

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

- 1.1 **PRODUCT IDENTIFIER:** EPA REGISTRATION NO. 34704-1051
TRADE NAME: ACEPHATE 90 WDG
- 1.2 **RECOMMENDED USE:** INSECTICIDE
- 1.3 **SUPPLIER DETAILS:**
LOVELAND PRODUCTS, INC.
P.O. Box 1286 • Greeley, CO 80632-1286
- 1.4 **24 Hour Emergency Phone:** 1-800-424-9300 - **Medical Emergencies:** 1-866-944-8565 – **Product Information:** 1-888-574-2878 (LPI-CUST)
U.S. Coast Guard National Response Center: 1-800-424-8802

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to 29 CFR 1910.1200

| | | |
|-----------------------------|-------------|------|
| Acute Toxicity - Oral | Category 4 | H302 |
| Acute Toxicity – Inhalation | Category 4 | H332 |
| Sensitization – Skin | Category 1B | H317 |
| Acute Toxicity – Dermal | Category 5 | H313 |

2.2 Label elements



Signal word: WARNING
 Hazard Statement: H302 – Harmful if swallowed.
 H332 – Harmful if inhaled.
 H317 – May cause an allergic skin reaction.
 H313 – May be harmful in contact with skin.

Precautionary Statement: (Prevention): P264 – Wash hands and face thoroughly after handling.
 P270 – Do not eat, drink or smoke when using this product.
 P261 – Avoid breathing dust/fume/gas/mist/vapors/spray.
 P271 – Use only outdoors or in a well-ventilated area.
 P272 – Contaminated work clothing must not be allowed out of the workplace.
 P280 – Wear protective gloves.

Precautionary Statement: (Response): P301+P312: IF SWALLOWED: Call a poison center/doctor/physician if you feel unwell.
 P330 – Rinse mouth.
 P304+P340: IF INHALED: Remove person to fresh air and keep and keep at rest in a position comfortable for breathing.
 P312 – Call a poison center/doctor/physician if you feel unwell.
 P302+P352: IF ON SKIN: Wash with plenty of water.
 P333+P313 – If skin irritation or rash occurs: Get medical advice/attention.
 P321 – Specific treatment (see First Aid on the product label).
 P363 – Wash contaminated clothing before reuse.

Precautionary Statement: (Storage): Not required (see section 7 for storage information).

Precautionary Statement: (Disposal): P501 – Dispose of contents/container at a recycler or dispose of empty bag in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances.

2.3 Other hazards

Acephate is an organophosphate, cholinesterase inhibitor.



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3. COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances

3.2 Mixtures

Classification according to 29 CFR 1910.1200

| Chemical Name: | CAS No. | Concentration [%] |
|--------------------|------------|-------------------|
| Acephate | 30560-19-1 | 90.00 |
| *Other ingredients | | 10.00 |

*Ingredients not specifically listed are to be considered proprietary or confidential business information per 29 CFR 1910.1200(i)

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice: Get medical attention if symptoms occur.

- If swallowed:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
- If in eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
- If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

4.2 Most Important Symptoms and Effects, Acute and Delayed

Symptoms: Harmful if swallowed. Harmful if inhaled.

4.3 Immediate Medical Attention and Special Treatment

Treatment: Treat symptomatically. Symptoms may be delayed.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565

Take container, label or product name with you when seeking medical attention.

NOTES TO PHYSICIAN: Acephate is 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.

5. FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

Suitable Extinguishing Media: Use medium appropriate to surrounding fire. Dry chemical, carbon dioxide (CO₂), alcohol foam, foam, water spray or fog.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Specific Hazards During Firefighting: Thermal decomposition products include, but are not limited to, oxides of carbon, oxides of sulfur, oxides of nitrogen, oxides of phosphorous, water vapor, and other unknown materials may be formed in a fire situation.

5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

Special Protective Equipment for Firefighters: Self-contained breathing apparatus and full protective gear should be worn in fighting large fires involving chemicals. Use water spray to keep fire exposed containers cool. Keep people away. Isolate fire and deny unnecessary entry.



