



Address: 21 Hubble, Irvine , CA 92618, USA
Tel.: 949-679-3535 Fax.: 949-679-3538
Email: amtide@sbcglobal.net

Material Safety Data Sheet (MSDS)

MSDS# AT-INC011001

Date: 06/17/2008

Section 1 - Product Chemical and Company Identification

Product name	Technical Imidacloprid	
Product Use	Insecticide	
Company	AmTide LLC.	
EPA Reg. No.	83851-5	
Emergency phone	Chemtrec	1-800-424-9300
	AmTide LLC.	1-949-753-4723

Section 2 - Composition /Information on Ingredients

Active Ingredient	CAS number	w/w %
Imidacloprid	138261-41-3	99.0%
Other ingredients		1.0%

Section 3 - Hazards Identification

Emergency overview

CAUTION:

Can be harmful if absorbed through the skin.
Can be harmful if inhaled.
Can be harmful if swallowed.
Repeated exposure to vapors and/or dust can cause eye injury.

Section 4 - First Aid Measures

If poisoning occurs, immediately contact a doctor or Poisons Information Centre, and follow the advice given. Show this Material Safety Data Sheet to the doctor.

Inhalation

If inhaled, remove to fresh air and keep warm and at rest. Seek medical advice if at all worried.

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.

Eye contact

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Ingestion



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Call a 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 a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Notes to physician

Medical treatment: Check blood pressure and pulse rate frequently, as bradycardia and hypotonia are possible. Provide supportive measures for respiratory function and cardiac action. Give artificial respiration if signs of paralysis appear. Additional therapeutic measures involve elimination of the substance from the body or acceleration of its excretion (gastric lavage, saline laxatives, activated charcoal).

Antidotes (if existing): No antidote is available, treated symptomatically.

Section 5 - Fire Fighting Measures

Flash point: Not applicable

Extinguishing media: Water, Carbon dioxide (CO₂), Foam, Dry chemical

Flammable limits: Not applicable

Fire fighting instructions: Keep out of smoke. Cool exposed containers with water spray. Fight fire from upwind position. Use self-contained breathing equipment. Contain runoff by diking to prevent entry into sewers or waterways. Equipment or materials involved in pesticide fires may become contaminated.

Section 6 - Accidental Release Measures

General and Disposal

Use proper protective equipment to minimize personal exposure (see Section 8). Sweep up spilled material. Place in a container for disposal.

Land Spill or Leaks

Isolate area and keep unauthorized people away. Do not walk through spilled material. Avoid breathing vapors and skin contact. Do not breathe dust. Avoid generating dust (a fine water spray mist, plastic film cover, or floor sweeping compound may be used if necessary).

Do not allow material to enter streams, sewers, or other waterways. Scrub contaminated area with soap and water. Rinse with water. Use dry absorbent material such as clay granules to absorb and collect wash solution for proper disposal. Contaminated soil may have to be removed and disposed.

Section 7- Handling and Storage

Handling

Advice on safe handling: Wash thoroughly after handling. Do not allow water to get into the container because of violent reaction. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Use with adequate ventilation. Discard



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contaminated shoes. Keep away from heat, sparks and flame.

Storage

Store in a cool, dry place away from food, drink and animal feeding stuffs. If spilled, do not flush to waterways (see Environmental Hazards). Carefully collect and containerize spilled material in a manner that produces the least amount of airborne dust. Suitable protective equipment should be worn during any spill cleanup operation (see Precautionary Statements). Residual surface material may be removed with towels moistened with methanol.

Section 8 - Exposure Controls/Personal Protection

Engineering Controls

Where engineering controls are indicated by use conditions of a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: Control exposure levels through the use of general and local exhaust ventilation. When handlers used closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [(40 CFR 170.240(d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Eye/Face Protection

Goggles should be used to prevent dust from getting into eyes.

Hand Protection

Chemical-resistant gloves made of any waterproof material such as, barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton

Body Protection

Long-sleeved shirt and long pants. Shoes plus socks.

Respiratory Protection

No personal respiratory protective equipment normally required. When respiratory protection is necessary under the conditions of use, wear a respirator approved for pesticides by the National Institute for Occupational Safety and Health (NIOSH).

