

# ACECAP 97<sup>®</sup>

## SYSTEMIC INSECTICIDE IMPLANTS

# MATERIAL SAFETY DATA SHEET

CONTAINS ORTHENE<sup>®</sup> TECHNICAL

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Please read the entire document. This Material Safety Data Sheet contains important environmental, health and toxicology information for your employees, and anyone who will use, transport, store, dispose of or handle this product. Please make sure this information is given to them. It also contains information to help you meet community right-to-know/emergency response reporting requirements under SARA Title III and many other laws. If you resell this product, this MSDS must be given to the buyer or the information contained herein must be incorporated in your MSDS.

### SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ACECAP 97<sup>®</sup> Systemic Insecticide Implants  
PRODUCT NUMBER(S): NA  
EPA REGISTRATION NUMBER: 37979-1  
HEALTH CANADA REGISTRATION #: 21568

MANUFACTURER	EMERGENCY TELEPHONE NUMBERS
Creative Sales, Inc. P.O. Box 501 222 N. Park Avenue Fremont, NE 68025-0501 U.S.A	HEALTH EMERGENCY OR SPILL (800) 759-7739 (402) 727-4800

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT NAME/CAS#	EXPOSURE LIMITS	CONC (%)
ORTHENE <sup>®</sup> Technical / 30560-19-1	NA	100.0

#### CONTAINING

INGREDIENT NAME/CAS #	EXPOSURE LIMITS	CONC (%)
ACEPHATE: O,S-DIMETHYL ACETYLPHOSPHORAMIDOTHIOATE	1mg/m <sup>3</sup> Chevron TLV	> 97.0%
MANUFACTURING IMPURITIES	NA	< 3.0%

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MSDS Number: 0007      Revision Number: 4      Revision Date: 3/3/2010

All of these manufacturing impurities are present at less than 1% and are not known human carcinogens, or are not known to be hazardous.

TLV - Threshold Limit Value

TWA - Time Weighted Average

STEL - Short-term Exposure Limit

CAS - Chemical Abstract Service Number

### SECTION 3: HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

- CAUTION:
- HARMFUL IF SWALLOWED
  - AVOID CONTACT WITH EYES, SKIN, OR CLOTHING
  - AVOID BREATHING DUST OR SPRAY MIST
  - AVOID BREATHING VAPOR
  - KEEP OUT OF REACH OF CHILDREN

#### POTENTIAL HEALTH EFFECTS

##### Acute Toxicity

**Eye:** This substance is not expected to cause prolonged or significant eye irritation.

**Skin:** This substance is not expected to cause prolonged or significant skin irritation. If absorbed through the skin, this substance is considered practically non-toxic to internal organs.

**Ingestion:** This substance is slightly toxic to internal organs if swallowed. The degree of injury will depend on the amount absorbed from the gut. Signs and symptoms which may be seen usually within 12 hours following overexposure, may include, but not be limited to, headache, dizziness, weakness, constriction of the pupil of the eye, blurred or dark vision, excessive salivation or nasal discharge, profuse sweating, abdominal cramps, nausea, and vomiting. Incontinence, unconsciousness, and convulsions indicate severe poisoning. In untreated severe poisoning, respiratory depression or cardiac arrest may be fatal.

**Inhalation:** If inhaled, this substance is considered practically non-toxic to internal organs. This substance may be irritating if inhaled. Signs and symptoms of respiratory tract irritations may include, but may not be limited to, one or more of the following: nasal discharge, sore throat, coughing, bronchitis, pulmonary edema and difficulty in breathing.

**Chronic Toxicity (Including Cancer):** High doses of Acephate have produced cancer in mice but there is no evidence that Acephate causes cancer in humans.

**Teratology (Birth Defects) Information:** There is no evidence that Acephate causes birth defects.

**Reproduction Information:** There is no evidence that Acephate causes reproductive defects in humans.

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For complete discussion of the toxicology data from which this evaluation was made, refer to Section 11.

#### SECTION 4: FIRST AID MEASURES

EMERGENCY NUMBER (800) 892-0099

**EYES:** Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. No additional first aid should be necessary. However, if irritation persists, see a doctor.

**SKIN:** If on skin, remove contaminated clothing, wash skin with plenty of soap and water. Wash contaminated clothing before reuse.

**INGESTION:** If swallowed, drink 1 or 2 glasses of water (or milk) and induce vomiting by touching the back of the throat with finger. If possible, contact a physician, Poison Control Center, or emergency center before inducing vomiting. Do not induce vomiting or give anything by mouth to an unconscious person. Take person and product container to the nearest emergency treatment center.

