



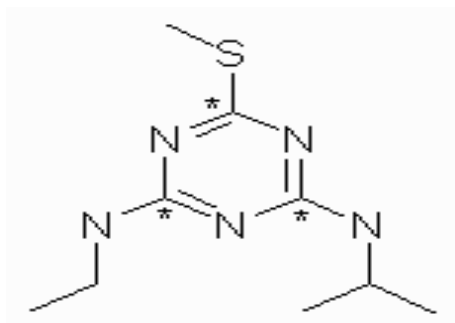
**Hangzhou Tianlong Biotechnology Co., Ltd.**

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: Ametryn  
Molecular Formula: C<sub>9</sub>H<sub>17</sub>N<sub>5</sub>S  
Molecular Weight: 227.35  
Structural Formula:



Chemical Name: N-ethyl-N'-(1-methylethyl)-6-(methylthio)-[ring-U-14C]-1,3,5-triazine-2,4-diamine

CAS No.: 834-12-8

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 %
Ametryn	834-12-8	97.0
Other ingredients		3.0

### 3. Hazards Identification

Toxicity - This product is unlikely to present a hazard during normal use (WHO Class III) Swallowed: low toxicity Tests on rats indicate a low toxicity following single doses of undiluted product. (LD<sub>50</sub> = 2675 mg/kg)

Dermal absorption: low toxicity Tests on rats indicate a slight toxicity due to skin contact with undiluted product. (LD<sub>50</sub> >3100 mg/kg)

#### **4. First Aid Measures**

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin contact: If skin or hair contact occurs, immediately remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre or a Doctor; or for 15 minutes and transport to Doctor or Hospital.

Eye contact: If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a Doctor; or for at least 15 minutes and transport to Doctor or Hospital.

Ingestion: Immediately rinse mouth with water. If swallowed, do not induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Get to a doctor or hospital quickly.

Notes to physician: Treat symptomatically.

#### **5. Fire-Fighting Measures**

Specific hazards: Non-combustible material.

Fire fighting further advice: Not combustible, however following evaporation of aqueous component residual material can burn if ignited. On burning may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

Hazchem Code: Not applicable.

Suitable extinguishing media: Not combustible, however, if material is involved in a fire use water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

#### **6. Accidental Release Measures**

Small spills: Wear protective equipment to prevent skin and eye contamination. Collect and seal in properly labeled containers or drums for disposal.

Large spills: Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain – prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labeled containers or drums for disposal. If contamination of crops or waterways has occurred advise

emergency services or State Department of Agriculture.

Dangerous Goods – Initial Emergency Response Guide No: Not applicable.

## **7. Handling And Storage**

Handling: Avoid skin and eye contact and inhalation of vapour, mist or aerosols.

Storage: Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from foodstuffs. Keep containers closed when not in use - check regularly for leaks.

## **8. Exposure Controls/Personal Protection**

Exposure limits: No exposure standards have been set for this product or the active ingredients.

Respiratory protection: Do not inhale spray mist.

Eye protection: Wear basic eye protection.

Personal protective equipment: It is good practice to wear suitable personal protective equipment. When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles.

Engineering control: handle in well ventilated areas, generally natural ventilation is adequate.

Hygiene Measures: After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

Decontaminate clothing and safety equipment after each use.

## **9. Physical and Chemical Properties**

Appearance: Light gray to white powder

Water Solubility: 185 mg/l at 20 degrees C. It dissolves readily in organic solvents including hexane, toluene, methanol, and acetone.

Solubility in Other Solvents: Soluble in acetone (610), methanol (510), toluene (470), n-octanol (220), hexane (58)

Melting Point: 84-85 degrees C

Vapor Pressure: 0.365 mPa Partition Coefficient: 676

Adsorption Coefficient: Not Available

## **10. Stability and Reactivity**

Chemical stability: This material is stable when stored and used as directed.

Conditions to avoid: No information available.

Incompatible Materials: No information available.

Hazardous decomposition products: No information available.

Hazardous reactions: No information available.

## **11. Toxicological Information**

Acute Effects

Inhalation: Material may be irritant to mucous membranes and respiratory

tract.

Skin contact: A skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

Eye contact: An eye irritant.

Ingestion: Swallowing can result in nausea, vomiting and abdominal pain.

Acute Toxicity: Ametryn is slightly toxic to humans. Symptoms of acute exposure to high doses include nausea, vomiting, diarrhea, muscle weakness, and salivation. Ametryn is moderately irritating to the eyes, skin, and respiratory tract. The LD50 is the dose of ametryn which is lethal to half of the test animals that ingest it. The oral LD50 of ametryn is 508 mg/kg for rats and 945 mg/kg for mice. The LC50 for rats that inhale ametryn for four hours is greater than 2.2 mg/l of air. The dermal LD50 is greater than 3,100 mg/kg for rats and 8,160 mg/kg for rabbits. Acute eye exposure in rabbits causes a temporary irritation.

Chronic Toxicity: No information is currently available

Reproductive Effects: No information is currently available.

Teratogenic Effects: No information is currently available.

Mutagenic Effects: Studies have shown that ametryn is not mutagenic.

Carcinogenic Effects: There is not adequate data to determine if ametryn can increase the risk of cancer in humans.

Organ Toxicity: Animal studies indicate that consuming large amounts of ametryn over a long period of time results in liver damage.

## **12. Ecological Information**

Effects on Birds: Ametryn is only slightly toxic to birds. The dietary LC50 (8 day) is 30,000 mg/kg for bobwhite quail and 23,000 mg/kg for mallard ducks.

Effects on Aquatic Organisms: Ametryn is moderately toxic to fish. The LC50 for rainbow trout exposed for 96 hours is 8.8 mg/l. The LC50 for bluegill is 4.1 mg/l and for goldfish it is 14.1 mg/l. Ametryn is highly toxic to crustaceans and moderately to highly toxic to mollusks.

Effects on Other Animals (Nontarget species): Ametryn is only slightly toxic to bees.

## **13. Disposal Considerations**

Refer to State/Territory Land Waste Management Authority. Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If

not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

#### **14. Transport Information**

Hazard class : 9

UN NO. : 3077

Packing Group : III.

#### **15. Regulatory Information**

Harmful by inhalation and if swallowed

Keep out reach of children.

When using, do not eat or drink.

Wash hands and clothes after handling, transporting or using.

#### **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.