


International Chemical Safety Cards

PHOSMET

ICSC: 0543



O,O-Dimethyl S-phthalimidomethyl phosphorodithioate
 Phosphorodithioic acid, S-((1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl) O,O-dimethyl ester
 O,O-Dimethyl phosphorodithioate S-ester with N-(mercaptomethyl) phthalimide
 $C_{11}H_{12}NO_4PS_2$
 Molecular mass: 317.3

ICSC # 0543
 CAS # 732-11-6
 RTECS # [TE2275000](#)
 UN # 2783
 EC # 015-101-00-5
 October 29, 2004 Validated

TYPES OF HAZARD/ HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible. Liquid formulations containing organic solvents may be flammable. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames.	Powder, water spray, foam, carbon dioxide .
EXPLOSION	Risk of fire and explosion if formulations contain flammable/explosive solvents.		
EXPOSURE		PREVENT DISPERSION OF DUST! AVOID EXPOSURE OF ADOLESCENTS AND CHILDREN!	
•INHALATION	Pupillary constriction, muscle cramp, excessive salivation. Sweating. Nausea. Dizziness. Laboured breathing. Weakness.	Ventilation (not if powder), local exhaust, or breathing protection. Avoid inhalation of dust , mist .	Fresh air, rest. Refer for medical attention.
•SKIN	MAY BE ABSORBED! (See Inhalation).	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.

•EYES	Redness.	Safety goggles, face shield, or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Abdominal cramps. Vomiting. Diarrhoea. Convulsions. Unconsciousness. (Further see Inhalation).	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Give a slurry of activated charcoal in water to drink. Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Rest. Refer for medical attention.


SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Chemical protection suit including self-contained breathing apparatus. Do NOT let this chemical enter the environment. Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place.	Provision to contain effluent from fire extinguishing. Separated from food and feedstuffs .	Do not transport with food and feedstuffs. Marine pollutant. Xn symbol N symbol R: 21/22-50/53 S: 2-22-36/37-60-61 UN Hazard Class: 6.1 UN Packing Group: III
SEE IMPORTANT INFORMATION ON BACK		
<p>ICSC: 0543</p> <p>Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.</p>		

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I M P O R T A N T D A	<p>PHYSICAL STATE; APPEARANCE: COLOURLESS TO OFF- WHITE CRYSTALS , WITH CHARACTERISTIC ODOUR.</p> <p>PHYSICAL DANGERS:</p> <p>CHEMICAL DANGERS: The substance decomposes on heating or on burning producing toxic fumes including nitrogen oxides, phosphorous oxides and sulfur oxides.</p> <p>OCCUPATIONAL EXPOSURE LIMITS: TLV not established. MAK not established.</p>	<p>ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation, through the skin and by ingestion.</p> <p>INHALATION RISK: A harmful concentration of airborne particles can be reached quickly on spraying or when dispersed, especially if powdered.</p> <p>EFFECTS OF SHORT-TERM EXPOSURE: The substance may cause effects on the nervous system , resulting in convulsions and respiratory depression . Cholinesterase inhibition. The effects may be delayed. Medical observation is indicated.</p> <p>EFFECTS OF LONG-TERM OR REPEATED EXPOSURE: The substance may have effects on the</p>
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T A	nervous system , resulting in weakness. Cholinesterase inhibitor; cumulative effect is possible: see Acute hazards/symptoms.	
PHYSICAL PROPERTIES	Decomposes below boiling point at >100°C Melting point: 72°C Density: 1.03 g/cm ³	Solubility in water, g/100 ml at 20°C: 0.003 Vapour pressure, Pa at 20°C: negligible Octanol/water partition coefficient as log Pow: 2.83
ENVIRONMENTAL DATA	 The substance is very toxic to aquatic organisms. This substance may be hazardous in the environment; special attention should be given to honey bees. This substance does enter the environment under normal use. Great care, however, should be given to avoid any additional release, e.g. through inappropriate disposal.	
NOTES		
Depending on the degree of exposure, periodic medical examination is suggested. Specific treatment is necessary in case of poisoning with this substance; the appropriate means with instructions must be available. If the substance is formulated with solvent(s) also consult the card(s) (ICSC) of the solvent(s). Carrier solvents used in commercial formulations may change physical and toxicological properties. Transport Emergency Card: TEC (R)-61GT7-III		
ADDITIONAL INFORMATION		
ICSC: 0543 PHOSMET (C) IPCS, CEC, 1994		
IMPORTANT LEGAL NOTICE:	Neither NIOSH, the CEC or the IPCS nor any person acting on behalf of NIOSH, the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views of the IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use. The only modifications made to produce the U.S. version is inclusion of the OSHA PELs, NIOSH RELs and NIOSH IDLH values.	