

Common Name: **ACEPHATE**

Synonyms: N-(Methoxy(methylthio)phosphinoyl)acetamide; Orthene™; Lancer®

CAS No: 30560-19-1

Molecular Formula: C₄H₁₀NO₃PS

RTK Substance No: 3140

Description: Colorless to white crystal or powder with an odor of rotten cabbage. It may be dissolved in a liquid "carrier."

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
<p>3 - Health</p> <p>1 - Fire</p> <p>1 - Reactivity</p> <p>DOT#: UN 2783</p> <p>ERG Guide #: 152</p> <p>Hazard Class: 6.1 (Poison)</p>	<p>Acephate does not burn, however it is often dissolved in a liquid carrier which may be flammable or combustible.</p> <p>Use dry chemical, CO₂, water spray or foam as extinguishing agents.</p> <p>POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Phosphorus Oxides</i>, <i>Sulfur Oxides</i> and <i>Nitrogen Oxides</i>.</p> <p>Use water spray to keep fire-exposed containers cool.</p>	<p>Acephate is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE); ALKALINE MATERIALS or STRONG BASES (such as SODIUM HYDROXIDE and POTASSIUM HYDROXIDE); and HYPOCHLORITES.</p>

SPILL/LEAKS

Isolation Distance:

Solid Spill: 25 meters (50 feet)

Liquid Spill: 50 meters (175 feet)

Fire: 800 meters (1/2 mile)

Moisten solid spilled material, or use a HEPA-filter vacuum for clean-up, and deposit in sealed containers.

Absorb liquids in vermiculite, dry sand, earth, or a similar material and deposit in sealed containers. DO NOT wash into sewer.

Acephate is hazardous to the environment and specific attention should be given to birds and honeybees.

PHYSICAL PROPERTIES

Odor Threshold:	Rotten cabbage
Flash Point:	199°F (93°C)
Vapor Pressure:	<1 mm Hg at 77°F (25°C)
Specific Gravity:	1.35 (Water = 1)
Water Solubility:	Soluble
Melting Point:	149° to 194°F (65° to 90°C)
Decomposes:	311°F (155°C)
Molecular Weight:	183.2
pH:	3.5-4.5 (1% in water)

EXPOSURE LIMITS

No occupational exposure limits have been established for **Acephate**.

Acephate is skin absorbable.

PROTECTIVE EQUIPMENT

Gloves:	Nitrile, Neoprene and SilverShield®/4H®
Coveralls:	DuPont Tyvek® for <i>solid Acephate</i>
Respirator:	Outdoors: Full facepiece APR with Organic vapor cartridge and pesticide pre-filters Indoors or Liquid: Supplied air or SCBA

HEALTH EFFECTS

Eyes:	Irritation and burns
Skin:	Irritation and burns
Inhalation:	Headache, dizziness, blurred vision, sweating, nausea and vomiting, muscle twitching, loss of coordination, convulsions, coma and death
Chronic:	Carcinogen (liver) in animals

FIRST AID AND DECONTAMINATION

Remove the person from exposure.

Flush eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn. Seek medical attention immediately.

Quickly remove contaminated clothing and wash contaminated skin with large amounts of soap and water. Seek medical attention immediately.

Begin artificial respiration if breathing has stopped and CPR if necessary.

Transfer to a medical facility.