

Nichino America, Inc.

Vetica™ Insecticide

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product: Vetica Insecticide (NNI-0871 SC)
General Use: Insecticide
Product Description: an off-white suspension concentrate
EPA Reg. No.: 71711-32

Manufacturer

Main Headquarter: Nihon Nohyaku Co., Ltd., 1-2-5, Nihonbashi, Chuo-ku,
Tokyo, JAPAN

Non-emergency information:

Phone: 81-3-3278-0461

Facsimile: 81-3-3281-2443

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. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Ingredients:	Active Ingredient:	flubendiamide	3.8%
		buprofezin	26.4%
	Other Ingredients:		<u>69.8%</u>
	Total:		100.0%

Chemical Name (IUPAC): flubendiamide ; buprofezin

Chemical Formula: C₂₃H₂₂F₇IN₂O₄S C₁₆H₂₃N₃OS

CAS Registry No.: 272451-65-7 69327-76-0

3. HAZARD IDENTIFICATION

Emergency Overview - Caution:

- Causes moderate eye irritation

Primary Route of Exposure:

- Dermal

Potential Health Effects:

Eye Contact: Causes moderate eye irritation

Dermal:

Ingestion:

Inhalation:

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.

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.

Ingestion: Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

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.

5. FIRE-FIGHTING MEASURES

- Extinguishing Media:** Water, foam, dry powder, or carbon dioxide.
- Special Fire-Fighting Procedure:** Firefighters should wear positive pressure, self-contained breathing apparatus. Avoid permitting extinguishing media, such as water, foam, and dry chemicals, flow into ponds, rivers, and lakes.
- Flammable Properties:** Does not flash.
- Auto Ignition Temperature:** Not combustible
- Hazardous Decomposition Products:** Carbon dioxide, carbon monoxide, nitrogen oxides, and sulfur dioxide
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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:** Do not breathe the dust. Use a suitable dust respirator. Avoid contact with skin and eyes. Carefully sweep up the spilled product, avoiding formation of a dust cloud, and place it in a suitable container. Seal the container. The area can be washed with water to remove the last traces of the product, but keep out of watercourses or sewers. Inform authorities immediately if contamination occurs.
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7. HANDLING AND STORAGE

- Handling Precautions:** 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 and wash contaminated clothing before reuse.

Storage Precautions: Store in original container and keep closed. Store in a cool, dry place. Do not expose contents to sunlight. Do not store contents at high temperatures (>120°F).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Control airborne contaminants below the exposure guidelines (see below for any applicable OSHA/ACGIH exposure limits). Use with adequate ventilation to minimize exposure. Local exhaust ventilation may be necessary, especially when the product is used in a confined area.

Manufacturing and Packaging Personnel:

Manufacturing and packaging personnel should use this product in well-ventilated areas. In accordance with recommended OSHA standards, they should wear

- Impervious gloves (PVC or rubber), especially when prolonged or repeated contact is anticipated.
- Safety glasses or chemical goggles.
- Approved dust respirators, especially when handling the product in a confined space.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: off-white liquid
Density: 8.83 lb/gal
pH: 5.84

10. STABILITY AND REACTIVITY

Flash Point: None
Flammable Point: None
Auto Ignition: None
Chemical Stability: This product is stable for at least 12 months of storage at ambient temperatures
Incompatibility With Other Materials: Not known
Hazardous Decomposition Products: None
Hazardous Polymerization: None

11. TOXICOLOGICAL INFORMATION

The following data were developed with formulated product:

Oral:	Rat LD ₅₀	>5,000 mg/kg
Dermal:	Rat LD ₅₀	>5,000 mg/kg
Eye Irritation:	Rabbit:	Mildly irritating
Skin Irritation:	Rabbit:	Slightly irritating
Skin Sensitization:	Guinea pig:	Non-sensitizing

Subchronic (Target Organ Effects)

n/a

Chronic Cancer Information

n/a

Teratogenic Effects (Birth Defects)

n/a

Reproductive Effects

n/a

Mutagenicity (Genetic Effects)

n/a

12. ECOLOGICAL INFORMATION

This pesticide is toxic to aquatic invertebrates. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwater or rinsate.

Flubendiamide and its degradate NNI-0001-des-iodo have properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Flubendiamide and its degradate NNI-0001-des-iodo may also impact surface water quality due to runoff or rainwater. This is especially true for poorly draining soils and soils with shallow groundwater. These chemicals are classified as having a medium potential for reaching both surface water and aquatic sediment via runoff several months or more after application. A vegetative buffer strip as required under Directions for Use will reduce the potential for loading of flubendiamide and its degradate NNI-0001-des-

iodo from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Vegetative Buffer Strip

Construct and maintain a minimum 15-foot wide vegetative filter strip of grass or other permanent vegetation between field edge and down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marches or natural ponds; estuaries; and commercial fish farm ponds).

Only apply products containing flubendiamide onto fields where a maintained vegetative buffer strip of at least 15 feet exists between the field edge and down gradient aquatic habitat.

For guidance, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. USDA, 2000. Fort Worth, TX. 21 pp. <http://www.in.csusda/v/technical/agronom/newconbuf.pdf>

Do not discharge effluent containing this product directly into lakes, streams, ponds, estuaries, oceans or public waters unless this product is specifically identified and addressed in a NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the Environmental Protection Agency. Do not contaminate water when disposing of equipment washwaters.

13. DISPOSAL CONSIDERATION

General Disposal Guidance: Any disposal practice must be in compliance with all Federal, State, and local laws and regulations. State 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.

Excess pesticide and rinsate should be disposed of according to label instructions and/or local regulations. Dispose of the used container according to local regulations.

Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at approved disposal facilities.

RCRA Information:

RCRA Hazardous Waste Ingredients: None

14. TRANSPORT INFORMATION

Proper Shipping Name: None
DOT Shipping Label: Not regulated

15. REGULATORY INFORMATION

U.S. Federal Regulatory Information:

EPA Registration Number: 71711-32
TSCA Inventory: Exempt from TSCA.

SARA Title III Notification and Information:

Section 302 (EHS) Ingredients: None
Section 304 (CERCLA & EHS) Ingredients (RQ):
Section 313 Ingredients:
Section 311/312 Notifications and Information:

Hazard Classes:

Acute Health Hazard: No
Chronic Health Hazard: No
Fire Hazard: No
Sudden Release of Pressure Hazard: No
Reactivity Hazard: No

U.S. State Regulatory Information:

U.S. State Right-to-Know (RTK) Ingredients:

Canadian Regulatory Information:

CPC Number: None
The MSDS contains all CPR required hazard-related information.

16. OTHER INFORMATION

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

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

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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.