General Protection

Clean water and soap 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 instructions. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

Exposure Limits

None Established

Section 9 - Physical and Chemical Properties



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Appearance: Almost white powder

Odor: Odorless

Density: 1.57g/mL

Melting point: 138.3-140.7°C

pH: 6.0-9.0

Solubility: 0.9g/100mL in methanol, 0.08g/100mL in 1-Octanol and insoluble in hexane.

These physical data are typical values based on material test but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis and any specific lot or as specification items.

Section 10 - Stability and Reactivity

Chemical stability: Stable under room temperature

Incompatibility: None known

Conditions to avoid: Not known

Hazardous: Proposed compounds due to fire or other extreme conditions: Hydrogen chloride, Hydrogen cyanide (hydrocyanic acid), Carbon monoxide, Nitrogen oxides (NOx)

Hazardous polymerizations: Will not occur.

Section 11 - Toxicological Information (Based on the active ingredient)

Acute oral LD50: 1,750 mg/kg (rat)

Acute dermal LD50: >5,050 mg/kg (rabbit)

Acute inhalation LC50: >2.25 mg/L air 4 hours

Eye irritation: Rabbit: no observed irritation after 48 hours, Toxicity Category IV.

Skin irritation: Rabbit: No dermal irritant based on 72h observations. Toxicity Category IV.

Sensitization: Guinea pig: Not a dermal sensitizer.

Sub-Chronic Toxicity

In a 3-week dermal toxicity study, rabbits treated with imidacloprid showed no local or systemic effects at levels up to and including 1000 mg/Kg, the limit dose.

In a 4-week inhalation study, rats exposed to high concentrations of imidacloprid exhibited decreased body weight gains and changes in clinical chemistries and organ weights.

Chronic Toxicity

In chronic dietary studies in rats and dogs exposed to imidacloprid, the target organs were the thyroid and/or liver.

Assessment Carcinogenicity

In oncogenicity studies in rats and mice, imidacloprid was not considered carcinogenic in either species.

ACGIH: None

NTP: None

IARC: None



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OSHA: None

Reproductive & Developmental Toxicity

REPRODUCTIVE: In a two-generation reproduction study in rats, imidacloprid was not a primary reproductive toxicant. Offspring exhibited reduced body weights at the high dose and in conjunction with material toxicity.

DEVELOPMENTAL: In developmental toxicity studies in rats and rabbits, there was no evidence of an embryonic or teratogenic potential for imidacloprid. In both species, developmental effects were observed only at high doses and in conjunction with maternal toxicity.

Neurotoxicity

In acute and subchronic neurotoxicity screening studies in rats, imidacloprid produced slight neurobehavioral effects in each study at the highest dose tested.

There were no correlating morphological changes observed in the neural tissues.

Mutagenicity

The imidacloprid mutagenicity studies, taken collectively, demonstrate that the active ingredient is not genotoxic or mutagenic.

Section 12 - Ecological Information (Based on the active Ingredient)

Fish LC₅₀ (96 h) for rainbow trout 214.4 mg/L.

Daphnia EC₅₀ (48 h) >336.92mg/L.

Environmental hazards:

This product is highly toxic to aquatic invertebrates. Keep out of lakes, streams, or ponds. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

This product is highly toxic to bees exposed to direct treatment of residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. Do not allow material to contaminate ground water system.

Section 13 - Disposal Considerations

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not contaminate ponds, waterways or ditches with chemical or used containers.

CONTAINER DISPOSAL: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into processing equipment. Then dispose of



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liner in a sanitary landfill or by incineration if allowed by state and local authorities. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

Section 14 - Transport Information

ICAO/IATA (air):

Proper Shipping name Not hazardous or regulated
Hazard Class Division No. Non-regulated

Section 15 - Regulatory Information

US Federal Regulations

TSCA list None

TSCA 12b export notification None

SARA Title III - section 302 - notification and information None

SARA Title III - section 313 - toxic chemical release reporting None

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State right-to-know ingredients None

Canadian Regulations

Canadian Domestic Substance List None

Environmental

CERCLA None

Clean Water Section 307 Priority Pollutants None

Safe Drinking Water Act Maximum Contaminant Levels None

International Regulations

EU Classification None

European Inventory of Existing Commercial Substances (EINECS) None

Section 16 - Other Information

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. AmTide, LLC assumes no responsibility for results obtained or for incidental or consequential damages arising from the use of these data.