**INHALATION:** If inhaled, move victim to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention.

**NOTES TO PHYSICIAN:** This material contains a cholinesterase inhibitor. Measurement of blood cholinesterase activity may be useful in monitoring exposure but decisions regarding treatment will usually need to be made before test results are available. If signs of cholinesterase inhibition appear, atropine sulfate is antidotal. 2-PAM (PROTOPAM) is also antidotal and may be used in conjunction with atropine but should not be used alone.

#### SECTION 5: FIRE FIGHTING MEASURES

**FLASH POINT:** NA      **METHOD:** NA

**AUTOIGNITION:** NDA

**EXTINGUISHING MEDIA:** CO<sub>2</sub>, dry chemical, foam, water fog.

**FLAMMABLE LIMITS (% by volume in air):** Lower: NDA      Upper: NDA

**NFPA RATINGS:** Health 1; Flammability 1; Reactivity NDA; Special NDA (Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association, NFPA.

**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

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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.

HAZARDOUS COMBUSTION PRODUCTS: Normal combustion forms carbon dioxide, water vapor and may produce oxides of sulfur, nitrogen and phosphorous. Incomplete combustion can produce carbon monoxide.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK PRECAUTIONS: Do not discharge into lakes, streams, ponds or public waters unless in accordance with an NPDES permit. Do not apply directly to water or wetlands. Do not contaminate water by cleaning of equipment or disposal of waste.

Clean up spills immediately, observing precautions in Personal Protection Section 8. Vacuum with machines equipped with high efficiency filters or sweep up material and place in a disposable container. Scrub contaminated area with detergent and water using a stiff broom. Pick up liquid with Oil Dry, cat litter, clay, rags or other absorbent and place in a disposable container.

DISPOSAL METHODS: Refer to Section 13, Disposal Considerations.

## SECTION 7: HANDLING AND STORAGE

READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

Keep pesticide in original container.  
Store in a cool, dry place. Protect from excessive heat.

Do not contaminate food or foodstuffs.  
Do not store or transport near feed or food.

## SECTION 8: EXPOSURE CONTROLS; PERSONAL PROTECTION

EYE PROTECTION:

User: Do not get this material in your eyes. Eye contact can be avoided by wearing chemical goggles.

Emergency  
Responder: NDA

RESPIRATORY/VENTILATION REQUIREMENTS:

User: No Special respiratory protection is normally required. However, if operating conditions create airborne concentrations which exceed the recommended exposure standards, the use of an approved respirator is required.

Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard.

Emergency  
Responder: NDA

**SKIN PROTECTION:**

User: No special skin protection is usually necessary. Avoid prolonged or frequently repeated skin contact with this material. Skin contact can be minimized by wearing protective clothing.

Emergency  
Responder: NDA

EXPOSURE LIMITS: See Section 2.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE:	White powder with a strong cabbage-like odor.
MELTING POINT:	86.9 – 91.0°C (Decomposes)
BOILING POINT:	NA
DENSITY/BLUK DENSITY/ SPECIFIC GRAVITY:	1.35
SOLUBILITY:	Soluble in water; moderately soluble in alcohol and acetone; slight-moderate solubility in aromatic solvents.
VAPOR PRESSURE:	1.7X10 – 6 mm Hg @ 24°C
DISSOCIATION CONSTANT:	NDA
OCTANOL/WATER PARTITION COEFFICIENT:	NDA
pH:	NDA
VISCOSITY:	NDA
MISCIBILITY:	NDA
CORROSION CHARACTERISTICS:	NDA

**SECTION 10: STABILITY AND REACTIVITY**

CHEMICAL STABILITY: Stable at temperatures below 122°F (50°C).

INCOMPATIBILITY: Avoid contact with alkaline materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Contact with alkaline materials, including hypochlorite oxidants, may produce noxious gases.

HAZARDOUS POLYMERIZATION: Polymerization will not occur.

IMPACT EXPLODABILITY: NDA

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OXIDATION/REDUCTION PROPERTIES: NDA

## SECTION 11: TOXICOLOGY INFORMATION

### ACUTE (Product Specific Information)

- Eye Irritation: Minimal effects clearing within 24 hours.
- Skin Irritation: No irritation was present 72 hours after exposure.
- Dermal Toxicity: The dermal LD<sub>50</sub> in rabbits is >10 g/kg.
- Oral Toxicity: The oral LD<sub>50</sub> in male rats is 1447 mg/kg. The oral LD<sub>50</sub> in female rats is 1030 mg/kg.
- Inhalation Toxicity: The 4-hour LC<sub>50</sub> in rats is > 61.7 mg/l.
- Skin Sensitization: Acephate did not induce a positive skin sensitization reaction in the guinea pig using the Modified Buehler or the Maximization techniques.

