1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier
Product Description: Acephate 97UP Insecticide

Other means of identification
Item#: 12U-102
Synonyms Not Available
Registration number(s) 70506-8

Recommended use of the chemical and restrictions on use
Recommended use Insecticide.
Uses advised against Activities contrary to label recommendation

Details of the Supplier of the Safety Data Sheet
Supplier Address United Phosphorus Inc.
630 Freedom Business Center
Suite 402
King of Prussia, PA 19406

Emergency telephone number
Company Phone Number 1-800-438-6071
Emergency telephone number Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center (866) 673-6671 (24hrs)

2. Hazards Identification

Classification
OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral Category 4
Acute toxicity - Dermal Category 4
Acute toxicity - Inhalation (Dusts/Mists) Category 4

Label elements

EMERGENCY OVERVIEW

hazard statements
HARMFUL IF SWALLOWED
Harmful in contact with skin
HARMFUL IF INHALED
Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Do not get in eyes, on skin, or on clothing
Use only outdoors or in a well-ventilated area

IF ON SKIN: Wash with plenty of soap and water
Call a POISON CENTER or doctor if you feel unwell
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor if you feel unwell
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)
OTHER INFORMATION
• Toxic to aquatic life

3. Composition/information on Ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Trade secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acephate</td>
<td>30560-19-1</td>
<td>97</td>
<td></td>
</tr>
</tbody>
</table>

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. First aid measures

FIRST AID MEASURES

General advice
Immediate medical attention is required. Show this safety data sheet to the doctor in attendance. Remove from exposure, lie down.

Eye contact
Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin contact
Wash off immediately with soap and plenty of water for at least 15 minutes. Call poison control center or doctor for treatment advice.

Inhalation
Move person 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 physician or poison control center immediately.

Ingestion
Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Clean mouth with water.

Protection of First-aiders
Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Most Important Symptoms and Effects, Both Acute and Delayed

Most Important Symptoms and Effects
No information available.
Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician  Cholinesterase inhibitor. Atropine is antidotal. PAM may also be used in conjunction with atropine but should not be used alone.

5. Fire-fighting measures

Suitable extinguishing media  Carbon dioxide (CO2). Water spray. Dry chemical. Foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

   Unsuitable extinguishing media  No information available.

Specific hazards arising from the chemical  No information available.


Explosion data  

Protective equipment and precautions for firefighters  
Use personal protective equipment. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions  Avoid contact with the skin and the eyes. Provide adequate ventilation. Take precautionary measures against static discharges. Use personal protective equipment.

Environmental Precautions  

Environmental precautions  Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Methods for Clean-Up  Sweep up and shovel into suitable containers for disposal. Reduce dust spreading with water spray, collect rinsate. Shovel or sweep up.

7. Handling and Storage

Precautions for safe handling

Handling  Wear personal protective equipment. Avoid contact with skin and eyes. Avoid dust formation in confined areas. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage  Keep containers tightly closed in a cool, well-ventilated place. Keep out of the reach of children. Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur.

Incompatible materials  Alkaline.

8. Exposure Controls/Personal Protection
Exposure guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering controls

Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Personal protective equipment

Eye/Face Protection

Use eye protection to avoid eye contact. Where there is potential for eye contact have eye flushing equipment available. Safety glasses with side-shields.

Skin protection

Wear protective gloves/clothing. Chemical resistant footwear plus socks.

Respiratory protection

Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134.

General hygiene considerations

Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wear suitable gloves and eye/face protection. Wash hands and face before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>VALUES</th>
<th>Remarks/ • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>powder</td>
<td></td>
</tr>
<tr>
<td>appearance</td>
<td>Highly hydroscopic</td>
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</tr>
<tr>
<td>color</td>
<td>Fine, white</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>rotten Cabbage</td>
<td></td>
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<tr>
<td>pH</td>
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<td>Melting point/freezing point</td>
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<td>Boiling Point/Range</td>
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<tr>
<td>Flash Point</td>
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<td></td>
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<td>Evaporation Rate</td>
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<td>flammability (solid, gas)</td>
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<tr>
<td>Flammability limit in air</td>
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<td>Upper Flammability Limit</td>
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<tr>
<td>Lower Flammability Limit</td>
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<tr>
<td>vapor pressure</td>
<td>1.7 X 10^-6 mmHg @24 C (acephate)</td>
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<tr>
<td>Vapor Density</td>
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<td></td>
</tr>
<tr>
<td>Specific gravity</td>
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<td></td>
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<tr>
<td>Water solubility</td>
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<tr>
<td>Solubility in Other Solvents</td>
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<td>Partition coefficient: n-octanol/water</td>
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</tr>
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</tr>
<tr>
<td>decomposition temperature</td>
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<td></td>
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<tr>
<td>Viscosity, kinematic</td>
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<td>Dynamic viscosity</td>
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</tr>
<tr>
<td>Explosive properties</td>
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<tr>
<td>Oxidizing properties</td>
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OTHER INFORMATION