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6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal Precautions: Avoid inhalation of dusts and contact with skin and eyes. Ensure adequate ventilation. Wear suitable protective clothing.

6.2 ENVIRONMENTAL PRECAUTIONS

Environmental Precautions: This pesticide is toxic to birds. For terrestrial uses, 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 disposing of equipment washwaters. 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 to drift onto blooming crops or weeds while bees are actively visiting the treatment area.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP

Methods for Clean-Up: Sweep up dry spills and transfer to approved chemical containers. Avoid breathing dusts. Wash the spill area with water containing a strong detergent, absorb with pet litter or other absorbent material, sweep up and place in a chemical container. Flush the area with water to remove any residue. Check local, state and federal regulations for proper disposal. Never return spills to original containers for re-use. **CAUTION:** Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on Safe Handling: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

7.2 CONDITIONS FOR SAFE STORAGE:

Requirements for Storage Areas and Containers: Store in a cool, dry place in original container. Store in a cool, dry place away from excessive heat. Do not put concentrate or dilute into food or drink containers. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS:

OCCUPATIONAL EXPOSURE LIMITS

U.S. Workplace Exposure Level (ACGIH) TLVs

| Components | Type | Value |
|-------------------|------|-------|
| No data available | TLV | |

U.S. Workplace Exposure Level (OSHA) PELs

| Components | Type | Value |
|-------------|------|--|
| PNOC; PNOR* | TWA | 5 mg/m ³ (Respirable fraction) 15 mg/m ³ (Total dust) |

Biological limit values

ACGIH Biological Exposure Indices

| Components | Value | Specimen |
|--|------------------------------|--|
| Acetylcholinesterase Inhibiting Pesticides | 70% of individual's baseline | Cholinesterase activity in red blood cells |



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8.2 EXPOSURE CONTROLS:

Engineering Measures

Pilots must use an enclosed cockpit in a manner that meets with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)], the use of human flaggers is prohibited.

Individual Protection Measures:

Eye / Face Protection: Goggles or shielded safety glasses are recommended.
Skin Protection: Long-sleeved shirt and long pants. Chemical-resistant gloves. Shoes plus socks.
Respiratory Protection: Not normally required, if vapors or dusts exceed acceptable levels, wear a MSHA/NIOSH approved dust mist filtering respirator with any N, R, P, or HE filter. If respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection standard. Wear air supplied respiratory protection if exposure concentrations are unknown.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 APPEARANCE: Granular solid.
ODOR: Rotten, cabbage-like.
ODOR THRESHOLD: No data available.
COLOR: White.
pH: 3.5 – 5.5
MELTING POINT / FREEZING POINT: No data available
BOILING POINT: No data available
FLASH POINT: Does not flash.
FLAMMABILITY (solid, gas): No data available.
UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: No data available.
VAPOR PRESSURE: 1.7×10^{-6} mmHg @ 23 – 25 °C (based on Acephate technical).
SOLUBILITY: Soluble.
PARTITION CO-EFFICIENT, n-OCTANOL / WATER: Kow: 0.13 @ 25 °C.
AUTO-IGNITION TEMPERATURE: No data available.
DECOMPOSITION TEMPERATURE: No data available.
VISCOSITY: (kinematic): No data available
SPECIFIC GRAVITY (Water = 1): 0.595 g/ml
BULK DENSITY: 37 lbs/ft³ | 595 kg/m³

Note: These physical data are typical values based on material tested but may vary from sample to sample.
Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

10.1 REACTIVITY

Stable

10.2 CHEMICAL STABILITY

Stable under normal temperature conditions

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No data available. Will not polymerize.

10.4 CONDITIONS TO AVOID

Excessive heat and excess moisture.

10.5 INCOMPATIBLE MATERIALS

Alkaline materials.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Thermal decomposition products include, but are not limited to, oxides of carbon, oxides of sulfur, oxides of nitrogen, oxides of phosphorous, water vapor, and other unknown materials may be formed in a fire situation.



