

Date of issue: 25.Nov.2011

Revision date (V.3): 11.Dec.2015

SAFETY DATA SHEET

SDS No. 528-145(M15-45)

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the substance/mixture

Product name: **Flubendiamide 20WDG (Synonym: NNI-0001 20WDG)**

1.2 Use of the substance/mixture

Insecticide for agriculture

1.3 Company/undertaking identification

Manufacturer

Nihon Nohyaku Co., Ltd.

19-8, Kyobashi 1-Chome, Chuo-Ku, Tokyo 104-8386, JAPAN
(ENVIRONMENT SAFETY DEPT. / Phone: 81-3-6361-1426
e-mail: kankyouanzen@nichino.co.jp)

Emergency telephone number

OVERSEAS DIVISION, Nihon Nohyaku Co., Ltd.

19-8, Kyobashi 1-Chome, Chuo-Ku, Tokyo 104-8386, JAPAN
Phone: 81-3-6361-1425 Facsimile: 81-3-6361-1456

UK Connection : Nichino Europe Co., Ltd.

5 Pioneer Court, Vision Park, Histon, Cambridge CB24 9PT, UK
Phone: 44-1223-200212 Facsimile: 44-1223-233119

USA Connection: Nichino America, Inc.

4550 New Linden Hill Road, Suite 501, Wilmington,
Delaware 19808, USA

Phone: 1-302-636-9001 Facsimile: 1-302-636-9122

2. HAZARD IDENTIFICATION

GHS Classification

Physical hazards

Pyrophoric solids Not classified

Health hazards

Acute toxicity (oral) Not classified

Acute toxicity (dermal) Not classified

Skin corrosion/irritation Not classified

Serious eye damage/eye irritation Not classified

Skin sensitization Not classified

Environmental hazards

Hazardous to the aquatic environment (acute) Category 1

Other hazards described above are not applicable or cannot be classified

GHS label elements

Pictogram



Signal word	Warning
Hazard statement	Very toxic to aquatic life
Precautionary statement	
[Prevention]	■ Avoid release to the environment.
[Response]	■ Collect spillage.
[Storage]	
[Disposal]	■ Dispose of contents or container in accordance with local regulations.

Other hazards: Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance / Mixture:	Mixture
Ingredient and composition	
Active ingredient:	3-iodo- <i>N'</i> -(2-mesyl-1,1-dimethylethyl)- <i>N</i> -{4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- <i>o</i> -tolyl}phthalamide (IUPACK name) (Common name: flubendiamide)
Component	
Flubendiamide (ISO)	20.0% (CAS No.272451-65-7)
Inert ingredients*	80.0%
*Surface active agent, clay	

4. FIRST-AID MEASURES

Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Skin contact:	Remove contaminated clothing. Wash skin with plenty of water and soap. If irritation persists, get medical attention. Contaminated clothing should be washed before re-use.
Ingestion:	If swallowed, rinse mouth with water, and give one or two glasses of water to drink. Keep patient at rest and get medical attention. Do not induce vomiting.
Inhalation:	Remove individual to fresh air. Get medical attention if ill effect occurs.

5. FIRE-FIGHTING MEASURES

Fire-fighting procedure:	Firefighters and others that may be exposed should wear full protective clothing and self-breathing apparatus. Avoid extinguishing media such as water, foam, and dry chemicals flow into pond, river and lake.
Unusual fire or explosion hazard:	None
Hazardous combustion products:	Carbon dioxide, carbon monoxide, sulfur oxides and nitrogen oxides etc.
Extinguishing media:	Water spray, Foam, Dry chemical powder, Carbon dioxide

6. ACCIDENTAL RELEASE MEASURES

Evacuate non-essential personnel. Wear proper equipment. Carefully sweep up and place in a container for waste disposal. Avoid raising dust. Wash the spillage area with water. Washings should not be poured into drains or waterway. Prevent spills from entering sewers, watercourse or low areas

7. HANDLING AND STORAGE

Handling: Use with adequate ventilation. Avoid contact with skin and eyes. Do not breathe mist or vapor. Wash face and hands thoroughly with soap and water after handling.

Storage: Avoid direct sunlight. Store in a cool, dry and well-ventilated place. Keep in original containers, tightly closed. Keep away from food, drink and animal feeding stuffs and out of reach of children. Keep locked up.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Exposure limits values

Flubendiamide: Not established.

8.2 Exposure control

Engineering controls: If practical, use with adequate ventilation in the working area. Make available in the work area emergency shower and eye wash.

Personal protective equipment:

Respiratory protection: Wear approved respiratory protection equipment.

Eye protection: Wear chemical safety goggles.

Skin protection: Wear suitable protective clothing and gloves to prevent skin contact. Wash contaminated skin promptly.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Brown fine granule

Bulk density: 0.65-0.78

pH: 5.0-8.0/20°C (1%water suspension)

Flammability (solid): Not flammable

10. STABILITY AND REACTIVITY

Chemical stability: This product is stable under normal warehouse conditions.

Incompatibility with other materials: Not known

Hazardous decomposition products: Combustion or thermal decomposition will evolve toxic and irritant vapors (CO, NOx, SOx etc.).

Hazardous polymerization: Not known

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Oral: Rat LD₅₀ (mg/kg) female >2000 (No animals died or showed any clinical signs at a dose level of 2000 mg/kg)

Dermal:	Rat LD ₅₀ (mg/kg)	male, female >2000 (No animals died or showed any clinical signs at a dose level of 2000 mg/kg)
Skin irritation:	Rabbit	Non-irritant
Eye irritation:	Rabbit	Slightly irritant (Irritation reactions disappeared by 72 hours after application. It was considered as the outside of GHS eye irritation category.)
Skin sensitization:	Guinea pig	Negative

12. ECOLOGICAL INFORMATION

Aquatic organism toxicity (Acute): Category 1

Carp:	LC ₅₀ (96hr)	677 mg/L	
Daphnia*:	EC ₅₀ (48hr)	0.00431 mg/L	* <i>Daphnia magna</i>
Algae**:	EbC ₅₀ (0-72h)	>1000 mg/L	** <i>Pseudokirchneriella subcapitata</i>
	ErC ₅₀ (24-72h)	>1000 mg/L	

Aquatic organism toxicity (Chronic):

This product cannot be classified as the data are insufficient.

13. DISPOSAL CONSIDERATIONS

Excess pesticide and rinsate should be disposed of according to label instructions and/or local regulations. Do not dump into sewers, on the ground or into any body of water. Dispose used container according to the local regulations. Repealing liquid containing flubendiamide should be avoided to flow into river, pond and lake.

14. TRANSPORT INFORMATION

Follow the precaution indicated in the HANDLING AND STORAGE section. Confirm that the material does not leak and treat carefully not to break the packing. Follow all regulations in your country.

UN Classification: Class 9, UN No.3077 (Environmentally hazardous substance, solid, N.O.S)
Packaging group III

IMDG Code: Marine pollutant

15. REGULATORY INFORMATION

Users should ensure that they comply with any relevant local, state or national legislation.

16. OTHER INFORMATION

The information herein is given in good faith, but not warranty. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of product. It is not applicable to unusual or non-standard uses of product, nor where instructions or recommendations are not followed.