



Hangzhou Tianlong Biotechnology Co., Ltd.

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

MATERIAL SAFETY DATA SHEET

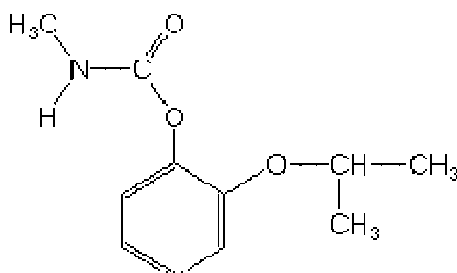
1. Chemical Product and company Identification

Product Name: Propoxur

Molecular Formula: C₁₁H₁₅NO₃

Molecular Weight: 209.25

Structural Formula:



Chemical Name: 2-isopropoxyphenyl methylcarbamate

CAS No.: 114-26-1

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 %
Propoxur	114-26-1	97.0
Other ingredients		3.0

3. Hazards Identification

Health hazards: This product is moderately toxic pesticides. Red blood cell cholinesterase activity inhibition. Can cause nausea, vomiting, blurred vision, sweating, rapid pulse, blood pressure. Also can cause contact dermatitis.

Environmental hazards: Harmful to environment.

4. First Aid Measures

If Swallowed: Call a physician immediately. Do not induce vomiting.

If in Eyes: Flush eyes with plenty of water. Call a physician if irritation persists.

If on Skin: Remove contaminated clothing and immediately wash skin with soap and water.

If Inhaled: Remove victim to fresh air and apply respiration if necessary.

Note to Physician: If symptoms of Cholinesterase Inhibition are present, Atropine sulfate is antidotal.

5. Fire-Fighting Measures

Fire Fighting Procedures: Self contained air supply suggested. Keep containers cool to avoid bursting.

Unusual Fire and Explosion Hazards: Exposure to temperatures above 130 deg. F may cause bursting.

Extinguishing Media: CO₂, dry chemical, or foam

6. Accidental Release Measures

If container is ruptured or begins to leak, place in a well-ventilated area free of sparks and ignition sources. Pesticide that cannot be used according to label instructions must be disposed of according to all applicable Local, procedures.

7. Handling And Storage

Storage: Store in a cool, well-ventilated place. Away from fire, heat source.

To prevent direct sunlight. Packing seal. With the oxidizing agent, alkali, edible chemicals stored separately, avoid mixing reservoir. Equipped with the appropriate variety and quantity of fire equipment. Storage areas should be equipped with appropriate materials asylum leakage.

8. Exposure Controls/Personal Protection

Personal Protective Equipment:

To avoid eye and skin contact, wearing the following personal protective clothing and equipment is recommended:

Eyes: Safety goggles or face shield

Clothing: Cotton overalls buttoned to the neck and wrist and a washable hat.

Gloves: Elbow length PVC gloves.

Respiratory: Respiratory protection is not normally required. If airborne concentrations are likely to exceed the exposure standard above, an AS/NZS 1715/1716 approved respirator should be worn.

Other: After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use wash gloves, goggles or face shield and contaminated clothing.

9. Physical and Chemical Properties

Appearance: White crystals.

Water Solubility: 2000 mg/L @ 20°C

Solubility in Other Solvents: Soluble in most polar organic solvents, e.g, acetone, methanol, cyclohexanone, chloroform, and toluene

Melting Point: 84-87°C

Vapor Pressure: 300 mPa @ 120°C

Partition Coefficient: 0.14

Adsorption Coefficient: 30

10. Stability and Reactivity

Conditions to Avoid: Open flames and very hot surfaces can cause thermal decomposition.

Incompatible Materials: Strong alkalines, acids, and oxidizers.

Hazardous Decomposition By-products Carbon dioxide, carbon monoxide, methyl isocyanate, and methyl amine.

Hazardous Polymerization Conditions: None known.

11. Toxicological Information

Acute oral LD50 : male rat 90-128mg/kg

Female rat 104mg/kg

Male mouse 100-109mg/kg

Acute dermal LD50 : 800-1000mg/kg

Any further information on the toxicology of the material can be obtained by contacting the manufacturer.

Mutagenic effects: Propoxur did not cause mutations in six different types of bacteria. The evidence indicates that propoxur is not mutagenic.

Carcinogenic effects: No carcinogenic effects have been reported for propoxur.

Organ toxicity: As determined in animal tests and data from human autopsies in poisoned individuals, the nervous system, and liver are the organs principally affected by propoxur.

12. Ecological Information

Effects on birds: Propoxur is very highly to highly toxic to many bird species, but its toxicity varies by the species. The reported LD50 is 25.9 mg/kg in bobwhite quail. Other reported oral LD50 values (for a 97 to 98% technical grade propoxur product), are 4 mg/kg in mourning doves and house finches, 6 mg/kg in Canada geese, 10.5 mg/kg in mallards, 20 mg/kg in pheasants, 26 mg/kg and 28 mg/kg in California and Japanese quail respectively and 120 mg/kg in grouse. The 5-day dietary LC50 for Japanese quail is greater than 5000 ppm. Acute symptoms of propoxur poisoning in birds include eye tearing, salivation, muscle incoordination, diarrhea, and trembling. Depending on the type of bird, poisoning signs can appear within 5 minutes

of exposure, with deaths occurring between 5 and 45 minutes, or overnight. Symptoms in survivors disappeared from 90 minutes to several days after treatment.

Effects on aquatic organisms: Propoxur is moderately to slightly toxic to fish and other aquatic species. The reported 96-hour LC50 values are 3.7 mg/L in rainbow trout, and 6.6 mg/L in bluegill sunfish. The oral LD50 for propoxur in bullfrogs is 595 mg/kg. The compound is not expected to accumulate significantly in aquatic organisms. The calculated accumulation factor for propoxur is nine times the ambient water concentration.

Effects on other organisms: Propoxur is highly toxic to honeybees. The oral LD50 for propoxur in mule deer is 100 to 350 mg/kg.

13. Disposal Considerations

Do not reuse empty container. This container may be recycled in the few but growing number of communities where (steel) aerosol can recycling is available. Before offering for recycling, empty the can by using the product according to the label. (Do not puncture!) If recycling is not available, wrap the container and discard in the trash. Any remaining or collected liquid from punctured cans should be disposed of in a safe manner at an approved facility in accordance with Local I regulations.

14. Transport Information

UN NO.: 2757
CLASS NO.6.1
Pack Group: III

15. Regulatory Information

Safety Phrase(s):

S2: Keep out of the reach of children.

S13: Keep away from food, drink and animal foodstuffs.

S23: Do not breathe vapour/mist.

S36/37: Wear suitable protective clothing and gloves.

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.