<table>
<thead>
<tr>
<th>Property</th>
<th>Remarks/ • Method</th>
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<tr>
<td>Softening point</td>
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<td>molecular weight</td>
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<tr>
<td>VOC Content</td>
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<td>density</td>
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</table>

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10. Stability and Reactivity

Reactivity
no data available

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to avoid
Not known. Excess moisture.

Incompatible materials
Alkaline.

Hazardous decomposition products

11. Toxicological Information

Information on Likely Routes of Exposure

Product information

Acephate 97UP
Eye irritation - minimal with clearing within 24 hrs
Skin irritation - non-irritating
Dermal toxicity - LD50 (rabbit) >2 g/kg
Oral toxicity - LD50 (male rat) 688mg/kg,
               LD50 (female rat) 1127 mg/kg
               LD50 (combined sexes) 846 mg/kg
Inhalation tox - LCS0 4hr (rats) >2.13 mg/L

Inhalation
May be harmful if inhaled.

Eye contact
Mild eye irritant.

Skin contact
May cause irritation.

Ingestion
MAY BE HARMFUL IF SWALLOWED.

Information on Toxicological Effects

Symptoms
No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

sensitization
No information available.

Mutagenic effects
No information available.

Carcinogenicity
The information below indicates whether any agency has listed any ingredient as a carcinogen.

Reproductive effects
Not Available.

STOT - Single Exposure
No information available.

STOT - repeated exposure
No information available.

Aspiration hazard
No information available.

Numerical Measures of Toxicity - Product information

LD50 Oral 688  mg/kg (rat)
LD50 Dermal 2000  mg/kg (rat)
LC50 Inhalation: > 2.13 mg/l (rat)

12. Ecological Information
ecotoxicity

Acephate = Highly toxic to bees (1.2 ug/bee)
Toxic to birds.
Rainbow trout LC50 (96 hr) = >1000 mg/L
Bluegill LC50 (96 hr) = >2000 mg/L
Mallard duck Oral LD50 = 350 mg/kg

Persistence/Degradability
No information available.

Bioaccumulation/ Accumulation
No information available.

Other Adverse Effects

Acephate tech in diet causes adverse effects on reproduction in Mallard ducks (NOEL >5 ppm <20 ppm) and in Bobwhite quail (NOEL >20 ppm <80 ppm).

13. Disposal Considerations

Waste Treatment Methods

Waste Disposal Method
Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. Dispose of in accordance with all applicable federal, state, and local laws and regulations.

Contaminated packaging
Non refillable container. Do not reuse this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. Refer to product label.

14. Transport Information

DOT
NOT REGULATED

ICAO
NOT REGULATED

IATA
NOT REGULATED

IMDG/IMO
NOT REGULATED

15. Regulatory Information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:
signal word

CAUTION

Ventilation Control

PESTICIDE APPLICATORS & WORKERS THESE WORKERS MUST REFER TO PRODUCT LABELING AND DIRECTIONS FOR USE IN ACCORDANCE WITH EPA WORKER PROTECTION STANDARD 40 CFR PART 170.

International Inventories

<table>
<thead>
<tr>
<th></th>
<th>USINV</th>
<th>DSL/NDSL</th>
<th>EINECS/ELINCS</th>
<th>ENCS</th>
<th>China</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
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<td>Does not comply</td>
<td>Complies</td>
<td>Complies</td>
<td>Complies</td>
<td>Complies</td>
<td>Does not comply</td>
</tr>
</tbody>
</table>

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>SARA 313 - Threshold Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acephate - 30560-19-1</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous

Categorization

- Acute health hazard: yes
- Chronic health hazard: No
- Fire hazard: No
- Sudden release of pressure hazard: No
- Reactive Hazard: No

CERCLA

SARA Product RQ: 0

RCRA

Pesticide Information

State Regulations

State Right-to-Know

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acephate</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

International regulations

U.S. EPA Label information

EPA Pesticide registration number: 70506-8
16. Other Information

NFPA  HEALTH  flammability  Instability  Physical hazard
1  0  0  -

Preparation Date  15-Apr-2015
Revision date  05-Nov-2015
Revision Summary  Update section 11

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End of MSDS