



TIDE INTERNATIONAL USA, INC.

—A DIVISION OF TIDE GROUP

MAIN OFFICE : 21 HUBBLE, IRVINE, CA 92618, USA

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Safety Data Sheet (SDS) of Tide Acephate 90WDG

Section 1 – Chemical Product and Company Identification

Product name	Tide Acephate 90WDG
Synonyms name	None
Chemical Class	Organophosphate chemical
Recommended Use	Insecticide
Company details	
Importer	Tide International USA, Inc. 21 Hubble, Irvine, CA 92618
EPA Reg. No.	84229-7
Emergency phone	CHEMTREC 1-800-424-9300 Tide International USA, Inc. 1-949-679-3535

Section 2 – Hazard(s) Identification

Classified as Hazardous according to criteria of the Hazard Communication Standard (HCS) or 29 CFR §1910.1200 (2012).

Classification of the substance or mixture:

- Acute oral (Category 4)
- Acute Inhalation (Category 4)
- Skin sensitization (Category 1B)
- Acute aquatic toxicity (Category 2)

Label elements

HCS labeling

Hazard pictograms (HCS)



Signal Word: WARNING



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GHS Hazard Statements:

Harmful if swallowed

May cause an allergic skin reaction

Harmful if inhaled

Very toxic to aquatic life.

Other hazard information:

NFPA Ratings: Health-1 Flammability-1 Reactivity-0

Signs and Symptoms of Systemic Effects:

This product contains Acephate, a cholinesterase inhibitor. Acute overexposures by oral, dermal or inhalation routes may produce signs and symptoms of toxicity, usually within several hours of exposure, including but not limited to headaches, dizziness, weakness, constriction of the pupil, blurred or dark vision, excessive salivation or nasal discharge, profuse sweating, abdominal cramps, nausea, diarrhea and vomiting. Severe poisonings may result in incontinence, unconsciousness, convulsions and death.

Environmental hazards:

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 intertidal areas below the mean high water mark. Do not contaminate water when cleaning 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 it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

Section 3 - Composition / Information on Ingredients

Active ingredient	CAS No.	Content (w/w,%)	ACIGH
Acephate	30560-19-1	90.0% min.	NA
Sodium sulfate	7757-82-6	1.0% max.	NA
Ethylene diamine alkoxyate	26361-40-5	2.0% max.	NE
Polyvinylpyrrolidone	9003-39-8	4.0% max	NA
Other ingredient deemed not to be hazardous	Proprietary	Balance	-

Section 4 – First-Aid Measures

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact CHEMTREC at 1-800-424-9300 for emergency medical treatment information.

If swallowed: Immediately call a POISON CENTER or doctor/physician if you fell unwell. Rinse mouth. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.



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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. Get medical advice/attention. Wash contaminated clothing before reuse.

If inhaled: Remove person to fresh air and keep comfortable for breathing. If person is not breathing, call 911 for an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a POISON CENTER or doctor/physician if you feel unwell.

Note 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.

Section 5 – Fire-Fighting Measures

Flashpoint: No data applicable

Combustible: No data applicable

Means of Extinction: Carbon dioxide, dry chemical, foam, water fog.

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.

Fire fighting instructions:

Products of combustion from fires involving this product 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 self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse.

Section 6 - Accidental Release Measures

Land spills or leaks:

Containment: Reduce airborne dust. Avoid runoff into storm sewers or other bodies of water.

Cleanup: Cleanup spill immediately. Vacuum or sweep up material and place in a chemical waste container. Wash area with soap and water. Pick up wash liquid with additional absorbent and place in a chemical waste container.

For spills in water:

Containment: This material will disperse or dissolve in water. Stop the source of the release. Contain and isolate to prevent further contamination of the soil, surface water, or ground water.

Cleanup: Cleanup spill immediately. Absorb spill with inert material. Remove contaminated water for



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treatment or disposal.

Section 7- Handling and Storage

KEEP OUT OF REACH OF CHILDREN!

Handling:

Use only outdoors or in a well-ventilated area.

Avoid breathing dust/mist/spray.

