

MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS:

RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS
2239 Edgewood Ave. S.
Minneapolis, MN 55426

EMERGENCY TELEPHONE NUMBERS:

(800) 424-9300 (CHEMTREC, transportation and spills)

PRODUCT NAME : BACASTAT™

CHEMICAL NAME : 2-naphthacenecarboxamide, 4-(dimethylamino)-1, 4, 4a, 5, 5a, 6, 11, 12a-octahydro-3, 6, 10, 12 dioxo-monohydrochloride, 12a pentahydroxy-6-methyl-1, 11-dioxo-monohydrochloride

CHEMICAL FAMILY : Antibiotic

PRODUCT CODE : EPA Reg. No. 74779-2

USE : Control of bacterial diseases on ornamentals.

SECTION 2 - COMPOSITION, INFORMATION OF INGREDIENTS

COMPONENT	PERCENTAGE	CAS NUMBER	OSHA PEL**	ACIGH TLV**
Oxytetracycline Hydrochloride	18.3	2058-46-0	Not estab.	Not estab.
Inert Ingredient		Not Available	3mg/cu m Respirable Dust	3mg/cu m Respirable Dust
Inert Ingredient		Not Available	10 mg/cu m Total Dust 5 mg/cu m Respirable Dust	10 mg/cu m Total Dust 5 mg/cu m Respirable Dust

*Unidentified inert ingredients are proprietary and/or non-hazardous

**Permissible Exposure Limits (PEL) & Threshold Limit Value (TLV) are 8-hour time weighted average (TWA)

SECTION 3 - HAZARDS IDENTIFICATION SUMMARY

(As defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200)

IMMEDIATE CONCERNS: -Free flowing yellow powder.
-Thermal decomposition and burning may form toxic by-products.
-For large exposures or fires, wear protective equipment.

HEALTH HAZARDS: Effects from over exposure may result from either swallowing, inhaling or coming into contact with skin or eyes. Symptoms of oxytetracycline hydrochloride exposure include gastrointestinal irritation, nausea and vomiting. Exposure may cause allergic reaction and anaphylaxis to occur in sensitive individuals. Eye contact may cause moderate eye irritation. As with other antibiotics, it has the potential to change the micro flora of the intestine and allow overgrowth of non-susceptible organisms.

PHYSICAL HAZARDS: Excessive exposure to any dust may aggravate pre-existing respiratory conditions. May cause allergic reaction and anaphylaxis to occur in individuals with allergic history or pre-existing dermatitis.

SECTION 4 - FIRST AID MEASURES

IF SWALLOWED: Call Poison Control Center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a 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.

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

IF ON SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

NOTE TO PHYSICIAN: Treat symptomatically. There is no specific antidote. Emesis may be indicated in recent substantial ingestion unless the patient is or could rapidly become obtunded, comatose, or convulsing. Is most effective if initiated within 30 minutes. Plasma tetracycline levels are not clinically useful. No specific lab work (CBC, electrolyte, urinalysis) is needed unless otherwise indicated. Anaphylaxis may be managed with appropriate supportive measures including securing an adequate airway, epinephrine and diphenhydramine.

*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): Not Applicable.

FIRE AND EXPLOSION HAZARD: None known. As with all dry powders, it is advisable to ground material equipment in contact with dry material to dissipate the potential buildup of static electricity.

EXTINGUISHING MEDIA: In case of fire use water spray, dry chemical, foam, or CO2 extinguishing media.

FIRE FIGHTING INSTRUCTIONS: Wear full protective clothing and self-contained breathing apparatus. Evacuate non-essential personnel from the area to prevent exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated.

FIRE FIGHTING EQUIPMENT: Wear full protective clothing and self-contained breathing apparatus with full facepiece.

HAZARDOUS COMBUSTION PRODUCTS: May emit carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen chloride gas.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Clean up spills immediately, observing precautions in Section 8 of this document. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Dispose of or treat all spill residues according to applicable local, state, and federal regulations (Section 13). Use suitable protective equipment (Section 8). Follow fire prevention procedures (Section 5).

SOLID SPILL: If emergency response personnel are unavailable or unwarranted, clean up a solid spill by carefully sweeping up the material (avoid creating dust) and using a proper tool to place it into an appropriate disposal container.

LIQUID SPILL: Cover the spill with an absorbing material and follow the same procedure used for a solid spill. Scrub the area with a hard water detergent. Pick up liquid with absorbent material and follow the same procedure used for a solid spill.

This material should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water.

SECTION 7 - HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN!

ENGINEERING CONTROLS: Local exhaust ventilation sufficient to control dust is recommended.

