

MATERIAL SAFETY AND DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS:
RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS
11571 K-Tel Drive
Minnetonka, MN 55343

EMERGENCY TELEPHONE NUMBERS:
(800) 424-9300 (CHEMTREC, transportation and spills)

PRODUCT NAME : TRANSTECT™ 70 WSP INSECTICIDE
CHEMICAL NAME : N-methyl-N'-nitro-N''[(tetrahydro-3-furanyl)methyl]guanidine
CHEMICAL FAMILY : Neonicotinoid Insecticide
PRODUCT CODE : EPA Reg. No. 59639-135-74779

SECTION 2 - COMPOSITION, INFORMATION OF INGREDIENTS

COMPONENT	PERCENTAGE	CAS NUMBER	OSHA PEL	ACIGH TLV
Dinotefuran*	70	165252-70-0	None	None
Particulates Not Otherwise Classified **	30	No CAS#	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	10 mg/m ³ TWA (inhalable particulate); 3 mg/m ³ TWA (respirable fraction)

* Active Ingredient

** Other ingredients, which are maintained as trade secrets, are any substances other than an active ingredient contained in this product. Some of these may be hazardous, but their identity is withheld because they are considered trade secrets. The hazards associated with the other ingredients are addressed in this document. Specific information on other ingredients for the management of exposures, spills, or safety assessments can be obtained by a treating physician or nurse by calling **1-800-892-0099** at any time.

SECTION 3 - HAZARDS IDENTIFICATION SUMMARY

(As defined by OSHA Hazard Communication Standard,)

HEALTH HAZARDS: Minor irritation to the eyes and skin. Not expected to cause skin allergic reactions. Mildly toxic when inhaled or ingested.

PHYSICAL HAZARDS: Powder material may form explosive dust-air mixture.

ENVIRONMENTAL HAZARDS:

SECTION 4 - FIRST AID MEASURES

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

IF ON SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

NOTE TO PHYSICIAN: No specific antidote available, treat symptomatically.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

SECTION 5 - FIRE FIGHTING MEASURES

FLASHPOINT (method): Not applicable.

FLAMMABLE LIMITS (LFL-UFL): Unknown.

FIRE AND EXPLOSION HAZARD: Can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion.

EXTINGUISHING MEDIA: Water fog, carbon dioxide, foam, dry chemical.

FIRE FIGHTING INSTRUCTIONS Products of combustion from fires involving this material may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse. Read the entire document.

This material is not expected to burn or explode in normal conditions, but will burn violently if involved in a fire. Dinotefuran becomes self-reactive in high temperatures. Exposure to heat may promote violent decomposition.

FIRE FIGHTING EQUIPMENT: Self-contained breathing apparatus with full facepiece.

HAZARDOUS COMBUSTION PRODUCTS: Normal combustion forms carbon dioxide, water vapor and may produce: Oxides of nitrogen.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Stop the source of the spill if safe to do so. Contain the spill to prevent further contamination of the soil, surface water, or ground water. For additional spill response information refer to the North American Emergency Response Guidebook.

FOR SPILLS ON LAND: CONTAINMENT: Remove all sources of ignition. Ventilate area of leak or spill. Clean-up personnel may require protection from inhalation of dust. Avoid runoff into storm sewers or other bodies of water.

CLEANUP: Clean up spill immediately in a manner that does not disperse dust into the air and place in a chemical waste container. Wash area with soap and water. Pick up wash liquid with additional absorbent and place in a chemical waste container.

FOR SPILLS IN WATER: CONTAINMENT: This material will disperse or dissolve in water. Stop the source of the release. Contain and isolate to prevent further release into soil, surface water and ground water.

CLEANUP: Clean up spill immediately. Absorb spill with inert material. Remove contaminated water for treatment or disposal.

SECTION 7 - HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN!