Keep exposure to this product to a minimum, and minimize the quantities kept in work areas.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

Contaminated work clothing must not be allowed out of the workplace.

Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed.

The measures detailed below under "Storage" should be followed during handling in order to minimize risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Avoid release to the environment.

Storage:

Keep pesticide in original container. Store in a cool, dry place away from excessive heat. Do not put concentrate or dilute into food or drink containers.

Section 8 - Exposure Controls/Personal Protection

Exposure limit values

Components.	CAS-No	Control parameters	Basis
Acephate	30560-19-1	NA	NA

Engineering controls

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

The use of human flaggers is prohibited.

Personal protection:

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber, nitrile rubber, and Viton. If you want more options, follow the instructions for category F on an EPA chemical-resistance category selection chart.

Mixers, loaders, applicators and other handlers must wear:

Long-sleeved shirt and long pants



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Socks and shoes

Chemical-resistant gloves

In addition, all mixers and loaders and all applicators using low-pressure hand wand application equipment must wear:

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

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Respiratory Protection: Wear suitable respiratory protective equipment if exposure to levels above the occupational exposure limit is likely. If needed, use MSHA/NOISH approved respirator for pesticides.

Eye Protection: Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.



Tightly sealed goggle

Skin and Body Protection: To avoid contact with skin, wear coveralls over with long- or short-sleeved shirt and long or short pants, chemical-resistant footwear plus socks and chemical resistant gloves. Wear chemical-resistant apron when cleaning equipment, mixing or loading. For overhead exposure, wear chemical-resistant headgear. An emergency eyewash or water supply should be readily accessible to the work area.

Hand Protection:



Chemical resistant gloves

Specific Hygiene Measures:

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should 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.



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Avoid breathing dust/fume/gas/mist/ vapors/spray.
Do not eat, drink or smoke when using this product.
Contaminated work clothing must not be allowed out of the workplace.

Environmental controls

See Sections 6, 7, 12, 13.

Section 9 - Physical and Chemical Properties

Appearance: White solid granular

Odor: A characteristic order (Sulfur Type)

Odor threshold: No Data Available

pH: 3.5-5.5

Melting point/freezing point: 85-88°C

Initial boiling point and boiling range: No Data Available

Flammability: No flammable

Explosibility: Not have explosive characteristics.

Evaporation rate: No Data Available

Vapor pressure: 1.7 x 10⁻⁶ mmHg at 23 - 25°C (Acephate)

Vapor density: No Data Available

Density: .0.53±0.05g/mL

Solubility: Soluble in water

Octanol/water partition coefficient: Kow: 0.13 at 25°C

Auto-ignition temperature: No Data Available

Decomposition temperature: No Data Available

Viscosity: No Data Available

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

Section 10 - Stability and Reactivity

Reactivity: Product will not undergo polymerization

Chemical stability: Stable under normal use and storage conditions.

Possibility of hazardous reactions: Will not occur hazardous polymerization.

Conditions to avoid: High temperatures and excess moisture.

Incompatible Materials: Avoid contact with alkaline materials.

Hazardous decomposition products: Contact with alkaline materials including hypochlorite oxidants may produce noxious gases.

Section 11 - Toxicological Information



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Exposure routes: Eyes, skin, ingestion & inhalation.

Toxicity:

Acute oral toxicity	LD ₅₀ for female rat 1780mg/kg, male rat 2150mg/kg
Acute dermal toxicity	LD ₅₀ for rabbits >2000mg/kg
Acute inhalation toxicity	LC ₅₀ (4h) >2.0mg/L
Skin irritation	No skin irritating.
Eye irritation	No irritation to eyes (rabbits).
Sensitization	Minimally skin sensitizing reaction in guinea pig.

Chronic Toxicity: In 2-year feeding trials, dogs exhibited depression of cholinesterase at 100 mg/kg diet (maximum dose level) of acephate but no other significant effects; rats showed depression of cholinesterase but no effect on weight gain or pathological effect at 30 mg/kg diet. Another feeding study noted that rats did not produce pathological changes over a 90-day period when fed up to 300 mg/kg body weight of acephate.

