

# 1. Chemical Product and company Identification

Product Name: Propamocarb Molecular Formula:  $C_9H_{21}CIN_2O_2$ Molecular Weight: 224.73 Structural Formula:  $(CH_3)_2N (CH_2)_3NHCO_2(CH_2)_2CH_3$ 

Chemical Name: propyl 3-(dimethylamino)propylcarbamate CAS No.: 24579–73–5 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 %
Propamocarb	24579 – 73 – 5	97.0
Others		3.0

## 3. Hazards Identification

More important danger for the man: none Dangers for the environment: toxic to aquatic animals Physical-chemical dangers: corrosive to metal and react with acid materials

## 4. First Aid Measures

Skin: Wash with soap and water.

Eyes: Immediately flush eyes with plenty of water. Get medical attention if irritation persists.

Inhalation: Remove person to fresh air. Support respiration if necessary. Seek medical advice.

Ingestion: To urge to spit, keep quiet, and immediately sent to hospital for treatment.

# 5. Fire-Fighting Measures

Extinguishing media: To be used: Foam, carbon dioxide, dry powder, sand, earth, or water spray. Don't use: not applicable Particular risk: not applicable

Measures of personal protection: Wear positive pressure self-contained breathing apparatus.

Environmental cautions

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

## 6. Accidental Release Measures

Personal cautions: do not enter the accidental place without authorizing, must wear protective clothing when disposed the product.

Cleaning methods

EX: Carefully sweep up while avoiding the formation of a dust cloud. Place in suitable container and seal for disposal. Area can be washed with water to remove last traces of material, by keeping out of watercourses of sewers. Inform authorities immediately if contamination occurs.

Environmental cautions

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

## 7. Handling and Storage

Handling: May be harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing.

Storage: Store in the original container and keep tightly closed. Store in a cool, dry place. Do not contaminate water, food or feed by storage or handling.

Technical protective measures: Users should:

- 1. Wash before eating, drinking, using tobacco, or using the toilet.
- 2. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water.
- 3. Keep and wash PPE separately from other laundry.
- 4. Do not apply this product in a way that will contact workers or other persons, either directly or through drift.
- 5. Only protected handlers may be in the area during application.
- 6. Do not apply this product through any type of irrigation system.

Fire and explosion protection: wear protective clothing

## 8. Exposure Controls / Personal Protection

Personal protective equipment: Long-sleeved shirts and long pants, shoes plus socks.

Respiratory protection: Ensure good ventilation. If not adequate, use a suitable

respirator for added protection. Protective gloves: waterproof gloves Eye protection: Safety glasses; chemical goggles. Industrial hygiene: Not applicable

### 9. Physical and Chemical Properties

Appearance: Colorless crystals and very hygroscopic. Melting point:  $45-55^{\circ}$ C Density: 1.085 g/mL Bulk density: not applicable Vapor pressure :  $18mPa@25^{\circ}$ C Water solubility: >500g/LOther solubilities: in methyl alchol>500g/L, in dichloroetane>430g/L, in thylacetate: 23g/L, in toluene<100g/L, in hexane><100g/L. PH value: 10 - 12Flash point: Not flammable Ignition temperature: not applicable

#### 10. Stability And Reactivity

Conditions to avoid: fire

Products to avoid: acidity material

Thermal decomposition: yes

Hazardous decomposition products: When heated to the point of decomposition, propamocarb hydrochloride may give off toxic fumes of oxides of carbon and nitrogen.

Hazardous reaction: Will not occur.

## 11. Toxicological Information

Contact with the skin(rabbit): non-irritant. Contact with the eyes(rabbit): non-irritant Acute oral LD50 : rat 2000-2900mg/kg

Mouse 2650-2800mg/kg

Dog 1450mg/kg

## Dermal LD50 >3000mg/kg

Inhalation: May be harmful if inhaled. Effects are probably slight and non-specific for inhalation incidental to routine handling and use.

Ingestion: May be harmful if swallowed. Effects are probably slight and non-specific if minute amount was accidentally ingested.

Sharp toxicity: none

Effects for chronic oxhibition

## 12. Ecological Information

Acute oral LD50: pheasant 3050mg/kg Mallard >6290mg/kg LC50(96h,mg/L) : carp 155 Rainbow trout 275 Bluegill 275 Daphnia LC50(48h) 280mg/L Bee LD50>0.1mg/bee Earthworm LC50(14d) : >1000mg/kg soil

### **13. Disposal Considerations**

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 it specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt. Dispose of waste product through a reputable waste contractor.

#### 14. Transport Information

Class: 9 UN No.: 3077 Packing 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.