



## MATERIAL SAFETY DATA SHEET

PRODUCT : Acephate Technical

PRODUCT DESIGNATION : Insecticide

---

### Section 1. Product & Company Identification

---

Common Name : Acephate Technical

Grade : Technical

Active Ingredient : Acephate

Chemical Name of Active Ingredient (IUPAC) : O,S-Dimethyl acetylphosphoramidothioate<sup>2</sup>

Chemical Family of A. I. : Organophosphate

Molecular Formula of A. I. : C<sub>4</sub>H<sub>10</sub>NO<sub>3</sub>PS

Molecular Mass of A. I. : 183.17 g/mol

Manufacturer & Supplier : **M/s PERFECT SOLUTIONS**

**Office Add:** B-371, Paschim Vihar, New Delhi - 110063  
(India)

**Factory Add:** 15/1, 15/2, 15/3 Industrial Estate, Vidisha -  
464001 (M.P)

Telephone Number : +91 8375844625\

---

### Section 2. Composition / Information on Ingredients

---

Identity	CAS RN	% W/W content
Acephate, a.i.	30560-19-1	97.00
Other additives	00000-00-0	Q. S to make to 100.00%



---

## Section 3. Hazards Identification

---

### Emergency Overview

**Appearance and odour:** White Powder and Strong Cabbage like Odour

**Warning Statements:** Keep out of reach of children

**Potential Health Effects Likely Routs of Exposure:** Skin contact, Inhalation and Ingestion.

**Eye Contact:** This product is expected to cause minimal or no eye irritation. The degree of injury will depend on the amount and duration of contact and the speed and thoroughness of the first aid treatment. Exposure may include redness and possibly some minor swelling.

**Skin contact:** This product is expected to cause brief and/or minor irritation. The degree of injury will depend on the amount and duration of contact and the speed and thoroughness of the first aid treatment. An exposure may include redness and possibly some minor swelling

**Ingestion:** This product has been shown to be slightly toxic when ingested. The degree of injury will depend on the amount of material ingested and the speed and thoroughness of the first aid treatment.

**Inhalation:** Based on evaluation of the ingredients and/or similar products, this product is expected to be minimally toxic when inhaled. The degree of injury will depend on the amount of material inhaled and the speed and thoroughness of the first aid treatment. Exposure to high concentrations of dust may result in respiratory irritation. Signs and symptoms may include, but not be limited to, nasal discharge, sore throat, coughing and difficulty in breathing.

---

## Section 4. First Aid Measures

---

### Emergency and First Aid Procedure –

**If in Eyes:** Irrigate the eyes with large amount water or normal saline occasionally lifting upper and lower lids until no evidence of chemical remains and obtain a medical help.

**If on Skin:** Remove contaminated clothing and shoes immediately. Wash contaminated area with soap or mild detergent and large amount of water until no effects of chemical remains. If symptoms persist get medical help.

**If Inhaled:** Remove the patient from the exposure area to fresh air immediately. If breathing has stopped perform the artificial respiration. Keep person warm and rest. Get medical attention immediately.



**If Swallowed:** Remove by gastric lavage and catharsis, maintain blood pressure and airway, and Give oxygen if respiration is depressed. Do not perform gastric lavage if victim is unconscious. Get medical attention immediately.

---

## Section 5. Fire Fighting Measures

---

**Extinguishing Media:** Dry chemical, CO<sub>2</sub>, Water spray, standard foam. For larger fire, use water spray, fog or standard foam.

**Exposure Hazards:** During a fire, irritating and possibly toxic gases like carbon dioxide; carbon monoxide; nitrogen oxides; sulfur dioxide; hydrogen chloride; may be generated by thermal decomposition or combustion.

**Fire Fighting:** Use dry chemical, foam or CO<sub>2</sub> extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate non essential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

---

## Section 6. Accidental Release Measures

---

**Personal Precautions:** Avoid contact with skin, eyes and clothing.

**Environmental Precautions:** Prevent contamination of soil, drains and surface water.

**Steps to be taken in case of a spill:** Absorb the material in the sand, soil, diatomaceous earth or suitable absorbent. Place in suitable material and remove to safe place or dispose of in an incinerator approved for chemicals.