HANDLING: Keep away from all possible sources of ignition (sparks or flame). Avoid high temperatures exceeding 150°C. Keep container closed. Use only with adequate ventilation. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring the material. Use explosion-proof electrical equipment. Take precautionary measures against static discharges.

STORAGE: Keep pesticide in original container. Do not store or transport near food or feed. Do not contaminate food or feed. Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers. Store in a cool, dry place, out of direct sunlight.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS (8 HOUR TWA): (Refer to Section 2)

ENGINEERING CONTROLS: Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION - Safety goggles

CLOTHING - Long-sleeved shirt and long pants, Chemical-resistant footwear plus socks

GLOVES - Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber,

polyvinyl chloride (PVC), viton

RESPIRATOR – Not required when handled under normal conditions. When handling in enclosed areas with inadequate ventilation, use a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C)

Discard clothing and other absorbent materials that have been heavily contaminated with this product. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS:

1. Wash hands before eating, drinking, and chewing gum, using tobacco or using the toilet.
2. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
3. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION: Granule

ODOR: No data available

BULK DENSITY: 29.8 lb./cu. ft.

pH: 6.4

VAPOR PRESSURE: Not applicable

WATER SOLUBILITY: Soluble in water.

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable at normal ambient temperatures.

CONDITIONS TO AVOID:

INCOMPATIBILITY WITH OTHER MATERIALS: Strong oxidizers, heat and sources of ignition.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides, nitrogen oxides sulfur oxides, crystalline silica.

HAZARDOUS POLYMERIZATION:

EXPLODABILITY: Dusts at sufficient concentrations can form explosive mixtures with air.

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Oral LD ₅₀ (rat)	- > 5,000 mg/Kg
Dermal LD ₅₀ (rat)	- > 5,000mg/Kg
Inhalation LC ₅₀ (rat)	- > 2.34 mg/L
Eye Irritation (rabbit)	- Mild
Skin Irritation (rabbit)	- Slight
Sensitization (guinea pig)	- Non-sensitizer

CARCINOGEN STATUS:

OSHA	-	Not listed.
NTP	-	Not listed.
IARC	-	Not listed.

MUTAGENIC DATA: Dinotefuran technical does not present a genetic hazard.

ADDITIONAL DATA: No reproductive or teratogenic (birth defect) effects at normal exposure levels.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: Dinotefuran Technical is practically non-toxic to moderately toxic to avian species, and is practically nontoxic to fish and practically nontoxic-to-highly toxic to aquatic invertebrate species. Dinotefuran Technical is highly toxic to bees. Keep out of water bodies. Do not apply to or allow drift on blooming crops that bees may visit.

FISH TOXICITY: (Technical)

96 hour LC₅₀, Rainbow trout - > 100 mg/L

96 hour LC₅₀, Bluegill - > 100 mg/L

AVIAN TOXICITY: (Technical)
Oral LD₅₀, quail - > 2000 mg/Kg
Oral LD₅₀, Mallard duck - unknown

BEE TOXICITY:
Contact LD₅₀ – Highly toxic.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE: Pesticide wastes are toxic. Dispose of in accordance with applicable Federal, state and local laws and regulations.

CONTAINER: Completely empty container into processing equipment. Then dispose of empty container in sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

SECTION 14 - TRANSPORT INFORMATION

DOT SHIPPING DESCRIPTION:	Not regulated (all sizes)
DOT HAZARD CLASS:	N/A
UN NUMBER:	N/A
DOT PACKING GROUP:	N/A
DOT PRIMARY/SECONDARY LABEL:	N/A
DOT PRIMARY/SECONDARY PLACARD:	N/A
DOT EMERGENCY RESPONSE GUIDE #:	N/A

SECTION 15 - REGULATORY INFORMATION

CERCLA REPORTABLE QUANTITY:	- No components listed
SARA TITLE III STATUS:	
311/312 Hazard Categories	- Immediate Health Hazard
313 Toxic Chemicals	- None

SECTION 16 - OTHER INFORMATION

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