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11 TOXICOLOGICAL INFORMATION

11.3 LIKELY ROUTES OF EXPOSURE

Harmful if swallowed. Harmful if inhaled.

LC₅₀ (rat): > 2.0 mg/L (4 HR) – Acephate technical

LD₅₀ Oral (male rat): 2150 mg/kg

LD₅₀ Dermal (rat): > 2,000 mg/kg (based on Acephate technical)

Acute Toxicity Estimates: No data available

Skin Irritation (rabbit): not an irritant.

Eye Irritation (rabbit): not an irritant.

Specific Target Organ Toxicity: No data available.

Aspiration: No data available

Skin Sensitization (guinea pig): Sensitizer

Carcinogenicity: EPA Group C (Possible Human Carcinogen - Limited evidence of carcinogenicity in animals in the absence of human data).

Germ Cell Mutagenicity: No data available

Interactive Effects: None known

12 ECOLOGICAL INFORMATION

12.3 ECOTOXICITY

The product is toxic to birds and highly toxic to bees. Information below is based on the technical ingredient Acephate.

Ecotoxicological Data

| | Species | Test Results |
|----------|----------------|---|
| Acephate | Rainbow trout | > 1,000 ppm – 96-hour LC ₅₀ |
| | Bluegill | 2050 mg/L – 96-hour LC ₅₀ |
| | Crayfish | >750 mg/L – 96-hour LC ₅₀ |
| | Honeybee | 0.271 µ/bee – 96-hour Oral LD ₅₀ |

Drift or runoff may adversely affect non-target plants.

Do not apply directly to water.

Do not contaminate water when disposing of equipment wash water.

Do not apply when weather conditions favor drift from target area.

12.2 PERSISTENCE AND DEGRADABILITY

Biodegradability: Rapidly degraded in soil by microorganisms under aerobic and anaerobic conditions. Half-life ranged from 0.5 – 3 days.

12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: Low potential for bioaccumulation.

12.4 MOBILITY IN SOIL

Acephate is highly soluble in water and adheres poorly to all soil types. Potential for Acephate to move off site with rain or irrigation water is high.

12.5 OTHER ADVERSE EFFECTS

Assessment: No data available.

13 DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Nonrefillable container. Do not reuse or refill the container. Completely empty bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles. Offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances. Do not contaminate water, food or feed by storage or disposal.

14 TRANSPORT INFORMATION

14.3 LAND TRANSPORT

DOT Shipping Description: NOT REGULATED.

U.S. Surface Freight Classification: INSECTICIDES OR FUNGICIDES, INSECT OR ANIMAL REPELLENTS, NOI, OTHER THAN POISON (NMFC 102120; CLASS: 60)



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15 REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

NFPA & HMIS Hazard Ratings:

NFPA

| | |
|----------------|------------|
| 1 Health | 0 Least |
| 1 Flammability | 1 Slight |
| 0 Instability | 2 Moderate |
| | 3 High |
| | 4 Severe |

HMIS

| |
|----------------|
| 1 Health |
| 1 Flammability |
| 0 Reactivity |
| J PPE |

SARA Hazard Notification/Reporting

SARA Title III Hazard Category:

| | | | | | |
|-----------|----------|----------|----------|----------------------------|----------|
| Immediate | <u>Y</u> | Fire | <u>N</u> | Sudden Release of Pressure | <u>N</u> |
| Delayed | <u>Y</u> | Reactive | <u>N</u> | | |

Reportable Quantity (RQ) under U.S. CERCLA: Not listed.

SARA, Title III, Section 313: Acephate (CAS: 30560-19-1) 90.0%

RCRA Waste Code: Not listed.

CA Proposition 65: Not listed.

This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION

Harmful if swallowed or inhaled.
Causes moderate eye irritation.
Avoid contact with eyes or clothing.

16 OTHER INFORMATION

SDS STATUS: Sections 1 and 2 revised.

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

*Particulates not otherwise classified/regulated

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