

MATERIAL SAFETY DATA SHEET

Agricultural Products Group
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EMERGENCY TELEPHONE NUMBERS:

BASF Corporation: 1 (800) 832-HELP
CHEMTREC: 1 (800) 424-9300

Product No.: 579682 **Thimet® 20-G soil and systemic insecticide**

Date Prepared: 7/1/2000 **Date Revised:** 8/7/2000

SECTION I

Trade Name: Thimet® 20-G soil and systemic insecticide

Chemical Name: O,O-diethyl-S-[(ethylthio)methyl]phosphorodithioate

Synonyms: phorate, AC 3,911

Formula: C7 H17 O2 P S3

Chemical Family: Organophosphate

Mol Wt: 260.37

SECTION II - INGREDIENTS

COMPONENT	CAS NO.	%	PEL/TLV - SOURCE
phorate*	298-0202	20.00	0.05 mg/m(3) Skin; 0.2 mg/m(3) STEL - ACGIH
inerts		80.00	None established

This formulation contains clay. Clay may contain more than 0.1% crystalline silica.

SARA Title III Section 313: *Listed

SECTION III - PHYSICAL DATA

BOILING/MELTING POINT @760mm Hg: N/D	pH: 4 - 7 (depending on carrier source)
VAPOR PRESSURE mmHg @ 20°C: N/D	
SPECIFIC GRAVITY OR BULK DENSITY:	50 - 56 lb/cu.ft.
SOLUBILITY IN WATER: Negligible	
APPEARANCE: Brown to gray granules	ODOR: Mercaptan-like INTENSITY: Moderate

SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT (TEST METHOD): Not applicable	AUTOIGNITION TEMP: N/D
FLAMMABILITY LIMITS IN AIR (% BY VOL):	LOWER: N/D UPPER: N/D
NFPA 704 HAZARD CODES	
HEALTH: 4	FLAMMABLE: N/R INSTABILITY: N/R OTHER: N/R
NFPA 30 STORAGE CLASSIFICATION: N/R	

EXTINGUISHING MEDIUM	Use water fog, foam, CO(2), or dry chemical extinguishing media suitable for surrounding fires.
SPECIAL FIREFIGHTING PROCEDURES	Firefighters should be equipped with self-contained breathing apparatus and turnout gear. DO NOT decontaminate personnel or equipment or handle broken packages without the personal protective equipment specified in Section VII Personal Protection.
UNUSUAL FIRE EXPLOSION HAZARDS	Decomposes on prolonged heating at 120°C or higher. Toxic and/or flammable gases may be formed. Flammable vapor/air mixture may be explosive. Thermal decomposition products may include but are not limited to hydrogen sulfide, mercaptans (including methyl mercaptan), thiophosphates, diakylsulfides (including dimethylsulfide) and non-specified oxides of carbon, phosphorus, and sulfur.

SELECT ACRONYM KEY

N/A - Not available; N/D - Not determined; N/R - Not rated; N/E - Not established

SECTION V - HEALTH DATA**TOXICOLOGICAL TEST DATA:**

Data for formulated product:

Rat (male) Oral LD50 = 13.5 mg/kg

Rat, (female) Oral LD50 = 5.1 mg/kg

Rabbit (male), Dermal LD50 = 113 mg/kg

Rabbit (female), Dermal LD50 = 86 mg/kg

Rabbit, (combined sexes) Dermal LD50 = 97 mg/kg

Rat, Inhalation LC50 (4 hr) - Not available.

Rat, Inhalation LC50 (1 hr) - Not available.

Rabbit, Skin Irritation - Not available.

Rabbit, Eye Irritation - Irritating

Guinea pig, Dermal Sensitizer - Not available.

Phorate may be absorbed through the skin, eyes and lungs producing systemic effects.

OSHA, NTP, or IARC Carcinogen: See EFFECTS OF OVEREXPOSURE

EFFECTS OF OVEREXPOSURE:

See Product Label and Directions For Use for additional precautionary statements.

DANGER! KEEP OUT OF REACH OF CHILDREN.

FATAL IF SWALLOWED, INHALED, OR ABSORBED THROUGH THE SKIN.

DO NOT GET IN EYES, ON SKIN OR ON CLOTHING.

DO NOT BREATHE DUST.

Symptoms of acute toxicity may include nausea, abdominal cramps, vomiting, salivation, excessive sweating and diarrhea.

Other symptoms may include chest tightness, wheezing, blurred vision, fatigue, slurred speech and confusion.

Death may result from respiratory arrest, respiratory paralysis and/or constriction of the lungs.

A flu-like condition, characterized by loss of appetite, weight loss, and a general feeling of sickness has been reported following chronic exposure to organophosphates.

Persons working with this product should have frequent blood tests of their cholinesterase levels.

This formulation contains clay. Clay may contain more than 0.1% crystalline silica.

Overexposure to crystalline silica results in silicosis, a lung disease characterized by coughing, difficult breathing, wheezing, scarring of the lungs, and repeated, non-specific chest illnesses. The International Academy for Research on Cancer (IARC) has classified crystalline silica in Group 1 (those agents with evidence of carcinogenicity to humans).

Existing medical conditions aggravated by this product: None known.

FIRST AID PROCEDURES

If swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger, or, if available, by administering syrup of ipecac. If person is unconscious, do not give anything by mouth and do not induce vomiting.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

If on skin: 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 in eyes: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

Repeated inhalation or skin contact may, without symptoms, progressively increase susceptibility to poisoning.

