

Product Name: AZATIN XL® /AZATIN XL® PLUS
Emergency Information: Chem Tel (800) 255-3924
Outside North America Call Collect (813) 248-0585

MATERIAL SAFETY DATA SHEET

Certis USA
9145 Guilford Road, Suite 175
Columbia, MD 21046

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

PRODUCT NAME.....Azatin XL® Plus
PRODUCT CODE.....70051-27
CHEMICAL FAMILY.....Emulsifiable concentrate
CHEMICAL NAME.....biological insecticide
FORMULA.....C₃₅H₄₄O₁₆

EMERGENCY TELEPHONE NUMBERS:

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2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>COMPONENT</u>	<u>CAS #</u>	<u>WT.%</u>	<u>OSHA PEL</u>	<u>TLV's TWA</u>	<u>STEL</u>
Azadirachtin	11141-17-6	3.0	N/A	N/A	N/A
Aromatic hydrocarbon	64742-94-5	ca. 50	N/A	10 ppm	15 ppm

3. HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW

This product is a dark free flowing liquid with odor of garlic and solvent which is intended for use as a pesticide to control insects on agricultural crops. Can cause eye and skin irritation. May cause respiratory irritation, especially at temperatures over 90°F. Contains aromatic solvent; keep away from heat, sparks, or open flame.

Signal Word: CAUTION

Potential Health Effects

ROUTE(S) OF ENTRY..... : Eyes, skin, oral, inhalation

HUMAN EFFECTS AND

SYMPTOMS OF OVEREXPOSURE..... : None noted

ACUTE EYE CONTACT..... : Causes irritation, but does not injure eye tissue.

CHRONIC EYE CONTACT..... : Chronic exposure not likely from normal use.

ACUTE SKIN CONTACT..... : May cause mild, reversible skin irritation.

CHRONIC SKIN CONTACT..... : Prolonged contact may irritate and cause dermatitis. Skin contact may aggravate an existing condition, LD₅₀ > 2.0 g/kg.

ACUTE INGESTION..... : LD₅₀ > 4.242 g/kg.

CHRONIC INGESTION..... : Chronic exposure not likely from normal use.

ACUTE INHALATION..... : LC₅₀ > 2.18 mg/l.

CHRONIC INHALATION..... : Chronic exposure not likely from normal use.



CARCINOGENICITY

NTP : N/A
IARC : N/A
OSHA : N/A

MEDICAL CONDITIONS

AGGRAVATED BY EXPOSURE : None noted

4. FIRST AID MEASURES:

FIRST AID FOR EYES : Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Get medical attention.

FIRST AID FOR SKIN : Wash with soap and water. Remove contaminated clothing. Seek medical attention if irritation persists.

FIRST AID FOR INHALATION : If not breathing give artificial respiration, preferably mouth-to-mouth.

FIRST AID FOR INGESTION : Do not induce vomiting.

5. FIRE FIGHTING MEASURES:

NFPA HAZARD CLASSIFICATION : HEALTH HAZARD 2 FIRE HAZARD 2
..... REACTIVITY 0

EXTINGUISHING MEDIA : Dry chemical, carbon dioxide, alcohol or polymer foam.

UNUSUAL FIRE AND EXPLOSION HAZARDS : Flammable liquid. Keep away from heat, sparks, or open flame.

SPECIAL FIRE FIGHTING PROCEDURES : None known

6. ACCIDENTAL RELEASE MEASURES:

SPILL OR LEAK PROCEDURES : Wear SCBA, rubber boots, and heavy rubber glove. Shut off sources of ignition. Dike around spill, adsorb on sand or similar, and place in closed containers for disposal. Ventilate area and wash spill site after material pick-up. Avoid run-off into storm sewers and ditches, which lead to waterways.

7. HANDLING AND STORAGE:

STORAGE TEMPERATURE (MIN. / MAX.) : 50 / 95 °F 10 / 35 °C

SHELF LIFE : Stable for upwards of 1 year at ambient conditions.

