

# MATERIAL SAFETY DATA SHEET

## 1. IDENTIFICATION

**Product name:** Imidacloprid

**Chemical name:** 1-[(6-chloro-3-pyridinyl) methyl]-N-nitro-2-imidazolidinimine

**CAS No.:** 138261-41-3

**Molecular formula:** C<sub>9</sub>H<sub>10</sub>C<sub>1</sub>N<sub>5</sub>O<sub>2</sub>

**Molecular weight:** 255.7

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:	Percent %
Imidacloprid	2.15%
Sugar	20.0%
Antiseptic	2.5%
Carrageenan	1.2%
Humectant	24.0%
Filler	12.0%
25% Titania suspension	1.2%
Distilled Water	Up to 100%

## 3. HAZARDS IDENTIFICATION

**Potential health effects:**

**Route(s) of entry:** Inhalation, skin contact, eye contact, ingestion

**Human effects and symptoms of overexposure:**

**Acute effects of exposure:** No specific symptoms of acute overexposure are known to occur in humans.

Based on EPA toxicity category criteria, this product is essentially non-toxic by the oral and dermal routes of exposure. In addition. Animal studies have shown that this material is minimally irritating to the eye and slightly irritating to the skin.

**Chronic effects of exposure:** No specific symptoms of chronic overexposure are known to occur in humans.

**Medical conditions aggravated by exposure:** No specific medical conditions are known which may be aggravated by exposure to this product.

## 4. FIRST-AID MEASURES

**Ingestion:** If ingestion is suspected, call a physician or poison control center. Drink one or two glasses of water and induce vomiting by touching back of throat with finger, or, if available, by administering syrup of ipecac. If syrup of ipecac is available, administer 1 tablespoonful (15ml) of syrup of ipecac following by 1 to 2 glasses of water. If vomiting does not occur within 20 minutes, repeat the dose once. Do not induce vomiting or give anything by mouth to an unconscious person.

**Skin:** Remove contaminated clothing and shoes. Rinse skin immediately with plenty of water 15-20 minutes. Call a poison control center or doctor for treatment advice.

**Inhalation:** Remove victim to fresh air. If not breathing give artificial respiration, preferably mouth to mouth. Call a poison control center or doctor for further treatment advice.

**Eye:** Have eye open and rinse slowly and gently with water for 15-20minutes. Remove contact lenses, if present, after the first 15 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**Note to Physician:** No specific antidote is available. Treat patient symptomatically.

## 5. FIRE FIRGHTING MEASURES

**Flash point:** >93°C

**Extinguishing media:** Water; Carbon Dioxide; Dry Chemical; Foam

**Specific fire fighting media:** Keep out of smoke, cool exposed containers with water spray. Fight fire from upwind position. Use self-contained breathing equipment. Contain run-off by diking to prevent entry into sewers or waterways. Equipment or materials involved in pesticide fires may become contaminated.

## 6. ACCIDENTAL RELEASE MEASURES

**Spill or leak procedures:** Isolate area and keep unauthorized people away. Do not walk through spilled material. Avoid breathing vapors and skin contact. Wear proper protective equipment. Dike contaminated area with absorbent granules, soil, sand, etc. If large spill, material should be recovered. Small spills can be absorbed with absorbent granules, spill control pads, or any absorbent material. Carefully sweep up absorbed spilled material. Place in covered container for reuse or disposal. Scrub contaminated area with soap and water. Use dry absorbent material such as clay granules to absorb and collect wash solution for proper disposal. Contaminated soil may have to be remove and disposed. Do not allow material to enter streams, sewers, or other waterways or contact vegetation.

## 7. HANDLING AND STORAGE

**Handling Precautions:** Do not contaminate water, food or feed by storing or disposal. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco.

**Storage:** Store in cool dry area designated specifically for pesticides. Do not store near any material

intended for use or consumption by humans or animals.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Respiratory Protection:** Exposure during the end-users use of this product is expected to be minimal. End-users should refer to the packaging label for proper handling procedures. However, if exposure to this product is possible while handling large quantities such as in manufacturing, transportation spills or other emergencies, the following personal protection is recommended.

**Eye Protection:** Wear splash proof or dust resistant safety goggles and face shield.

**Eye Protection:** Long sleeves and trousers.

**Hand Protection:** Chemical-resistant gloves such as latex or nitrile.

**Respirator requirements:** NIOSH-approved particulate respirator

**Additional protective measures:** Clean water should be available for washing in case of eye or skin contamination. Educate and train employees in safe use of the product. Follow all label instruction. Launder clothing after use. Wash thoroughly after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Paste

**Colour:** White

**Odour:** A weak characteristic odour

**Solubility:** 0.61g/l (at 20 °C)

**Molecular weight:** 255.7

**Density:** 1.19

## 10. STABILITY AND REACTIVITY

**Stability:** Stable

**Hazardous polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

**Toxicology Data (Active ingredient):**

Acute Oral LD<sub>50</sub> (rat): 397mg/kg

Acute Dermal LD<sub>50</sub> (rat): > 5000mg/kg

Acute Inhalation LC<sub>50</sub> (4h rat): >0.069mg/L air

Eye Irritation (rabbit): non-irritating to eyes

Skin Irritation (rabbit): non-irritating to skin

## 12. ECOLOGICAL INFORMATION

**Bee toxicity:** Harmful to honeybees by direct contact, but no problems expected when not sprayed into flowering crop or when used as a seed treatment.

**Fish:** LC<sub>50</sub> (96 h) for golden orfe 237mg/l, for rainbow trout 211mg/l.

**Daphnia:** LC<sub>50</sub> (48h) for Daphnia is 85mg/l.

**Algae:** EC<sub>50</sub> (96h) for *Pseudokirchneriella subcapitata* is greater than 100mg/l.

**Earthworm:** Acute LC<sub>50</sub> (14d) for *Eisetia foetida* 10.7mg/kg dry soil.

**Birds:** LD<sub>50</sub> for bobwhite quail: 152mg/kg, for Japanese quail: 31mg/kg.

## 13. DISPOSAL CONSIDERATIONS

Dispose of container at an approved waste disposal facility or by incineration if allowed by state and local authorities. Do not use container in connection with food, feed, or drinking water.

## 14. TRANSPORT INFORMATION

**UN number:** Not applicable

**Proper shipping**

**Name:** Not applicable

**Class and Subsidiary Risk:** This product is not classified as a Dangerous Good

**Packing Group:** Not applicable

## 15. REGULATORY INFORMATION

None

## 16. OTHER INFORMATION

None

Ningbo Free Trade Zone Finechem Ind. Co., Ltd.

Han Yanping

Signature: \_\_\_\_\_