Note to physician: Atropine is an antidote. Warning symptoms include weakness, headache, tightness in chest, blurred vision, nonreactive pinpoint pupils, salivation, nausea, vomiting, diarrhea, and abdominal cramps. Give atropine intramuscularly or intravenously, depending on severity of poisoning, 2 to 4 milligrams every 10 minutes until fully atropinized as shown by dilated pupils, dry flushed skin and tachycardia. Twenty to thirty milligrams, or more, may be required during the first 24 hours. Never give opiates or phenothiazine tranquilizers. Clear chest by postural drainage. Artificial respiration or oxygen administration may be necessary. Observe patient continuously for at least 48 hours. Allow no further exposure to any cholinesterase inhibitor until cholinesterase regeneration has taken place as determined by blood tests.

Pralidoxime chloride (2-PAM; PROTOPAM chloride) may be effective as an adjunct to atropine. Use according to label directions. In very severe cases of poisoning, Diazepam may be indicated to control convulsions.

Note: Have the product container or label with you when calling a poison control center or doctor or going for treatment.

SECTION VI - REACTIVITY DATA

STABILITY: Stable. Decomposes on heating. Avoid moisture.

CONDITIONS TO AVOID: Store in original container in cool, dry, well ventilated place away from ignition sources, heat or flame.

CHEMICAL INCOMPATIBILITY: Strong oxidizers, strong acids, and strongly alkaline materials.

HAZARDOUS DECOMPOSITION PRODUCTS: See SECTION IV - Fire and Explosion Hazards

HAZARDOUS POLYMERIZATION: Does not occur.

CONDITIONS TO AVOID: Does not polymerize.

CORROSIVE TO METAL: No

OXIDIZER: No

SECTION VII - PERSONAL PROTECTION

PESTICIDE APPLICATORS & WORKERS must refer to the Product Label and Directions For Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170.

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory Protection:

Wear a NIOSH approved toxic dust respirator if the TLV or STEL is exceeded (0.05 mg/m³) Skin; 0.2 mg/m³ STEL).

Eye Protection:

Chemical goggles when respirator does not provide eye protection.

Protective Clothing:

Rubber gloves, rubber boots and protective clothing as necessary to prevent skin contact.

Rubber gloves, boots and other personal protective equipment should be decontaminated prior to re-use.

Ventilation:

Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

SECTION VIII - ENVIRONMENTAL DATA

ENVIRONMENTAL TOXICITY DATA

Phorate is extremely toxic to fish and wildlife. Birds feeding in treated areas may be killed.

Phorate is toxic to bees.

SARA 311/312 REPORTING

FIRE: N PRESSURE: N REACTIVITY: N ACUTE: Y CHRONIC: Y TPQ(lbs): 10

SPILL AND LEAK PROCEDURES:

In case of large scale spillage of this product, avoid contact, isolate area and keep out animals and unprotected persons. Call CHEMTREC (800 424-9300) or BASF Corporation (800 832-HELP). For a small spill, wear personal protective equipment as specified on the label.

FOR A LIQUID SPILL: Dike and contain the spill with inert material (sand, earth, etc.) and transfer the liquid and solid diking materials to separate containers for disposal.

DECONTAMINATION SOLUTION: 10% household bleach, 5% isopropyl alcohol, 85% water. Rinse spill area and tools with the decontamination solution. Contain and absorb this rinsate with inert absorbents such as granular clay or sawdust and place in the same container as the spilled material.

SPILLS TO BODIES OF WATER: Immediately notify the appropriate authorities downstream of the spill so they can determine if further action is needed.

RELEASES TO THE ENVIRONMENT: The CERCLA RQ for this product is 10 lb. phorate (equivalent to 1.2 gallons of product). A spill of or in excess of the RQ requires notification to state, local and federal emergency authorities.

HAZARDOUS SUBSTANCE SUPERFUND: Yes

RQ(lbs): 10

WASTE DISPOSAL METHOD:

Pesticide wastes are acutely hazardous. Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

HAZARDOUS WASTE 40CFR261: Yes

HAZARDOUS WASTE NUMBER: P094

CONTAINER DISPOSAL:

Return empty container to point of purchase.

SECTION IX - SHIPPING DATA - PACKAGE AND BULK

D.O.T. PROPER SHIPPING NAME (49CFR172.101-102):

Organophosphorus pesticides, solid, toxic

HAZARDOUS SUBSTANCE (49CFR CERCLA LIST):

Phorate

RQ(lbs): 10

D.O.T. HAZARD CLASSIFICATION (CFR 172.101-102):**PRIMARY**

6.1

SECONDARY**D.O.T. LABELS REQUIRED (49CFR172.101-102):**

6.1

D.O.T. PLACARDS REQUIRED (CFR172.504):

Poison

POISON CONSTITUENT (49CFR172.203(K)):

phorate

BILL OF LADING DESCRIPTION

Organophosphorus pesticide, solid, toxic, RQ (phorate), 6.1, UN2783, PG I, ERG 152, Marine Pollutant

CC NO.: Not applicable

UN/NA CODE: UN 2783

SECTION X - ADDITIONAL INFORMATION**Thimet® 20-G soil and systemic insecticide****RESTRICTED USE CLASSIFICATION - Due to acute oral and dermal toxicity and avian hazards**

Keep out of reach of children. Keep out of reach of domestic animals.

Not for use or storage in or around the home.

EPA Reg. No. 241-257

KEEP OUT OF REACH OF CHILDREN

DANGER/PELIGRO

Complete Label and Directions For Use are attached to the product.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

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DISCLAIMER

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