

MATERIAL SAFETY DATA SHEET

1. Chemical Product Identification

Product Name: Tridemorph Molecular Formula: C₁₉H₃₉NO Molecular Weight: 297.55 Structural Formula:



major component – 2,6-dimethyl-4-tridecylmorpholine Chemical Name: 2, 6-dimethyl-4-tridecylmorpholine CAS No.: 81412-43-3 Supplier: HANZHOU TIANLONG BIOTECHNOLOGY CO., LTD Address: Room 1906, Fengqi Times Tower, No.338 Fengqi East Road, Hangzhou, China, 310020 Tel: 0086-571-87214516 Fax: 0086-571-87079476

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Tridemorph	81412-43-3	98.0
Other ingredients		2.0

3. Hazards Identification

Physical/chemical hazards: Not applicable. Human health hazards: Harmful if swallowed. Irritating to skin and eyes.

4. First Aid Measures

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Warm water must be used. Get medical attention.

5. Fire-Fighting Measures

Extinguishing Media: Dry chemical powder, foam, sandy soil Special fire-fighting procedures: Fire fighters should wear positive pressure self-contained breathing apparatus and full turnout gear

6. Accidental Release Measures

Personal precautions: Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist before handling this product.

Environmental Precautions and Clean-up Methods: Absorb with an inert material and put the spilled material in an appropriate waste disposal.

7. Handling and Storage

Handling: Do not ingest. Do not breathe gas/fumes/ vapor/spray. Avoid contact with skin. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

8. Exposure Controls/Personal Protection

Engineering measures: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Hygiene measures: Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Respiratory system: Wear appropriate respirator when ventilation is inadequate.

Skin and body: Lab coat. Hands: Gloves Eyes: Safety glasses.

9. Physical and Chemical Properties

Appearance: Yellow liquid Boiling Point: 134°C@66.7Pa Solubility in water: 1.1mg/L(pH7;20°C), freely soluble in other organic solvents Vapor Pressure: 12mPa@20°C Relative density :0.86 Partition coefficient : KowlogP=4.20(pH7;22 °C) PH: 6.5 Flash point : 142℃

10. Stability and Reactivity

Stability: The product is stable. Materials to avoid: Slightly reactive to reactive with oxidizing agents.

11. Toxicological Information

Eye Irritation: no irritation Skin Irritation: no irritation Acute oral LD50(rat) ; 480mg/kg Dermal LD50(rat): >4000mg/kg Inhalation LC50(rat, 4h) : 4.5mg/L

12. Ecological Information

96 hour LC50, Carp- 3.4mg/L Oral LD50, mallard ->2000mg/Kg Oral LD50, quail - 1388mg/kg 48 hour LC50 daphnia :1.3mg/L 24hour LD50 bee : >200 g/bee

13. Disposal Considerations

Dispose in accordance with applicable laws and regulations.

14. Transport Information

Class: 9 UN No: 3082 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 spray

When using do not eat, drink or smoke

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

In case of accident or if you feel unwell, seek medical advice immediately (Show the label where possible)

Use appropriate containment to avoid environmental contamination

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.