



Material Safety Data Sheet

United Phosphorus, Inc.

NFPA	PPE	

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1. PRODUCT AND COMPANY IDENTIFICATION

UPI
 630 Freedom Business Center
 Suite 402
 King of Prussia, PA 19406

Emergency Telephone Number
 Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
 Medical: Rocky Mountain Poison Control Center
 (866) 673-6671 (24hrs)

<u>Company Information</u>	<u>Contact Information</u>	<u>Phone Number</u>	<u>Available Hrs</u>
UPI	Customer Service R&D Technical Service	1-800-438-6071 610-223-2180	8:00 am to 5:00 pm EST 8:00 am - 5:00 pm (EST)

Product Name Acephate 90 SP Insecticide
 Acephate 90 WSP Insecticide
EPA Reg # 70506-2
Recommended Use Insecticide
Product Code 12U-103

2. HAZARDS IDENTIFICATION

Emergency Overview Irritating to eyes Harmful if swallowed		
CAUTION Appearance Fine,, White.	Physical State Powder. Highly hydroscopic.	Odor Rotten. Cabbage.

Potential Health Effects

Eyes	Moderately irritating to the eyes.
Skin	Prolonged or repeated contact may cause irritation, redness and rash.
Inhalation	Harmful by inhalation. Mist or dust concentrations may be harmful or irritating if inhaled. Signs and symptoms of respiratory tract irritation may include nasal discharge, sore throat, pulmonary edema and difficulty breathing.
Ingestion	Harmful if swallowed. Signs and symptoms which may occur within 12 hours following overexposure include headache, dizziness, weakness, pinpoint pupils, blurred vision, excessive salivation and nasal discharge, abdominal cramps, nausea and vomiting.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients Name

Chemical Name	CAS-No	Weight %	OSHA PEL
Acephate	30560-19-1	90	N/A

4. FIRST AID MEASURES

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	Take off contaminated clothing Rinse skin immediately with plenty of water for 15-20 minutes Call poison control center or doctor for treatment advice.
Inhalation	If breathing is irregular or stopped, administer artificial respiration May cause allergic respiratory reaction Call a physician or poison control center immediately
Ingestion	Call a physician or poison control center immediately May produce an allergic reaction Never give anything by mouth to an unconscious person Do not induce vomiting unless told to do so by a poison control center or doctor

Notes to Physician Acephate is a cholinesterase inhibitor. Blood cholinesterase measurements may be useful to monitor exposure but treatment-related decisions may be needed before the results of the blood tests are available. If signs of cholinesterase inhibition appear, atropine is antidotal. 2-PAM may also be used in conjunction with atropine but should not be used alone.

5. FIRE-FIGHTING MEASURES

Flammable Explosive Properties

Flash Point	Not available		
Autoignition Temperature	Not available		
Flammability Limits in Air	Not available		
Extnguishing Media	Foam Carbon dioxide (CO2) Water spray		
Fire/Explosion Hazard	Contain run-off from fire.		
Hazardous Combustion Products	Carbon dioxide (CO2), Sulfur oxides, Oxides of nitrogen, Oxides of phosphorous.		
NFPA	Health 1	Flammability 0	Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with the skin and the eyes. Ensure adequate ventilation. Take precautionary measures against static discharges.
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.
Methods for Clean-up	Sweep up and shovel into suitable containers for disposal. Reduce dust spreading with water spray, collect rinsate.

7. HANDLING AND STORAGE

Handling	Keep out of reach of children. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Empty containers may contain hazardous residues.
Storage	Keep away from direct sunlight. Keep containers tightly closed in a cool, well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

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. 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.

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.

Skin Protection

Chemical resistant protective clothing. Long sleeved clothing. Long pants. Socks and footwear.

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. Mixers & loaders:

A NIOSH approved dust mist filtering respirator with MSA/NIOSH approval number prefix TC-21C or a NIOSH approved respirator with any N, R, P, or HE filter.

