



MATERIAL SAFETY DATA SHEETS

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Amiton

1. CHEMICAL IDENTITY

Chemical Name : Amiton

Chemical Classification: Toxic

Trade Name : Inferno, Metramac, Tetram

Synonyms: O, O-Diethyl S-(β -diethylamine) ethyl phosphorothioate, Inferno,

Formula : C₁₀H₂₄NO₃PS

CAS No: 78-53-5

UN No: 3018

Regulated Identification

Shipping Name : Organophosphorus Pesticide

Hazchem Code : 2X

Codes / Label : Class 6.1, Toxic

Hazardous Waste ID No : 15

HAZARDOUS INGREDIENTS	C.A.S. No.	HAZARDOUS INGREDIENTS	C.A.S. No.
1 Amiton	78-53-5	3	
2		4	

2. PHYSICAL / CHEMICAL DATA

Boiling Pt. °C: 110 °C at 0.2 mm Hg **Physical State:** Liquid **Appearance:** Colourless

Melting Pt °C: **Vapour Pressure @ 35°C mmHg:** 0.00032 (20 °C) **Odour:** Faint

Vapour Density(Air =1): **Solubility in water at 30°C g/100ml:** Highly soluble. **Others:** Miscible with organic solvents.

Specific Gravity (Water =1): **pH :**

3. FIRE / EXPLOSION HAZARD DATA

Flammability : No **LEL:** **Flash Point °C in OC:**

TDG Flammability: **UEL:** **Flash Point °C in CC:**

Autoignition Temperature °C :

Explosion sensitivity to impact:

Explosion sensitivity to static Electricity:

Hazardous Combustion Products : When heated to decomposition, toxic gases and vapours (NO_x, SO_x, PO_x) are released.

Hazardous Polymerization :

Combustible Liquid: No **Explosive Material:** No **Corrosive Material** No

Flammable Material: No **Oxidiser :** No **Others:**

Pyrophoric Material: No **Organic Peroxide :** No

4. REACTIVITY DATA

Chemical Stability : Stable

Incompatibility with other material : Alkalies

Reactivity :

Hazardous :
Reaction Products

5. HEALTH HAZARD DATA

Routes of entry: Inhalation, Ingestion, Skin and Eyes

Effects of Exposure / Symptoms:

The chemical is an organophosphate which is readily absorbed through inhalation, ingestion and skin contact and causes inhibition of blood cholinesterase. The initial symptoms are giddiness, headache and nausea. Subsequently, cold sweating, vomiting, abdominal cramp, diarrhoea, blurred vision, twitching in the eyelids may occur. In severe cases, laboured breathing, wheezing, excessive sweating, salivation, mental confusion, convulsion, progressive cardiac and respiratory failure and coma are manifested.

Emergency Treatment :

Inhalation: Move victim to fresh air. Call emergency medical care. Apply artificial respiration if victim is not breathing. Do not use mouth-to-mouth method.

Skin: Remove and isolate contaminated clothing and shoes. In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. Wash skin with soap and water. Keep victim warm and quiet.

Eyes: Irrigate exposed eyes with copious amounts of tepid water for at least 15 minutes. If irritation, pain, swelling, lacrimation, or photophobia persist, the patient should be seen in a health care facility.

Ingestion: Do not induce emesis. Administer charcoal as a slurry (240 mL water/30 g charcoal). Usual dose: 25 to 100 g in adults/adolescents

LD50 (oral-rat) mg/kg: 5.4 mg/kg

STEL:

LC50 (rat) mg/kg:

Odour Threshold:

**Permissible
Exposure Limit:**

TLV (ACGIH) :

NFPA Hazard	Health	Flammability	Reactivity	Special
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Signals

6. PREVENTIVE MEASURES

Personal Protective Equipment : Neoprene-coated gloves, protective clothing, face-shields, splash-proof goggles and respirators.

Handling : All chemicals should be considered hazardous. Avoid direct physical contact. Use appropriate, approved safety equipment. Untrained individuals should not handle this chemical or its container. Handling should occur in a chemical fume hood.

Storage : Store in a cool, dry place in a covered container. Store in areas where any spillage from the containers will not endanger workers or contaminate other materials.

Precautions :

7. EMERGENCY / FIRST AID MEASURES

FIRE:

Fire Extinguishing Media : Dry chemical, carbon dioxide, foam

Special Procedure : Use water to keep the fire-exposed containers cool.

Unusual Hazards : When heated to decomposition, can emit toxic fumes of oxides of nitrogen, phosphorus, and sulfur.

EXPOSURE: First Aid Measures:

Inhalation: Move victim to fresh air. Call emergency medical care. Apply artificial respiration if victim is not breathing. Do not use mouth-to-mouth method.

- Skin:** Remove and isolate contaminated clothing and shoes. In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. Wash skin with soap and water. Keep victim warm and quiet.
- Eyes:** Irrigate exposed eyes with copious amounts of tepid water for at least 15 minutes. If irritation, pain, swelling, lacrimation, or photophobia persist, the patient should be seen in a health care facility.
- Ingestion:** Do not induce emesis. Administer charcoal as a slurry (240 mL water/30 g charcoal). Usual dose: 25 to 100 g in adults/adolescents

Antidotes / Dosages: See "Additional Information"

SPILLS :

Steps To Be Taken : Use water spray to flush spills away from exposure. Wash the surface with alkali and water.

Waste Disposal Method: Collect all wastes in air-tight bags for burning in a suitable combustion chamber.

8. ADDITIONAL INFORMATION / REFERENCES

Amiton is used as a contact insecticide and miticide.

Antidotes/Dosages : (1) Atrophine sulphate (intravenous injection of a dose of 2 - 4 mg to be repeated every 5-10 mins. until adequate atropinisation.) (2) Atropine sulphate solution (0.15-1%) for instilling in the eyes. (3) Cholinesterase reactivators 2PAM (1-2 gm I.M. or I.V. injection), TMB-4, Toxogonin (240 mg injection) (4) Diazepam (5-10 mg I.M. injection)

9. MANUFACTURERS / SUPPLIERS DATA

NAME OF FIRM :	Contact person
MAILING ADDRESS :	in Emergency :
TELEPHONE / TELEX NOS :	Local Bodies involved :
TELEGRAPHIC ADDRESS :	Standard Packing :
OTHERS :	Trem Card Details / Ref :

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