



Hangzhou Tianlong Biotechnology Co., Ltd.

Add: Room 1906, Fengqi Times Tower, No.338, Fengqi East Road, Hangzhou, Zhejiang, China.

MATERIAL SAFETY DATA SHEET

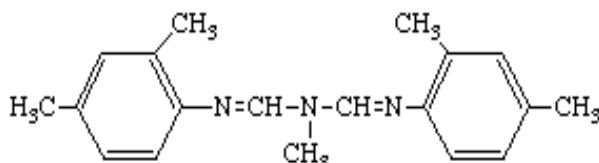
1. Chemical Product and company Identification

Product Name: Amitraz

Molecular Formula: C₁₉H₂₃N₃

Molecular Weight: 293.4

Structural Formula:



Chemical Name: N-methyl bis (2, 4-xilylininomethyl) amine

CAS No.: 33089-61-1

Supplier: HANZHOU TIANLONG BIOTECHNOLOGY CO., LTD

Address: Room 1906, Fengqi Times Tower, No.338 Fengqi East Road, Hangzhou, China, 310020

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2. Composition / Information on Ingredients

Composition	CAS No.	Content %
Amitraz	33089-61-1	98.0
Other ingredients		2.0

3. Hazards Summarizing

Routes of exposure:

Skin, inhalation, oral

Immediate efforts

Skin: Contains materials that may be moderately toxic. Cause mild skin relation.

Eye: Causes moderate eye irritation. Cause redness and tearing.

Inhalation: Contains materials that may be moderately toxic. Vapoure could cause headache, nausea, dizziness and respiratory irritation if inhaled.

Ingestion: May be harmful if swallowed. May cause headache, dizziness, nausea, vomiting, gastrointestinal and central nervous system depression.

4. First Aid Measures

Eyebaths or eyewash stations and safety deluge showers should be provided where this product is being used. If poisoning occurs, contact a Doctor or Poisons Information Centre. If possible have this MSDS or product label with you.

Swallowed: If swallowed, do not induce vomiting. Wash mouth with water

and give a glass of water to drink. Seek medical attention.

Eyes: If this product comes into contact with eyes, hold open and wash with running water for at least 15 minutes. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained. Seek medical attention.

Skin: If product gets on skin, immediately remove contaminated clothing and wash skin thoroughly with soap and water to remove material. If you begin to feel unwell, or if irritation persists, seek medical attention.

Inhalation: If vapors or mists have been inhaled, and irritation or unusual symptoms have developed, remove to fresh air and observe until recovered. If irritation or symptoms persists more than about 30 minutes, seek medical advice.

Advice to Doctor: Treat symptomatically. Note the nature of this product.

5. Fire-Fighting Measures

Extinguishing media:

Carbon Dioxide, Dry Chemical, Foam

Fire fighting instructions:

When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat, goggles and respirator. All skin areas should be covered.

6. Accidental Release Measures

Personal cautions: safety glasses or goggles, rubber gloves, shoes plus socks, long-sleeved shirt, and long pants and hats.

Cleaning methods

EX: clear the material in time. Transfer to a properly labeled deposit that will be closed and sealed until the recovery or elimination of the product.

Environmental cautions

EX: prevent the contamination of the floor and of beds of water.

7. Handling and Storage

Do not store at temperatures below 0°C. Do not get in eyes, on skin, or clothing. Do not breathe mist, keep container closed. Wash thoroughly after handling. Do not contaminate food or feed products.

8. Exposure Controls/Personal Protection

Engineering Controls: Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Provide local exhaust or process enclosure ventilation system.

Eye/Face: To protect against accidental eye contact, goggles/face-shield should be worn.

Skin Protection: Rubber gloves should be worn. Wash thoroughly with soap and water after handling.

Respiratory Protection: Ensure good ventilation. For maximum protection, wear a supplied air, full-facepiece respirator, airlined hood, or full-facepiece self-contained breathing apparatus.

9. Physical and Chemical Properties

Form: Solid

Color: A white to buff

Odor: Characteristic petroleum odor

Melting point: 86 - 87°C

Boiling point: Not available.

