

1 - Product and Company Information

ProductName DEMETON S, 100MG, NEAT

2 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

Very toxic in contact with skin and if swallowed.

3 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I
DEMETON S	126-75-0	204-801-8	None
Formula	C8H19O3PS2		
Molecular Weight	258.36 AMU		
Synonyms	Demeton-S * O,O-Diaethyl-S(2-ethylthio-ethyl)-monothiophosphat (German) * Diethyl S-(2-ethioethyl)thiophosphate * O,O-Diethyl S-(2-ethylthioethyl)phosphorothioate * O,O-Diethyl S-ethyl-2-ethylmercaptophosphorothiolate * O,O-Diethyl S-2-(ethylthio)ethyl phosphorothioate * O,O-Diethyl S-(2-ethylthioethyl) phosphorothioate * Isodemeton * Isosystox * Izosystox (Czech) * PO-Systox * Thiodemeton * Thiol systox * Thiophosphate de O,O-diethyle et de S-(2-ethylthio-ethyl) (French)		

4 - First Aid Measures

AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

AFTER SKIN CONTACT

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

5 - Fire Fighting Measures

EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions. Combustible.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Cover with dry soda ash, pick up, keep in a closed container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING

Directions for Safe Handling: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed. Keep away from heat and open flame. Store in a cool dry place.

SPECIAL REQUIREMENTS: Air sensitive. Light sensitive. Heat sensitive.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Safety shower and eye bath. Use only in a chemical fume hood.

GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

Appearance	Physical State: Liquid	At Temperature or Pressure
Property	Value	
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	N/A	
Flash Point	45 °C Method: closed cup	
Flammability	N/A	
Autoignition Temp	N/A	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	Lower: 1 % Upper: 5.3 %	
Vapor Pressure	N/A	
SG/Density	1.132 g/cm3	
Partition Coefficient	N/A	
Viscosity	N/A	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	Solubility in Water: Insoluble.	

10 - Stability and Reactivity

STABILITY

Stable: Stable.

Conditions of Instability: May decompose on exposure to light. May decompose on exposure to air. Heat sensitive.

Materials to Avoid: Strong oxidizing agents, Strong bases.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Sulfur dioxide, Phosphoric acid.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

11 - Toxicological Information

RTECS NUMBER: TF3130000

ACUTE TOXICITY

LD50

Oral

Rat

1.5 mg/kg

LD50

Intraperitoneal

Rat

1500 UG/KG

Remarks: Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels True cholinesterase.

LD50

Intraperitoneal

Rat

1700 UG/KG

Remarks: Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels True cholinesterase.

LD50

Subcutaneous

Mouse

6 MG/KG

LD50

Intraperitoneal

Guinea pig

5000 UG/KG

Remarks: Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels True cholinesterase.

LD50

Intraperitoneal

Rat

274 UG/KG

Remarks: Peripheral Nerve and Sensation: Flaccid paralysis

Without anesthesia (usually neuromuscular blockade).

LD50

Intraperitoneal

Rat

1500 UG/KG

Remarks: Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels True cholinesterase.

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