Carcinogenicity:

High doses of Acephate Technical have produced cancer in mice but there is no evidence that 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 Research on Cancer (IARC), or the Occupational Safety and Health Administration (OSHA).

Reproduction:

There is no evidence that Acephate Technical causes reproductive effects in humans.

Developmental Toxicity:

There is no evidence that Acephate Technical causes birth defects.

Neurotoxicity:

No delayed neurotoxicity

Mutagenicity:

Acephate is not considered to be a mutagenic hazard.

Section 12 - Ecological Information

Ecotoxicity:

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 intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

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Avian toxicity: Acephate

Japanese quail (*C. coturnix japonica*) Diet LC50 = 3275mg a.i./kg diet



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Northern bobwhite (<i>C. virginianus</i>)	Diet LC50 = 1280mg a.i./kg diet
Mallard duck (<i>A. platyrhinchus</i>)	Oral LD50=350mg a.i./kg b.w.
Northern bobwhite (<i>C. virginianus</i>)	Reproductive NOEL =20ppm
Mallard duck (<i>A. platyrhinchus</i>)	Reproductive NOEL =5ppm

Aquatic organism toxicity: Acephate

Bluegill (<i>L. macrochirus</i>)	LC50=2050mg a.i./L
Mosquitofish (<i>G. affinis</i>)	LC50=6650 mg a.i./L
Goldfish (<i>C. auratus</i>)	LC50 \cong 9550mg a.i./L
Crayfish (<i>P. clarki</i>)	LC50 > 750mg a.i./L

Other non-target organism toxicity: Acephate

Honeybee (<i>A. mellifera</i> L.)	48hr contact LD50=0.357 μ g a.i./bee
	96hr oral LD50=0.271 μ g a.i./bee

Persistence/Degradability: Acephate is rapidly degraded in soil by microorganisms under both aerobic and anaerobic conditions. The half-life of acephate ranged from 0.5 to 3 days.

Bioaccumulative potential: Low bioaccumulation potential.

Mobility in soil: Acephate is highly soluble in water and adheres very poorly to all soil types. The potential for acephate to move off the site of application with rain or irrigation water is rated high. There was no bound acephate or methamidophos present in the soil

Section 13 - Disposal Considerations

Dispose of contents and container in accordance with local regulations. End users must dispose of any unused product as per the label recommendations.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. 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.

Section 14 - Transport Information

D.O.T. Shipping Name:	Insecticide, dry, non-regulated
Technical Shipping Name:	Tide Acephate 90 WDG
Packing Group:	NA
D.O.T. Hazard Class:	NA
U.N./N.A. Number:	NA
Marine pollutant	NDA



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Section 15 - Regulatory Information

FIFRA –

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. The following is the hazard information as required on the pesticide label:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

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

ENVIRONMENTAL HAZARDS

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U.S Federal Regulations

Regulations under FIFRA: All pesticides are governed under FIFRA (Federal Insecticide, Fungicide and Rodenticide Act). Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

EPCRA SARA Title III Classification

Section 302 (EHS) TPQ: None

Section 304 (EHS) RQ: None

Section 311/312 Hazard Classes:

Acute Health Hazard: Yes

Chronic Health Hazard: Yes

Fire Hazard: No

Sudden Release of Pressure Hazard: No

Reactivity Hazard: No

California Proposition 65

Not listed

CERCLA (Comprehensive Response Compensation, and Liability Act) : NA

EPCRA (Emergency Planning and Community Right-to-know Act) Section 313 : Yes

OSHA (Occupational Safety and Health Administration): This product is hazardous under the



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criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910, 1200.)

RCRA (Resource Conservation and Recovery Act) : NA

TSCA Status

Acephate is exempt from TSCA, subject to FIFRA

CAS# 7757-82-6 is listed on the TSCA inventory.

CAS 26316-40-5 is listed on the TSCA inventory.

CAS 9003-39-8 is listed on the TSCA inventory.

State Regulations

Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities.

CAS# 7757-82-6 can be found on the following state right to know lists: Pennsylvania, Massachusetts.

Section 16 - Other Information

SDS# TIC-INS842297

Created date: 03/17/2015

Update date:

Revised for:

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