

CAS No: 16752-77-5  
 RTECS No: AK2975000  
 UN No: 2757  
 EC No: 006-045-00-2

S-Methyl-N-(methylcarbamoyloxy)thioacetimidate  
 Ethanimidothioic acid, N-((methylamino)carbonyloxy)-, methyl ester  
 Methyl N-((methylamino)carbonyloxy)ethanimidothioate  
 $C_5H_{10}N_2O_2S$   
 Molecular mass: 162.2

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
<b>FIRE</b>	Combustible under specific conditions. Liquid formulations containing organic solvents may be flammable. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames.	Water spray, foam, powder, carbon dioxide.
<b>EXPLOSION</b>			
<b>EXPOSURE</b>		<b>PREVENT DISPERSION OF DUST! STRICT HYGIENE! AVOID EXPOSURE OF ADOLESCENTS AND CHILDREN!</b>	
<b>Inhalation</b>	Pupillary constriction, muscle cramp, excessive salivation. Muscle twitching. Dizziness. Headache. Sweating. Laboured breathing. Unconsciousness.	Local exhaust or breathing protection.	Fresh air, rest. Half-upright position. Refer for medical attention. See Notes.
<b>Skin</b>		Protective gloves.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
<b>Eyes</b>	Redness. Blurred vision.	Safety goggles 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.
<b>Ingestion</b>	Abdominal cramps. Convulsions. Diarrhoea. Nausea. Vomiting. Weakness. (Further see Inhalation).	Do not eat, drink, or smoke during work. Wash hands before eating.	Give a slurry of activated charcoal in water to drink. Refer for medical attention immediately.
<b>SPILLAGE DISPOSAL</b>		<b>PACKAGING &amp; LABELLING</b>	
Personal protection: P3 filter respirator for toxic particles. Do NOT let this chemical enter the environment. Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place.		<b>EU classification</b> T+ Symbol N Symbol R: 28-50/53 S: (1/2-)22-36/37-45-60-61 <b>UN classification</b> UN Hazard Class: 6.1 UN Pack Group: II	
<b>EMERGENCY RESPONSE</b>		<b>SAFE STORAGE</b>	
Transport Emergency Card: TEC (R)-61GT7-II		Store in an area without drain or sewer access. Dry. Keep in a well-ventilated room. Separated from strong bases, food and feedstuffs.	

### IMPORTANT DATA

**Physical State; Appearance**

WHITE CRYSTALS, WITH CHARACTERISTIC ODOUR.

**Chemical dangers**

The substance decomposes on heating and on burning producing toxic and corrosive fumes including nitrogen oxides, sulfur oxides, hydrogen cyanide, methylisocyanate. Reacts with strong bases.

**Occupational exposure limits**

TLV: 2.5 mg/m<sup>3</sup> as TWA; A4 (not classifiable as a human carcinogen); BEI issued; (ACGIH 2005). MAK not established.

**Routes of exposure**

The substance can be absorbed into the body by inhalation of its aerosol and by ingestion.

**Inhalation risk**

A harmful contamination of the air will not or will only very slowly be reached on evaporation of this substance at 20/C; on spraying or dispersing, however, much faster.

**Effects of short-term exposure**

The substance is irritating to the eyes. The substance may cause effects on the nervous system, resulting in convulsions and respiratory depression. Cholinesterase inhibitor. Exposure far above the OEL may result in death.

**Effects of long-term or repeated exposure**

The substance may have effects on the blood, resulting in anaemia.

### PHYSICAL PROPERTIES

Melting point: 78/C

Density: 1.3 g/cm<sup>3</sup>

Solubility in water, g/100 ml at 25/C: 5.8 (moderate)

Vapour pressure, Pa at 25/C: negligible

Octanol/water partition coefficient as log Pow: 1.24

### ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. This substance may be hazardous in the environment; special attention should be given to birds and 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

Methomyl is a mixture of (Z)- and (E)-isomers.

If the pesticide is present in a formulation containing hydrocarbon solvents, vomiting should not be induced.

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 solvents also consult the ICSCs of these materials.

Carrier solvents used in commercial formulations may change physical and toxicological properties.

Do NOT take working clothes home.

Depending on the degree of exposure, periodic medical examination is suggested.

Du Pont 1179, Flytek, Lannate, Lanox, Methavin, Methomex, Nudrin are trade names.

Card has been partially updated in January 2008: see Ingestion First Aid.

### ADDITIONAL INFORMATION

#### LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information