

## MATERIAL SAFETY DATA SHEET

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

### 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

PRODUCT NAME ..... : Trilogy®, Triact® 70EC  
PRODUCT CODE ..... : 70051-2  
CHEMICAL FAMILY ..... : Lipid  
CHEMICAL NAME ..... : Clarified hydrophobic extract of Neem Oil  
FORMULA ..... : N/A

#### EMERGENCY TELEPHONE NUMBERS:

Emergency Information Chem Tel (800) 255-3924  
Outside North America Call Collect (813) 248-0585

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>COMPONENT</u>	<u>CAS #</u>	<u>WT.%</u>	<u>OSHA PEL</u>	<u>TWA</u>	<u>TLV's</u> <u>STEL</u>
Clarified hydrophobic extract of Neem oil (Neem oil TGAI)	947173-77-5	70	N/A	N/A	N/A
Other ingredients		30	N/A	N/A	N/A

### 3. HAZARDOUS IDENTIFICATION

#### EMERGENCY OVERVIEW

This product is a brown liquid intended for use as a pesticide to control insects on agricultural crops. This product should pose no health concerns through normal use in accordance with label directions. Do not store near heat 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 ..... : May cause mild, reversible eye irritation

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

ACUTE SKIN CONTACT ..... : Repeated exposure may cause mild sensitization

CHRONIC SKIN CONTACT ..... : Repeated exposure may cause slight sensitization

ACUTE INGESTION ..... : LD<sub>50</sub> > 5 g/kg

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

ACUTE INHALATION ..... : LC<sub>50</sub> > 6.2 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..... : Remove to fresh air. Seek medical attention if irritation persists.  
FIRST AID FOR INGESTION..... : Swallowing less than one ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention.

**5. FIRE FIGHTING MEASURES:**

NFPA HAZARD CLASSIFICATION..... : HEALTH HAZARD 1 FIRE HAZARD 2  
..... REACTIVITY 0  
EXTINGUISHING MEDIA..... : Dry chemical, carbon dioxide, alcohol or polymer foam.  
UNUSUAL FIRE AND EXPLOSION HAZARDS..... : None  
SPECIAL FIRE FIGHTING PROCEDURES..... : None

**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.)..... : 55 / none °F 13 / none °C  
SHELF LIFE..... : Stable for upwards of 2 year at ambient conditions.  
SPECIAL SENSITIVITY..... : Keep from freezing  
HANDLING AND STORAGE PRECAUTIONS..... : Do not store near heat or open flame.

**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** : None

**9. PHYSICAL AND CHEMICAL PROPERTIES:**

**PHYSICAL FORM** : Liquid  
**COLOR** : Brown  
**ODOR** : Garlic  
**BOILING POINT RANGE** : 310 °F 154 °C  
**MELT POINT / FREEZE POINT** : 55 °F 13 °C  
**FLASH POINT** : 347 °F 175 °C  
**AUTO IGNITION** : N/A °F °C  
**UPPER EXPLOSIVE LIMITS (UEL)** : Not determined  
**LOWER EXPLOSIVE LIMITS (LEL)** : Not determined  
**pH** : 6.5-7.5  
**SOLUBILITY IN WATER** : Dispersible  
**SPECIFIC GRAVITY** : 0.914 g/ml  
**BULK DENSITY** : N/A  
**% VOLATILE BY WEIGHT** : 25  
**VAPOR PRESSURE at 20 °C** : 2 mm Hg  
**VAPOR DENSITY** : 0.012

**10. STABILITY AND REACTIVITY:**

**STABILITY** : Stable  
**HAZARDOUS POLYMERIZATION** : Will not occur  
**INCOMPATIBILITIES** : None noted  
**DECOMPOSITION PRODUCTS** : None known  
**CONDITIONS TO AVOID** : None

**11. TOXICOLOGICAL INFORMATION:**

Avoid breathing spray mist. In case of eye contact, flush eyes with plenty of water. If on skin, wash with soap and water. If irritation persists, get medical attention.

**12. ECOLOGICAL INFORMATION:**

Do not apply directly to water, or to areas where surface water is present, or to inter-tidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters. This product is toxic to bees exposed to direct treatment. Do not apply this product while bees are actively visiting the treatment area.

**13. DISPOSAL CONSIDERATIONS:**

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

**14. TRANSPORTATION INFORMATION:**

**D.O.T. PROPER SHIPPING NAME** : N/A  
**TECHNICAL SHIPPING NAME** : Clarified hydrophobic extract of Neem Oil  
**D.O.T. HAZARD CLASS** : N/A



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

U.N. /N.A. NUMBER..... : N/A  
PRODUCT RQ (lbs.)..... : N/A  
D.O.T. LABEL ..... : N/A  
D.O.T. PLACARD..... : N/A

**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**..... : N/A

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.

<u>COMPONENT NAME / CAS NUMBER</u>	<u>CONCENTRATION</u>	<u>STATE CODE</u>
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**16. OTHER INFORMATION:**

REASON FOR ISSUE ..... : Updated CAS #  
APPROVAL DATE..... : 5/27/09  
SUPERSEDES DATE ..... : 1/18/08  
MSDS NUMBER..... : 70051-2

To the best of our knowledge, the information contained herein is accurate. However, neither Certis USA nor any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All material may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