Volatile materials: No specific data. Expected to be low at 100°C.

Flashing point: 64°C

Flammability limits: Not applicable. This product is not flammable.

Specific gravity: 1.128 at 20°C

Water Solubility: <0.1 mg/l (20°C). Soluble in most organic solvents: in acetone, toluene, xylene >300 g/l. Stability Hydrolysis DT50 (25°C) 2.1 h (pH 5), 22.1 h (pH 7), 25.5 h (pH 9). U.V. light appears to have little effect on stability.

Vapor Pressure: 0.34 mPa at 20 °C

Partition Coefficient: (octanol/water) Kow = 316,000

10. Stability and Reactivity

Stability: Stable under normal handling and storage conditions.

Incompatibilities: Avoid mixed with nitric, sulfuric acid, strong oxidizing agent and reducing agent

Hazard Decomposition: Thermal decomposition products contain oxides of carbon, oxides of nitrogen.

Hazard Polymerization: Will not occur.

11. Toxicological Information

Acute oral LD50 to rats is 500-600mg/kg,

Acute dermal LD50 to rabbits is more than 200 mg/kg.

It is not irritative to eyes and skins of experimental animals.

Teratogenicity Effects: In one study, rats treated with 12 mg/kg/day of amitraz from days 8 to 20 of pregnancy, the offspring were heavier but had less bone development than the offspring of untreated rats. However, an EPA study indicates that the highest dose at which amitraz has no observable effect on test rats' offspring (teratogenic NOEL) is 12 mg/kg/day. The teratogenic NOEL of rabbits is 25 mg/kg/day. These studies indicate that high doses of amitraz exposure during pregnancy produced adverse effects in laboratory animals. Likely human exposures are very much less than those which produced effects, and these effects are unlikely in humans under normal circumstances.

Mutagenic Effects: A variety of tests indicate that amitraz is not mutagenic and does not cause damage to DNA.

Carcinogenic Effects: Long term feeding studies show that amitraz is not carcinogenic in rats. However, it can cause tumors in female mice. Amitraz causes an increase in tumors of the lungs and lymph nodes in female mice, but not males, at 57 mg/kg/day over 20 months. A two-year study of female mice also showed an increase in tumors of the liver (hepatocellular tumors) at 57 mg/kg/day of amitraz. Because amitraz causes cancer in female mice, but not male mice or male or female rats, it is unclassifiable as to human carcinogenicity.

Organ Toxicity: At high doses, amitraz can reduce the function of the hypothalamus, which helps regulate the metabolism by controlling hormone release in the body. A daily dose of 200 mg of amitraz per kilogram of body weight for ten weeks causes decreased growth and food consumption.

12. Ecological Information

Effects on Birds: Amitraz is slightly toxic to birds. The dietary LC50 (8 day) is 7,000 mg/kg for mallard ducks and 1,800 mg/kg for Japanese quail. The oral LD50 for bobwhite quail is 788 mg/kg. Amitraz may affect reproduction in birds. The avian reproduction NOEL is less than 40 ppm.

Effects on Aquatic Organisms: Amitraz is moderately toxic to fish. The LC50 (96-hour exposure) is 1.3 mg/l for bluegill sunfish and 3.2-4.2 mg/l for harlequin fish. For a 48-hour exposure of rainbow trout, a cold water species, the LC50 is 2.7-4.0 mg/l. Daphnia, a fresh water invertebrate, exhibited toxic effects at 35 ppb of amitraz in water.

Effects on Other Animals (Nontarget species): Amitraz is relatively non-toxic to bees. The LD50 is 12 micrograms per bee by ingestion and 3.6 mg/l by direct spraying.

13. Disposal Considerations

Spillage disposal: Do not wash away into sewer. Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place.

14. Transport Information

Class: 6.1

UN No: 2902

Packaging Group III

15. Regulatory Information

Safety Phrases: Keep out of reach of children

Keep away from food, drink and animal feeding stuff

Do not breathe dust.

Avoid contact with skin and eyes

Wear suitable protective clothing and gloves.

This material and its container must be disposed of as hazardous waste

16. Other Information

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.