General Hygiene Considerations

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Fine, White	Odor	Rotten Cabbage
Physical State	Powder Highly hygroscopic	pH	approx; (1% solution) 4
Boiling Point/Range	Not available	Melting Point/Range	Not available 90 °C / 195 °F
Specific Gravity	Not available	Solubility	Soluble
Evaporation Rate	Not available	Vapor pressure	1.7 X 10 ⁻⁶ mmHG @24 C (acephate)
Vapor Density	Not available	VOC Content	Not available
Viscosity	Not available	Molecular Weight	no data available
Bulk Density	25-30 lb/ft ³	Percent Solids	Not available
Percent Volatiles	Not available		

10. STABILITY AND REACTIVITY

Stability

Stable under recommended storage conditions

Conditions to Avoid

Extreme temperatures Excess moisture

Incompatible Materials	Alkaline
Hazardous Decomposition Products	Oxides of sulfur Oxides of nitrogen Oxides of phosphorous
Possibility of Hazardous Polymerization	Hazardous polymerisation does not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information

Acephate 90
Eye irritation: Moderate irritation (rabbit)
Skin irritation: Not irritating (rabbit)
Dermal toxicity : LD50 (rat) >10 g/kg
Oral toxicity: LD50 (female rat) 1030 mg/kg
Inhalation toxicity: 4 hr LC50 (Rat, acephate tech) >60 mg/L
Skin sensitization: Negative (guinea pig)

Chronic Toxicity

Carcinogenicity

Acephate - High doses of Acephate technical have produced cancer in mice but there is no evidence thatt Acephate technical causes cancer in humans. EPA has classified Acephate as a Group C possible human carcinogen based on the cancer produced in female mice. This product is not listed as a carcinogen by the National Toxicology Program (NTP), the International Agency for Rearch of Cancer (IARC) or the Occupational Safety and Health Administration (OSHA).

12. ECOLOGICAL INFORMATION

Ecotoxicity

Acephate- This pesticide is toxic to birds. Do not apply directly to water, to areas where surface water is present. Cover or soil incorporate spills. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. DO not apply this product or allow drift to blooming crops or weeds if bees are visiting the treatment area. Oral LD50 for bees is 1.2 ug/bee.

Fish and avian toxicity:

96 hr LC50 Rainbow trout - >1,000 ug/L
96 hr LC50 Bluegill - >2,000 ug/L
Oral LD50 Mallar duck - 350 mg/kg
Oral LD50 Pheasant - 140 mg/kg

In addition, Acephate technical in the diet causes adverse effects on reproduction in mallard ducks (NOEL >5ppm but <20ppm) and in Bobwhite quail (NOEL >20ppm and <80ppm). Acephate SP -

Bluegill - 2050 ppm
Black Bass - 1725 ppm
Catfish - 2230 ppm
Crayfish - 750 ppm
Mosquito fish - 6000 ppm.

13. DISPOSAL CONSIDERATIONS

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 container by shaking and tapping sides and bottom to loosen clinging particles. Then offer for recycling if available or dispose of empty container in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

14. TRANSPORT INFORMATION

DOT Not regulated when shipped by highway in non-buk containers as per 49 CFR 171.4 When shipped in bulk, by vessel, or internationally use the IMDG shipping description:
 Environmentally hazardous substances, solid, n.o.s. (Acephate)
Proper Shipping Name
Hazard Class 9
UN-No UN3077
Packing Group PG III
Marine pollutant Y.

ICAO
UN-No UN3077
Proper Shipping Name Environmentally hazardous substance, solid, n.o.s (Acephate)
Hazard Class 9
Packing Group PG III

IATA
UN-No UN3077
Proper Shipping Name Environmentally hazardous substances, solid, n.o.s. (Acephate)
Hazard Class 9
Packing Group PG III
ERG Code 9L

IMDG/IMO
Proper Shipping Name Environmentally hazardous substances, solid, n.o.s. (Acephate)
Hazard Class 9
UN-No UN3077
EmS No. F-A; S-F
Marine pollutant yes

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS/ ELINCS	ENCS	CHINA	KECL	AICS
Acephate				X		X	KE-11118	X

12U-103
Acephate 90 SP Insecticide
Acephate 90 WSP Insecticide

USA

Federal Regulations

SARA 313
 SARA 313

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values
Acephate	30560-19-1	90	1.0

SARA 311/312 Hazardous Categorization

Chronic Health Hazard	Yes
Acute Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
 This product does not contain any HAPs.

CERCLA

RCRA

Pesticide Information

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Acephate 30560-19-1 (90)			X	

State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

State Right-to-Know

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Acephate		X			

International Regulations

Mexico - Grade Not available

Canada

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This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class
Not determined

16. OTHER INFORMATION

Revision Date 20-Aug-2013

Revision Summary
Recurrent confirmation/update of data

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End of MSDS