

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name : Dinotefuran 98% TC
Chemical Name : hydroxy-[[N'-methyl-N-(oxolan-3-ylmethyl)carbamiidoyl]amino]-oxoazanium
Type : Insecticide
Molecular formula : $C_7H_{15}N_4O_3^+$

2. Composition/Information on ingredients

Chemical Name	CAS#	Percent or content(w/w)
Dinotefuran	165252-70-0	98.0%
Inerts	-	2.0%

3. Health Hazards Identification

Signal Word: Warning



H330 - Fatal if inhaled

H400 - Very toxic to aquatic life.

H410 - Very toxic to aquatic life with long lasting effects.

4. First Aid Measures

Inhalation: Move subject to fresh air. If breathing is difficult, administer oxygen; if breathing stops administer artificial respiration. Get medical attention immediately.

Eye contact: Flush eyes with water. Consults a physician if irritation persists.

Skin contact: Wash affected skin areas thoroughly with soap and water. Consult a physician if irritation persists. Remove and wash contaminated clothing thoroughly. Do not take clothing home to be laundered.

Ingestion: If swallowed, give 2-3 glasses of water to drink. See a physician. Never give anything by mouth or induce vomiting to an unconscious person.

Note to physician: No specific antidote is available. If poisoning is suspected apply symptomatic therapy

5. Fire Fighting Measures

Flash point : >100⁰C (Non flammable)

Extinguishing media : Dry chemical, foam, and carbon dioxide

Special exposure hazards : Wear full protective equipment and breathing protection.
Avoid creating significant airborne dust.

Unusual fire and explosion hazards: Toxic gases including carbon monoxide, carbon dioxide, oxides of nitrogen, and smoke.

6. Accidental Release Measures

Personal protection: Appropriate protective equipment must be worn when handling as pill of this material. See SECTION 8, Exposure Controls/Personal Protection, for recommendations. If exposed to material during cleanup operation, see SECTION 4, First Aid Measures, for actions to follow. Remove all contaminated clothing promptly. Wash all exposed skin areas with soap and water immediately after exposure. Thoroughly launder clothing before reuse. Do not take clothing home to be laundered.

Procedures: Keep spectators away. Avoid breathing vapor. Transfer spilled material to suitable containers for recovery or disposal.

Caution: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. Handling and Storage

Handling product: KEEP OUT OF REACH OF CHILDREN and animals, and away from open flames or other sources of ignition. Avoid contact with eyes, skin or clothing and avoid breathing vapour or spray mist. Wear full protective clothing and equipment (see Section 8). After work, rinse gloves and remove protective equipment, and wash hands before eating, smoking, drinking, or using the toilet. Clean up spilled product immediately, and clean clothes and equipment after use. Wash contaminated clothing before re-use. Keep product, spray, wash or rinse water, and contaminated materials out of water, and away from access by people, animals and bees. Keep containers closed when not in use. Do not re-enter treated areas until residues have dried.

Storage: Store in original containers in a well-ventilated, cool, dry, secure area, inaccessible to children and domestic animals. Store away from heat or flame. Keep separate from other products. Clean up spilled product immediately.

8. Exposure Controls/Personal Protection

Respiratory protection: Wear appropriate protective respirator whenever work place conditions warrant a respirator's use.

Eye protection: Use chemical splash goggles. Eye protection worn must be compatible with respiratory protection system employed.

Hand protection: Chemical-resistant gloves should be worn whenever this material is handled. Rinse and remove gloves immediately after use. Wash hands with soap and water.

Other protection: Use chemically resistant apron or other impervious clothing to avoid prolonged or repeated skin contact. laminate, butyl rubber, nitrile, neoprene rubber, polyvinyl chloride (PVC).

9. Physical and Chemical Properties

Physical state	:	Crystalline Powder
Color	:	White
Molecular Weight	:	202.2
Melting Point	:	107.5 °C
Bulk Density	:	1.4 (20-25°C)

10. Stability and Reactivity

Stability: Stable under normal storage conditions.

Conditions to avoid: High heat, open flames

Incompatibility with other materials: Strong caustic solutions, strong acid solutions, oxidizing agents

Hazard decomposition: None known

Hazardous polymerization: Will not occur

11. Toxicological Information

Acute toxicity

Rat LD50 oral, Rats	:	2800 mg/kg bw
Rat LD50 dermal, Rats:	:	>2000 mg/kg bw
Inhalation LC50, Rats :	:	>4.09 mg/l (4h)
Skin irritation	:	Slight irritant to skin of rabbits
Eye irritation	:	Slight irritant to eye of rabbits
Skin sensitization	:	Non-Sensitizer to skin of Guinea pigs

12. Ecological Information

Birds Acute oral LD50 for Japanese quail >2000 mg/kg.

Fish LC50 (96 h) for rainbow trout >100 mg/l, bluegill sunfish >100 mg/l

Daphnia EC50 (48 h) >1000 mg/l

Algae EC50 (72 h) for *Pseudokirchneriella subcapitata* >100 mg/l.

Bees Oral 0.023 µg/bee ; Contact 0.047 µg/bee

13. Disposal Considerations

For disposal, incinerate this material at a facility that complied with local, state and country regulations.

14. Transport Information

Name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
UN No.	:	3077
UN Hazard Class	:	9 [EHSM]
UN Packing Group	:	III
Marine Pollutant status	:	YES

15. Regulatory Information

Classification	:	T2
Safety phrase:		
S2	:	Keep out of the reach of children.
S20/21	:	When using do not eat, drink or smoke.
S 24/25	:	Avoid contact with skin and eyes.
S36/37	:	Wear suitable protective clothing and gloves.
S46	:	If swallowed, seek medical advice immediately and show container or label.
S60	:	This material and its container must be disposed of as hazardous waste.
S61	:	Avoid release to the environment. Refer to special instructions/safety data sheets.

16. Other Information

The information herein is presented in good faith and believed to be accurate. However, no warranty, expressed 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 and Local laws and regulations.