---

## Section 7. Handling & Storage

---

**Precautions in Handling:** Use appropriate (impervious) clothing, gloves and closed foot ware to prevent the repeated contact with skin. Use flash proof and dust resistant goggles to prevent the contact with eyes.

**Precautions in Storage:** Keep the product in original container tightly closed and correctly labeled. Store in suitable, cool, dry, well ventilated place under lock and key; away from the reach of the children, animals, food and animal feeding stuffs. Store away from the incompatible substances and source of ignition



---

## Section 8. Exposure Control, Personal Protection

---

**Personal Protection:** Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

**Protective Gloves:** Wear heavy duty appropriate gloves

**Eye Protection:** Avoid contact with eyes. Where there is potential for eye contacts have eye flushing equipment available. Tightly fitting safety goggles. Face-shield.

**Skin Protection:** Wear protective gloves/clothing. Long-sleeved clothing

**Environmental Exposure Control:** Prevent further leakage or spillage if safe to do so. Discharge into the environment must be avoided. Local authorities should be advised if significant spillage cannot be contained.

**Respiratory Protection:** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**Engineering Control:** Ensure adequate ventilation, especially in confined areas. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

---

## Section 9. Physical and Chemical Properties

---

Appearance / state	:	Solid
Colour	:	White Powder
Odour	:	Strong cabbage like odour
Melting point	:	86.9 - 91.0°C (188.4 - 195.8°F) (Decomposes)
Specific gravity	:	1.35
Vapour pressure	:	0.226 mPa (24°C)
pH	:	5-7 (21°C)
Density	:	1.35



---

## Section 10. Stability & Reactivity

---

**Chemical Stability:** Direct source of heat/open flames.

Thermal Stability: Stable to heat.

**Materials to Avoid:** Avoid contact with alkaline materials.

**Hazardous Decomposition Product:** During a fire, irritating and possibly toxic gases like carbon dioxide; carbon monoxide; nitrogen oxides; sulfur dioxide; hydrogen chloride; may be generated by thermal decomposition or combustion.

**Hazardous Polymerisation:** Not known.

---

## Section 11. Toxicological Information

---

Oral LD50: Rat (male/female) >1000mg/kg Rat

Skin Contact, Dermal LD50: Rat (male / female) 10000mg/kg

Inhalation, LC50: Rat (male / female) > 15 mg/L (4 hours)

Eye Irritation: Rabbit, Slight Irritant

Skin Irritation: Rabbit, Slight Irritant

Sensitization: Guinea Pig, Non- Sensitising

---

## Section 12. Ecological Information

---

Acute Oral Toxicity in Birds: In Mallard ducks >350 mg/kg of body weight

Acute Toxicity in Fish (96 hrs LC<sub>50</sub>) : Rainbow trout : >100 mg/L

Acute Toxicity Honey bees: Oral LC<sub>50</sub> 48 Hrs 1.2 µg/bee

Acute toxicity in Daphnia Magna (48 hrs) = 7.24

---

## Section 13. Disposal Consideration

---

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed on site (by use according to the label) or at an approved waste disposal facility. Further information can be obtained from the EPA or the equivalent state and local agencies.

**Containers:** Completely empty bag into application equipment. Check with EPA, State, and local authorities for the current regulations applicable to your area for disposal of waste containers



---

## Section 14. Transport Information

---

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

Toxic substances under the applicable, ICAO/IATA, IMO, ADG.

### IMDG Classification

Shipping name : Environmentally hazardous substances, solid, n.o.s.  
(Acephate)  
Class : 9  
Packing group : III  
UN number : 3077  
Marine pollutant : Yes

---

## Section 15. Regulatory Information

---

Contains : Acephate Technical

Regulatory Status: 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.

SARA TITLE III: Sara (313) Chemicals: Acephate

Sara (311,312): Immediate Health Effects: Yes

Chronic Health Effects: Yes

Fire Hazard: No

Sudden Release of Pressure: No

Reactivity Hazard: No

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). 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.

RQ: Reportable Quantity

---

## **Section 16. Other Information**

---

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the PRODUCT AS SUCH. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons in receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces formulations(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.

**Safety Division : PERFECT SOLUTIONS, SAFETY DIVISION**