SPECIAL SENSITIVITY : Avoid temperature extremes, direct sunlight.

HANDLING AND STORAGE PRECAUTIONS : Keep container tightly closed when not in use. Store in a cool, dry place away from feed and foodstuffs. Keep away from heat, sparks, or open flame. Wear goggles and or face shield.



8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

- EYE PROTECTION REQUIREMENTS..... : The use of safety goggles is recommended.
SKIN PROTECTION REQUIREMENTS..... : The use of chemical-resistant gloves is required.
RESPIRATORY / VENTILATION REQUIREMENTS : Use with adequate ventilation.
EXPOSURE LIMITS..... : N/A

9. PHYSICAL AND CHEMICAL PROPERTIES:

- PHYSICAL FORMLiquid
COLORDark brown
ODOR.....Garlic/aromatic
BOILING POINT RANGE.....182° C
MELT POINT / FREEZE POINT
FLASH POINT43° C
AUTO IGNITIONN/A
UPPER EXPLOSIVE LIMITS (UEL).....Not determined
LOWER EXPLOSIVE LIMITS (LEL).....Not determined
pH.....4.69
SOLUBILITY IN WATER.....Dispersible
SPECIFIC GRAVITY1.066 g mL⁻¹
BULK DENSITYN/A
% VOLATILE BY WEIGHT.....62
VAPOR PRESSURE at 20 ° C3.0 mm Hg
VAPOR DENSITY3.94

10. STABILITY AND REACTIVITY:

- STABILITY : Stable
HAZARDOUS POLYMERIZATION : Will not occur
INCOMPATIBILITIES..... : Acids, acid chlorides, oxidizing agents, reducing metals, alkali metals.
DECOMPOSITION PRODUCTS..... : None known
CONDITIONS TO AVOID : Keep away from heat, sparks, or open flame.

11. TOXICOLOGICAL INFORMATION:

Harmful if swallowed. Avoid contact with skin, eyes, or clothing. Avoid contamination of feed and foodstuffs. Avoid breathing spray mist. In case of contact, flush eyes with plenty of water. If on skin, wash with soap and water. If irritation persists, get medical attention.

12. ECOLOGICAL INFORMATION:

This product may be hazardous to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or in areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of water.



13. DISPOSAL CONSIDERATIONS:

WASTE DISPOSAL METHOD..... : Rinsewater and unused diluted pesticide may be disposed of on-site or in an approved waste disposal facility.

14. TRANSPORTATION INFORMATION:

D.O.T. PROPER SHIPPING NAME Ground Mode: Combustible liquid in bulk form only
..... Ground Mode: Non bulk package not regulated by DOT
..... Vessel and air shipments: Flammable liquid, N.O.S. (petroleum hydrocarbon), 3, UN1993, PG III

15. REGULATORY INFORMATION:

OSHA STATUS : N/A

TSCA STATUS : N/A

CERCLA REPORTABLE QUANTITY : N/A

SARA TITLE III:

SECTION 302 EXTREMELY

HAZARDOUS SUBSTANCES..... : N/A

SECTION 311/312

HAZARD CATEGORIES..... : N/A

SECTION 313

TOXIC CHEMICALS : Chemical (s) subject to reporting of the 1986 Superfund Amendments and Re-authorization Act (SARA) and 40 CFR Part 372.

RCRA STATUS : N/A

STATE REGULATORY INFORMATION:

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For detail on your regulatory requirements you should contact the appropriate agency in your state.

COMPONENT NAME /

CAS NUMBER

CONCENTRATION

STATE CODE



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16. OTHER INFORMATION:

REASON FOR ISSUE.....Product code and transportation information update.
APPROVAL DATE.....6/14/06
SUPERSEDES DATE6/18/01
MSDS NUMBER.....70051-27

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