice and was not carcinogenic.

Teratogenic Effects (Birth defects)

Fenpyroximate technical demonstrated no developmental toxicity in the rabbit at dose levels up to 5 mg/kg/day or in rats also at 5 mg/kg/day.

Reproduction

Fenpyroximate demonstrated no adverse effects on reproductive performance in a two-generation rat reproduction study. The highest dose tested (6.6 – 8.6 mg/kg/day) resulted in decreased weight gain in both the parents and offspring.

Neurotoxicity Effects

No neurotoxicity was seen in an acute exposure by gavage in the acute neurotoxicity study in rats at doses below the maximum tolerated doses. No effects on neurobehavioral evaluations (FOB and motor activity) were seen at the highest dose tested of 6 mg/kg/rat. In the subchronic study, fenpyroximate showed no effects on FOB and motor activity at doses up to 18.4 mg/kg/day for female rats and up to 16.4 mg/kg/day for male rats. Significant body weight reduction was seen at this highest dose level in both male and female rats.

Immunotoxicity

No effects on the immune functions, as assessed by measurement of antigen-specific, T-cell antibody formation were seen at any dose level.

Mutagenicity (Genetic Effects)

Fenpyroximate was not mutagenic when tested in a battery of five different test systems.

12. ECOLOGICAL INFORMATION

This product is very highly toxic to fish and aquatic invertebrates. Do not apply directly to water. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsate.

13. DISPOSAL CONSIDERATION

General Disposal Guidance: Any disposal practice must be in compliance with all federal, state/provincial, and local laws and regulations. State (provincial) and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Chemical additions, processing, storage or otherwise altering this material may make the waste disposal information presented in this MSDS incomplete, inaccurate, or otherwise inappropriate. Waste characterization and disposal compliance are the responsibility solely of the party generating the waste or deciding to discard or dispose of the material.

Refer to appropriate federal (RCRA: 40 CFR.261), state/provincial, or local requirements for proper classification information. For regulatory information on the ingredient components, see Section 15.

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray, or rinsate is a

violation of Federal law. If these wastes cannot be disposed of by use 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.

Container Disposal:

Nonrefillable container equal or less than 5 gallons: DO NOT reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by State or local authorities, by burning. If burned, stay out of smoke.

(Non-refillable container greater than 5 gallons)

Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple Rinse as follows: Empty remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke

Refillable container greater than 5 gallons:

Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

14. TRANSPORT INFORMATION

DOT: < 119 gallons; not regulated

>119 gallons: DOT: UN 3082, Environmentally hazardous substance, liquid, n.o.s.(fenpyroximate), 9, PG III

IATA: UN 3082, Environmentally hazardous substance, liquid, n.o.s, (fenpyroximate), 9, PG III

IMDG: UN 3082, Environmentally hazardous substance, liquid, n.o.s, (fenpyroximate), 9, PG III, MARINE POLLUTANT; EMS F-A, S-F

15. REGULATORY INFORMATION

U.S. Federal Regulatory Information:

EPA Registration Number: 71711-19

TSCA Inventory: Registered Pesticide; exempt from TSCA

Regulatory Controls:

This product is registered under Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C.). It is a violation of Federal Law to use this product in a manner that is inconsistent with its labeling. Read and follow all label directions.

SARA Title III Notification and Information:

N-methyl-2-pyrrolidone (CAS 872-50-4)

§ 15 Prop 65 (CA):

N-methyl-2-pyrrolidone (CAS 872-50-4)

Naphthalene (CAS No. 91-20-3)

CA Prop 65 Components:

WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

U.S. Right to Know (RTK) ingredients:

N-methyl-2-pyrrolidone (CAS 872-50-4)

16. OTHER INFORMATION

HMIS Hazard Rating:	Health:	1
	Fire:	1
	Phys. Haz.:	0
	Reactivity:	0

NFPA Hazard Rating:	Health:	1
	Fire:	1
	Reactivity:	0
	Spec. Haz.:	0

Disclaimer of Expressed and Implied Warranties: This information is provided in good faith but without express or implied warranty. Buyer assumes all responsibility for safety and use not in accordance with FIFRA label instructions.

Prepared by:	Regulatory Affairs
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