SUBCHRONIC: The most significant treatment related effect of Acephate is a decrease in cholinesterase activity of plasma, RBC, and brain.

CHRONIC/CARCINOGENICITY: When mice were fed diets containing Acephate throughout their entire lifetime, a compound-related increase in liver weight, together with liver carcinoma (a commonly occurring cancer in mice) occurred in high-dose females. These changes were not observed in the males at any dose level or in low- or mid-dose females. When rats were fed diets containing Acephate throughout their entire lifetime, there was no treatment-related increase in tumors at any site. The most significant treatment-related effect was a decrease in cholinesterase activity of plasma, RBC, and brain.

TERATOLOGY/DEVELOPMENTAL TOXICITY: There is no evidence that Acephate causes birth defects.

REPRODUCTION: When male and female rats were fed Acephate continuously for two generations through weaning of the third generation, animals in the mid- and high-dose groups demonstrated compound-related effects on reproductive performance. The low-dose was judged to be a no-effect level.

MUTAGENICITY: Acephate has been shown to have a weak potential to cause mutations when tested in microbes or cultured cells and in some studies using mice. However, the results of most live animal studies indicate that Acephate does not cause mutations in whole animals.

OTHER: The significance of the above-mentioned results cannot be fully evaluated for humans. However, based on the dose-response observed in these studies and risk evaluation of the results, it is concluded that the risk of developing cancer or other adverse health effects is minimal if one follows the precautions outlined on the product label, material safety data sheet and any plant safety instructions.

## SECTION 12: ECOLOGICAL INFORMATION

AVIAN TOXICITY: Acephate is moderately toxic to birds.

Oral LD<sub>50</sub> Mallard Duck: 350 mg/kg

Oral LD<sub>50</sub> Pheasant: 140 mg/kg

Oral LD<sub>50</sub> Chickens: 852 mg/kg

In addition, Acephate in the diet causes adverse effects on reproduction in mallard ducks (no effect level greater than 5 ppm, but less than 20 ppm) and in bobwhite quail (no-effect level greater than 20 ppm, but less than 80 ppm).

AQUATIC ORGANISM TOXICITY: Acephate is practically non-toxic to freshwater fish. The 96-hour LC<sub>50</sub> for Orthene Technical was found to be higher than 1,000 ppm in rainbow trout, bluegill, and channel catfish. The following LC<sub>50</sub> values for Orthene 75 S Soluble Powder substantiate the low toxicity to fish:

Bluegill:	2,050 ppm
Black Bass:	1,725 ppm
Catfish:	2,230 ppm
Mosquito Fish:	6,000 ppm
Goldfish:	9,550 ppm
Crayfish:	750 ppm

OTHER NON-TARGET ORGANISM TOXICITY: Acephate is highly toxic to bees. The acute oral LD<sub>50</sub> for bees is 1.2 ug/bee.

## SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL METHODS: Check governmental regulations and local authorities for approved disposal of this material.

Dispose in accordance with applicable laws and regulations.

## SECTION 14: TRANSPORT INFORMATION

D.O.T. SHIPPING NAME: Organophosphorus Pesticides, Solid, (Acephate), NOI, Other Than Poison

TECHNICAL SHIPPING NAME: NDA

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D.O.T. HAZARD CLASS: Not hazardous  
U.N.\N.A.NUMBER: Does Not Apply  
PRODUCT RQ (lbs): NONE  
D.O.T. LABEL: NDA  
D.O.T. PLACARD: NONE  
FREIGHT CLASS BULK: NDA  
IATA CATEGORY: NDA

### SECTION 15: REGULATORY INFORMATION

#### U.S. FEDERAL REGULATIONS:

OSHA Status: NONE  
TSCA Status: NONE  
CERCLA Reportable Quantity: NONE  
SARA Title III Status

#### SARA 311 CATEGORIES:

1. Immediate (Acute) Health Effects: YES
2. Delayed (Chronic) Health Effect: YES
3. Fire Hazard: NO
4. Sudden Release of Pressure Hazard: NO
5. Reactivity Hazard: NDA

RCRA Status: NONE

STATE REGULATIONS: NONE

### SECTION 16: OTHER INFORMATION

The information in this MSDS is based on data available to us as of the revision date given herein, and believed to be correct.

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