HANDLING: Avoid generating dust. Use respiratory protection in the absence of adequate ventilation controls (Section 8). Wash skin thoroughly after shift exposure. Keep containers closed when not in use. Clean up spills promptly (Section 6).

STORAGE: Store in a cool, dry place and protect from moisture. Avoid contact with skin or eyes. Do not breathe dust or spray. Do not ingest. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Do not store food, beverages or tobacco products in the storage area. Protect containers from damage. Use entire contents of packages, do not store open packages. Keep out of reach of children and domestic animals.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS (8 HOUR TWA): (Refer to Section 3)

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 required. Use chemical splash goggles if potential exists for direct exposure to dust, splashes, or sprays. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

CLOTHING – Wear chemical resistant (e.g. nitrile or butyl) gloves, coveralls, socks, and chemical resistant footwear. For overhead exposure, wear chemical resistant headgear.

GLOVES - Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyvinyl chloride (PVC), viton.

RESPIRATOR – Use MSHA/NIOSH approved dust/mist respirator with any R, P, or HE filter. Do not breathe dust or spray.

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, chewing gum, using tobacco or using the toilet.
2. Remove clothing immediately if this product 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: Free flowing yellow powder.

ODOR: Odorless to faint odor.

BULK DENSITY: 42.7 lbs/cu ft (loose), 63.7 lbs/cu ft (compacted)

pH: 2.5-4.0

VAPOR PRESSURE: Not available.

WATER SOLUBILITY: Oxytetracycline hydrochloride is soluble in water.

MOLECULAR WEIGHT: 496.9 (Oxytetracycline hydrochloride)

VOLATILE COMPONENTS: (%w/w): <8% (water)

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable, however may decompose if heated.

STORAGE CONDITIONS: Hygroscopic, protect from moisture. Sensitive to air, light, heat, and bases so protect from exposure. Keep container sealed and avoid damage.

INCOMPATIBILITY WITH OTHER MATERIALS: Decomposed by strong acids and alkalis.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

HAZARDOUS POLYMERIZATION: Should not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Oxytetracycline

ACUTE TOXICITY:

Oral LD ₅₀ (mouse)	- 6,646 mg/kg, Practically Non-Toxic
Dermal LD ₅₀ (rabbit)	- >2,000 mg/kg, Slightly Toxic
Eye Irritation (rabbit)	- Moderately Toxic
Skin Irritation (rabbit)	- Non-Irritating
Sensitization (guinea pig)	- Sensitizing

MUTAGENIC DATA: None observed.

CHRONIC/SUB-CHRONIC TOXICITY: Gastrointestinal irritation with nausea, epigastric pain and burning, vomiting, abdominal pain, transitory yellowish-brown discoloration of the tongue, anorexia and diarrhea have been reported following oral administration. Blood disorders (delay in coagulation) have been reported. Possible hypersensitization and super-infections due to overgrowth of organisms not affected by the antibiotic agent. Three types of renal disease is associated with over exposure: Acute Non-Oliguric Renal Failure (individuals with pre-existing pancreatitis or fatty liver), Uremia (individuals with pre-existing impaired renal function), and Reversible Nephrotoxicity (due to out-dated or degraded tetracyclines).

CARCINOGENIC POTENTIAL: Not classifiable based on it IARC, ACGIH, OSHA, NTP, or EPA.

ADDITIONAL DATA: Possible risk of congenital malformation in the fetus.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: Oxytetracycline is unstable to light and heat, it should not accumulate in the soil. This product is a pesticide. Avoid contact of spilled materials and runoff with soil and surface waterways.

SECTION 13 - DISPOSAL CONSIDERATIONS

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

CONTAINER: Do not reuse product container. Dispose of product containers, waste containers, and residues according to local, state and federal health and environmental regulations.

SECTION 14 - TRANSPORT INFORMATION

DOT SHIPPING DESCRIPTION: Not regulated by DOT
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

TSCA CLASSIFICATION: - Exempt. Oxytetracycline is a non-hazardous, non-restricted substance. It is listed in the TSCA inventory but is not regulated. Subject to FIFRA.
CERCLA REPORTABLE QUANTITY: - None
SARA TITLE III STATUS:
 311/312 Hazard Categories - Acute Health Hazard/Chronic Health Hazard
 313 Toxic Chemicals - Not applicable

SECTION 16 - OTHER INFORMATION

NFPA Hazard Ratings: Health 1, Flammability 0, Instability 0 (0-Minimal, 1-Slight, 2-Moderate, 3-Serious, 4-Extreme)

HMIS Hazard Ratings: Health N/A, Flammability N/A, Reactivity N/A (0-Minimal, 1-Slight, 2-Moderate, 3-Serious, 4-Extreme)

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