

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE AND THE SUPPLIER

Product name:	Cartap Hydrochloride 50% SP
Other name:	/
Recommended use of the chemical and restrictions on use	Insecticide
Supplier name:	Shandong Weifang Rainbow Chemical Co., Ltd.
Supplier address:	Binhai Economic Development Area, Weifang, Shandong, China
Supplier phone:	+86-531-88875222, 88875231
Supplier fax:	+86-531-88875232, 88875224
Emergency phone number:	+86-531-88875222

2. HAZARDS IDENTIFICATION

Hazard statement(s):

Toxic if swallowed. Maybe harmful if inhaled or absorbed through skin.

Toxic to aquatic life.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration
Flumioxazin	15263-52-2	50%
Other ingredients		Up to 100%

4. FIRST AID MEASURES

Description of necessary first aid measures

Inhalation: Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

Skin contact: Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

Eye contact: Rinse with pure water for at least 15 minutes. Consult a doctor.

Ingestion: Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

Note to physician

Cartap Hydrochloride is a cholinesterase inhibitor. Blood cholinesterase measurements may be useful to monitor exposure but treatment related decisions may be needed before the results of the blood tests are available. If signs of cholinesterase inhibition appear, atropine is antidotal. 2-PAM may also be used in conjunction with atropine but should not be used alone.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media:

Extinguish small fires with carbon dioxide, dry powder, or alcohol-resistant foam. Water spray can be used for cooling of unaffected stock, but avoid high-pressure hose, which may spread the product from the broken containers. This will increase the contamination hazard.

Special hazards arising from the chemical:

Fire may produce irritating or poisonous vapors, mists or other products of combustion.

Special protective actions for fire-fighters:

Wear self-contained breathing apparatus for firefighting if necessary.

Fight fire from maximum distance. Remove container from fire area if possible. Contain fire control agents for

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later disposal. Use a recommended extinguishing agent for the type of surrounding fire. Water can be used to cool unaffected containers. Avoid inhaling hazardous vapors. Keep upwind.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Methods and materials for containment and cleaning up:

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

Precautions for safe handling:

Handling in a well-ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

Conditions for safe storage, including any incompatibilities:

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls:

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

Personal protective equipment:

Respiratory protection: If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

Eye protection: Wear tightly fitting safety goggles with side-shields or face shield.

Skin and body protection: Wear protective clothing including chemical impermeable gloves, long sleeved shirt, long pants, shoes and socks.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color etc.):	White powder
Odor	Slight odor
Flammability (solid, gas):	Not flammable
Melting point	179°C
Solubility(ies):	Soluble in water.
pH	4.45

10. STABILITY AND REACTIVITY

Chemical stability:

Stable under normal conditions.

Incompatible materials:

Highly reactive with oxidizing agents. Slightly reactive with alkalis.

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Hazardous decomposition products:

These products are carbon oxides, nitrogen oxides, sulfur oxides, halogenated compounds, hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

Numerical measures of toxicity:

Acute oral LD50:	200 mg/kg in the rat
Acute dermal LD50:	>2000 mg/kg in the rabbit
Acute inhalation LC50:	>5.21 mg/L in the rat
Skin irritation:	Not irritant to rabbits
Eye irritation:	Not irritant to rabbits
Skin sensitization:	Not cause skin sensitization in guinea pigs

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Based on technical information

Fish - Acute 96 hour LC50:	1.6 mg/L in the Cyprinidae
Aquatic invertebrates - Acute 48 hour EC50:	0.01 mg/L in the Daphnia magna
Honeybee - Acute LD ₅₀	>1.0 µg bee ⁻¹

13. DISPOSAL CONSIDERATIONS

Safe handling of waste residues and disposal methods:

Product:

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging:

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill.

14. TRANSPORT INFORMATION

UN number:

3077

UN proper shipping name:

Environmentally hazardous solid substance, n.o.s.

Transport hazard class(es):

9

Packing group, if applicable:

III

15. REGULATORY INFORMATION

The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given.

Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and /or local laws.

16. OTHER INFORMATION

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The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.