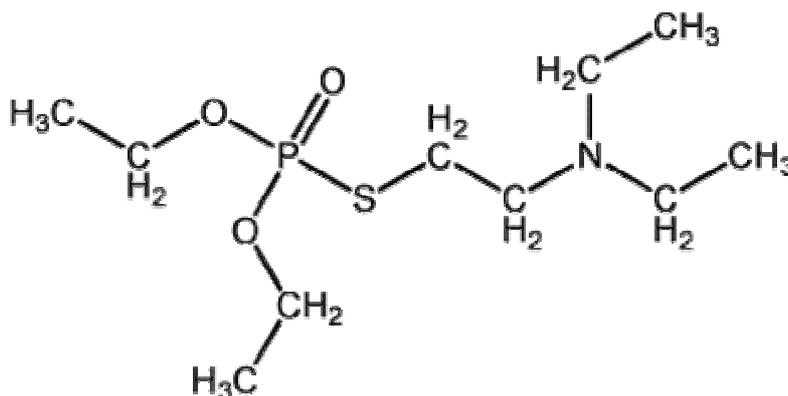


Amitron

- VG
- Tetram
- S-(2-(Diethylamino)ethyl) O,O-diethylphosphorothioate
- O,O-Diethyl-S-(beta-diethylamino)ethyl phosphorothioate
- O,O-Diethyl s-2-diethylaminoethyl phosphorothioate
- O,O-Diethyl s-(beta-diethylamino)ethyl phosphorothiolate

Formula C₁₀H₂₄NO₃PS

Structure



Description Colorless liquid.

Uses Contact insecticide, miticide. Chemical warfare agent. Cholinesterase inhibitor.

Registry Numbers and Inventories.

CAS	78-53-5
NIH PubChem CID	6542
RTECS	TF0525000
RTECS class	Agricultural Chemical and Pesticide; Drug
UN (DOT)	2783
Merck	12,509
Beilstein/Gmelin	1785674
Beilstein Reference	4-04-00-01596
EPA OPP	57302
Swiss Giftliste 1	G-6950

Properties.

Formula	C ₁₀ H ₂₄ NO ₃ PS
Formula mass	269.35000000000002

Boiling point, °C	76 (0.01 torr)
Vapor pressure, mm_{Hg}	0.00032 (20 C)
Density	1.048 g/cm ³ (25 C)
Solubility in water	highly soluble
Viscosity	4.85 cp (25 C)
Surface tension	31.2 g/s ² (25 C)
Refractive index	1.474 (20 C)

Hazards and Protection.

Storage	Keep in a cool, dry, dark location in a tightly sealed container or cylinder. Keep away from incompatible materials, ignition sources and untrained individuals. Secure and label area. Protect containers/cylinders from physical damage.
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.
Protection	Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Stop leak if you can do it without risk. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Use clean non-sparking tools to collect absorbed material.
Respirators	Use NIOSH/MSHA approved respirator appropriate for exposure of concern.
Small spills/leaks	Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind; keep out of low areas. Ventilate closed spaces before entering them. Remove and isolate contaminated clothing at the site. Do not touch spilled material; stop leak if you can do so without risk. Use water spray to reduce vapors. Small spills: absorb with sand or other noncombustible absorbent material and place into containers for later disposal. Large spills: dike far ahead of spill for later disposal.
Stability	No data.

Fire.

Fire fighting	Stay upwind; keep out of low areas. Ventilate closed spaces before entering them. Wear positive pressure breathing apparatus and special protective clothing. Remove and isolate contaminated clothing at the site. Move
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container from fire area if you can do so without risk. Fight fire from maximum distance. Small fires: dry chemical, carbon dioxide, water spray, or foam. Large fires: water spray, fog, or foam.

Fire potential Combustible material: may burn but does not ignite readily.

Hazards Containers may explode when heated.

Combustion products Fire may produce irritating, corrosive and/or toxic gases.

Health.

Poison_Class 1

Exposure effects Fever, low heart rate and abnormally low blood pressure, or rapid heart rate and elevated blood pressure may occur. Headache, dizziness, muscle spasms and profound weakness are common. Alterations of level of consciousness, anxiety, paralysis, seizures and coma may occur. Seizures may be more common in children.

Ingestion Vomiting, hypersalivation, diarrhea, fecal incontinence and abdominal pain may occur.

Inhalation Dyspnea, rales, bronchorrhea, bronchospasm, or tachypnea may be noted. Noncardiogenic pulmonary edema may occur in severe cases. Chemical pneumonitis may be seen.

Skin Sweating is a consistent but not universal sign.

Eyes Constriction of the pupil, tearing, and blurred vision are common. Prolonged dilation of the pupils may occur in severe poisonings. Opsoclonus has been reported in one case. Salivation commonly occurs.

First aid

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

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 if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult.

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.

Transportation

UN number 2783

Response guide [152](#)

Hazard class 6.1



Packing Group I; II; III

USCG CHRIS Code AON

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