

MATERIAL SAFETY DATA SHEET



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CAS NO. (a.i.): 11141-17-6
MSDS Rev. Date: April 1996

TRANSPORTATION EMERGENCY
CALL CHEMTEL: (800) 255-3924 24 hrs in USA
(813) 979-0626 24 hrs outside USA

NON-TRANSPORTATION
OLYMPIC EMERGENCY PHONE:(800) 356-4647
OLYMPIC INFORMATION PHONE:(800) 659-6745

PRODUCT NAME: AZATIN® XL BIOLOGICAL INSECTICIDE

EPA Registration Number 70051-27-59807

I. CHEMICAL PRODUCT IDENTIFICATION

PRODUCT DESIGNATION: . . .Formulated neem seed extract containing 3% azadirachtin.
ACTIVE INGREDIENT (a.i.): . . .Azadirachtin
CHEMICAL FAMILY:Tetranortriterpenoid
CAS No. (a.i.):11141-17-6
Molecular weight. (a.i.):720

II. COMPOSITION (Hazardous Materials over 1%: Carcinogens over 0.1%)

This product contains approx. 4.7 mass % naphthalene (CAS no. 91-20-3) and 1.8 mass % n-butanol (CAS no. 71-36-3).

III. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Causes eye irritation. Can cause skin irritation. May cause respiratory irritation, especially at temperatures over 90°F. Toxic to fish. Dark, free-flowing liquid with odor of garlic or solvent.

Eyes:Causes eye irritation. Do not get in eyes.
Skin:May cause irritation. The dermal LD50 for rabbits is over 2,000 mg/kg.
Ingestion:May be harmful if swallowed in large amounts. The oral LD50 in rats is 4,242 mg/kg.
Inhalation:Not likely to be hazardous, except at high temperatures (over 90°F). Acute inhalation LC50 (rats) is > 2.18 mg/kg.

IV. FIRST AID MEASURES

Eyes:Immediately flush eyes with plenty of water. Get medical attention if irritation persists.
Skin:Wash with soap and water. Get medical attention if irritation develops.
Inhalation:No specific treatment is necessary since the material is not likely to be hazardous by inhalation. If exposed to excess levels of fumes or spray mist, remove to fresh air, and get medical attention if symptoms develop.
Ingestion:Swallowing less than 1 ounce should not cause significant harm. For larger amounts, do not induce vomiting, but drink 1 or 2 glasses of water or milk and seek medical attention.

V. FIRE FIGHTING MEASURES

Will burn if involved in a fire. The flash point is > 133°F via the TAG Closed Cup method. Hazardous combustion products: Carbon monoxide and carbon dioxide.

V. FIRE FIGHTING MEASURES (continued)

Extinguishing media:CO₂, Halon, dry chemicals.
Fire fighting instructions:Water may be used to cool fire-exposed containers, to protect personnel and to disperse vapors. Run-off water may be hazardous to fish. Fire fighters should wear normal protective equipment (full bunker gear) and positive-pressure self-contained breathing apparatus.

VI. ACCIDENTAL RELEASE MEASURES

This material is a water pollutant and should be prevented from entering sewers and drainage systems and bodies of water.
Clean up:Absorb spills with inert material (sand, saw dust, earth, etc.) then place in a chemical waste container. (See Exposure Controls/Personal Protection Section).

VII. HANDLING AND STORAGE

Handling:Avoid contact with eyes. Keep container closed, use only in well ventilated area. Wash thoroughly after handling. Avoid prolonged breathing of vapors or spray mist.
Storage:Temperature min/max = -20°F/100°F.
Special sensitivity:Heat, light, moisture.

VIII. EXPOSURE CONTROL/PERSONAL PROTECTION (PPE)

Eye Protection Requirement:Safety glasses, splash goggles or face shield. Contacts should not be worn.
Skin Protection:Chemical resistant gloves such as barrier laminate, Viton, butyl rubber, nitrile rubber, or neoprene rubber (≥14mil). Coveralls, long sleeved shirt, shoes plus socks.

IX. CHEMICAL AND PHYSICAL PROPERTIES

Boiling point:No data
Vapor pressure:>2mm Hg @ 25°C
Vapor density:No data
Sp. gravity:1.066 (H₂O = 1)
Evaporation rate:No data
Freezing point:No data
pH:4.69
Coef. of Oct/water:12.3
Odor threshold:No data
Odor:Garlic or solvent
Appearance:Dark liquid

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X. STABILITY AND REACTIVITY

Chemical stability:(CONDITIONS TO AVOID) Keep away from open flames. Not unstable.
Incompatibility:Not dangerously incompatible.
Hazardous decomposition products:None
Hazardous polymerization:Will not occur.

XI. TOXICOLOGICAL INFORMATION

Eye:This material is irritating to the eyes.
Skin effects:This material can be an irritation to the skin, especially at ambient temperatures over 90°F.
Acute oral effects:Single dose oral toxicity is practically non toxic; the LD50 in rats is 4,241 mg/kg.

XI. TOXICOLOGICAL INFORMATION (continued)

Acute inhalation:The 4-hr. LC50 in rats was >2.18 mg/kg.
Subchronic:Rats dosed with 600 mg/kg per day for 90 days showed no overt adverse effects on target organs.
Chronic/Carcinogenicity:No data
Teratogenicity:No data
Reproductivity:No data
Mutagenicity:Ames test negative with or without metabolic activation. Negative in the UDS and Mouse Lymphoma studies.
Immunotoxicity:Not immunotoxic.

XII. ECOLOGICAL INFORMATION

Not expected to kill fish at recommended rates. Will cause significant fish kill if large concentrations reach waterways. Breaks down rapidly (in 100 hrs.) in water or light, and will not cause long-term effects. No significant effects on other wild life.

Chemical fate information:

Octanol/water partition coefficient:12.3 Partitioning from water to oil is relatively high.
Potential for mobility in soil is very low.
Accumulation in the environment is not expected. Biodegradation is expected in a waste water treatment plant.

XIII. DISPOSAL CONSIDERATIONS

Waste disposal method - Waste must be disposed of in accordance with federal, state and local environmental control regulations. Empty containers should be triple rinsed, and then can be placed in the local land fill or incinerated.

XIV. TRANSPORTATION INFORMATION

Domestic:Not regulated by DOT.
International:No UN or NA number has been assigned. Not regulated by IATA, ICAO, ICHO, T.C., ADR or RID.

XV. REGULATORY INFORMATION

US Federal Regs.:Registered under FIFRA (Reg. No. 62552-10-59807)
OSHA:Not hazardous by definition of Hazardous Communications. Standard (29 CFR 1910.11200)
CERCLA:SARA Hazard Category: This product does not meet any of the hazard categories promulgated under Sec. 311 and 313 of the Superfund Amendment or Re-authorization Act of 1986 (SARA Title III).
International Regs.:Canadian Environmental Protection Agency (CEPA): Not registered.
State Regs.:There are no known additional requirements necessary for compliance with state Right-to-Know regulation.
Volatile Organic Compounds (VOCs):Contains no VOCs.

XVI. OTHER INFORMATION

The information herein is given in good faith, but no warranty, expressed or implied, is made.

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