

Material Safety Data Sheet

Date last revised: 31 March 2003

I. General Information

Chemical Name and Synonyms Temephos	Trade Name & Synonyms Abate 4-E Insecticide
Chemical Family Organophosphate	EPA Registration Number 8329-60, 8329-69
Proper DOT Shipping Name Agricultural Insecticide, N.O.I.	DOT Hazard Classification Non-Hazardous
Manufacturer Clarke Mosquito Control Products, Inc.	Manufacturer's Phone Number (630) 894-2000
Manufacturer's Address 159 North Garden Avenue Roselle, Illinois 60172	INFOTRAC (Transportation/spill Emergency) 1-800-535-5053 Poison Control Center (Medical Emergency) 1-800-214-7753

WARNING! Keep out of reach of children. Harmful if swallowed or absorbed through the skin. Causes skin and eye irritation. Wash thoroughly with soap and water after handling. Avoid breathing spray mist.

II. Ingredients

Principal Hazardous Components	CAS #	Percent	OSHA PEL-TWA
Temephos	003383-96-8	44.6%	15 mg/m3 – TWA
Petroleum Distillate	N/A	40-54%	150 mg/m3 – TWA
Toluene	108-88-3	< 0.4%	200 ppm - TWA

III. Physical Data

Boiling Point (°F): Not Available	Specific Gravity (H₂O = 1): 1.0756 mg/ml
Vapor Pressure (mm Hg.): Not Available	Vapor Density (Air = 1): Not Available
Solubility in Water: Emulsifies in water	Odor: Mercaptan-like odor
% Volatile: About 40% by weight	Octanol/H₂O Partition Coeff: Not Available
Physical State: Viscous Liquid	Viscosity: 10.36 cSt@ 20C
pH: = 6.4	Evaporation rate: Not Available
Appearance: Clear brown, mobile liquid	

IV. Fire & Explosion Hazard Data

Flash Point (Test Method): 61.5 C
Extinguishing Media: Use water, foam, dry chemical, or carbon dioxide (CO ₂), to extinguish fires.
Special Fire Fighting Procedures: Wear self-contained, positive pressure breathing apparatus and full fire fighting protective clothing. Keep unnecessary people away. Use as little water as possible. Dike area of fire to prevent pesticide run-off. Use spray or fog, solid stream may cause spreading. Do not decontaminate personnel or equipment, or handle broken packages or containers without protective equipment as specified in the Exposure Control Section. Decontaminate emergency personnel with soap and water before leaving the fire area.
Unusual Fire & Explosion Hazards: Avoid breathing dusts, vapors and fumes from burning materials. Control run-off water. Alert medical personnel to be ready to treat for pesticide poisoning. Control run-off water. If water enters a drainage system, advise the authorities downstream. Hot containers may explode. Use water to keep containers cool.

V. Health Hazard Data

Toxicity*: Oral LD ₅₀ : > 1,500 mg/kg Dermal LD ₅₀ : > 2,000 mg/kg	This product is considered to be slightly toxic by ingestion in single doses. This product is considered to be moderately toxic by single skin applications.
* Toxicity data based on ABATE Technical	
Teratogenicity: No teratogenic or fetotoxic effect was observed at all dose levels tested in both rabbits and rats	Carcinogenicity: Temephos is not listed as a human carcinogen by the IARC, OSHA, or NTP.
Mutagenicity: No mutagenic activity was observed in ABATE Tech by all test methods used. (Bacterial/Microsome Reverse Mutation (AMES) Test, Chemical Induction of Chromosome Aberration using Monolayer Cultures or Chinese Hamster Ovary (CHO) Cells with and without Metabolic Activity, Rat Hepatocyte Primary Culture/DNA Repair Test, and Mammalian Cell CHO/Hypoxanthine Guanine Phosphoribosyl Transferase (HGPRT) Mutagenicity Test)	
Medical Conditions Aggravated by Exposure: Knowledge of the available toxicology information and of the physical and chemical properties of the material suggest that overexposure is unlikely to aggravate existing medical conditions.	
Symptoms of Overexposure (Note to Physicians): This product may inhibit activity of cholinesterase. Atropine is antidotal. Pralidoxime chloride (2-PAM; PROTOPAM Chloride) may be effective as an adjunct to atropine. Because of increased risk of chemical pneumonia or pulmonary edema caused by aspiration of aromatic hydrocarbons into the lung, vomiting should be induced only under professional supervision.	

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Emergency First Aid

Skin Contact: Wash with plenty of soap and water. Get medical attention.

Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. See a physician promptly.

Eye: Causes substantial but temporary eye injury. Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contacts, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

Ingestion: Do not induce vomiting. Get medical attention. Aspiration may cause chemical pneumonitis.

VI. Reactivity Data

Stability:		Unstable	Conditions to Avoid: Storage above 60 °C
	X	Stable	
Incompatibility		May Occur	Conditions to Avoid: Strong alkalis and some oxidizing agents
	X	Will Not Occur	
Hazardous Decomposition Products	Decomposition may produce oxides of carbon, phosphorous, and sulfur		

VII. Environmental Protection Procedures

Spill Response: Wear protective equipment per Exposure Control Methods Section. Shovel spill into a closed metal container.

Storage: Do not contaminate water, food, or feed by storage or disposal. Store in a secure, dry, well-ventilated room, building or covered area.

Waste Disposal: Dispose in accord with local, state, and federal regulation.

VIII. Special Protection Information

Exposure Control Methods: During formulation, it is recommended to wear protective clothing, rubber gloves, and goggles to prevent exposure to skin and eyes. Wear an approved mist respirator when such exposure could exceed the PEL.

Other Protection: Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

IX. Additional Regulatory Information

SARA Title III Data

Section 311 and 312 Hazard Categories

Immediate Health Hazard	Y	Reactive Hazard	N
Delayed Health Hazard	N	Sudden Pressure	N
Fire Hazard	N	Release Hazard	N

Section 302 Extremely Hazardous Substances:

None

Section 313 Toxic Chemicals:

Temephos

CAS# 3383-96-8

44.6% by weight

Toluene

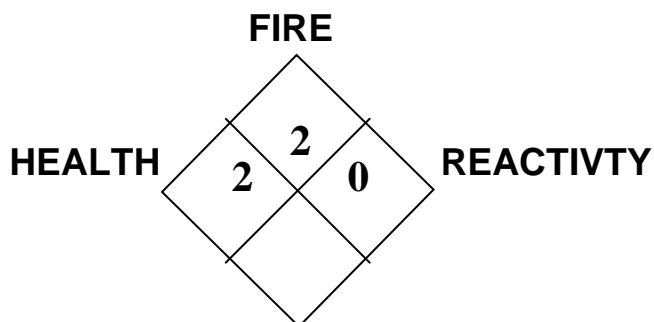
CAS# 108-88-3

<0.4% by weight

CERCLA Reportable Quantity:

Toluene

1,000 lb. (453.6 kg.)



NFPA Code Key

- 4 = Severe
- 3 = Serious
- 2 = Moderate
- 1 = Slight
- 0 = Minimal

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