



# MATERIAL SAFETY DATA SHEET

## METHOMEX 90 SP

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name : METHOMEX 90 SP  
Chemical name of active ingredient(s) : 1-Methylthioethylideneamine methylcarbamate  
Chemical formula :  $C_5H_{10}N_2O_2S$   
EU Cat. No. : Methomyl: 006-045-00-2.  
Code no. : R-5855.G  
Manufacturer : Makhteshim Chemical Works, Ltd.  
P.O.B. 60, Beer Sheva 84100, Israel  
Fax no.: 972-7-6296848-(364)  
Emergency telephone number : 972-3-6106666  
Subscription no.: 36789 (MAKHTESHIM)

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation : Preparation.

#### Information on hazardous ingredients \*

Common name	CAS No.	%	EC Number	Symbol	R-Phrases
Methomyl	16752-77-5	90.00	240-815-0	T+	R28

\* Occupational Exposure Limit(s), if available, are listed in section 8

### 3. HAZARDS IDENTIFICATION

Most important hazards : THIS COMPOUND INHIBITS CHOLINESTERASE  
Physical/chemical hazards : Prevent heating of material.  
Dust explosion hazards.  
Human health hazards : Toxic by inhalation.  
Very toxic if swallowed.  
Environmental hazards : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 4. FIRST-AID MEASURES

**Effects and symptoms** : Exposure may result in excessive sweating, weakness, salivation, nausea, diarrhoea, bradycardia, tachycardia, bronchorrhea, small pupils, central nervous depression, fasciculation and convulsions.

Inhalation : May result in systemic poisoning.  
Ingestion : May result in systemic poisoning.  
Skin contact : May result in systemic poisoning.

#### First-aid measures

Inhalation : Remove victim to fresh air. Keep victim warm and at rest.  
If breathing is difficult: give oxygen.  
If not breathing: apply artificial respiration.  
Immediately get medical attention.

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Ingestion	: Induce vomiting only if victim is conscious. Never give anything by mouth to an unconscious person. Wash out mouth with water. If breathing is difficult: give oxygen. If not breathing: apply artificial respiration. Immediately get medical attention.
Skin contact	: Remove contaminated clothing. Wash off with plenty of water and soap. Get medical attention.
Eye contact	: Wash off with plenty of water for at least 15 minutes. Consult an eye specialist.
Notes to a physician	: Antidote: Atropine sulfate. Suggest serum and/or RBC cholinesterase determination. If ingested perform gastric lavage and administer activated charcoal.

#### 5. FIRE-FIGHTING MEASURES

##### Extinguishing media

Suitable	: If involved in fire: In case of a small fire: dry chemical, carbon dioxide. In case of a large fire : water spray or alcohol resistant foam.
Special fire-fighting procedures	: Fight fires from a protected location. Dike fire control water for later disposal. Keep container cool by spraying with water.
Hazardous thermal (de)composition products	: SO <sub>x</sub> , NO <sub>x</sub> , CO, CO <sub>2</sub> , CS <sub>2</sub> , HCN and Methyl isocyanate.
Protection of fire-fighters	: Wear suitable protective clothing. Self-contained breathing apparatus.

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	: Use appropriate protection (see section 8).
Environmental precautions	: Dispose of this material and its container at hazardous or special waste collection point, in accordance with national and regional regulations. If the product has contaminated surface water, inform the appropriate authorities.
Methods for cleaning up	: Collect spilled material with shovel, place into a clean container and cover container loosely. Wash away remainder with plenty of water.

#### 7. HANDLING AND STORAGE

Handling	: Avoid generation of dust. Do not breathe dust; Avoid contact with skin and eyes. Dust explosion hazards: During the routine handling of this material there should be little risk of a dust explosion. There are indications that an explosive dust mixture can develop. Therefore, appropriate prevention measures should be taken. If a large dust cloud develops, turn off any device that may cause spark and leave the area until the cloud dissipates.
Storage	: Keep locked up. Keep container tightly closed. Keep only in the original container in a cool, well-ventilated place. Keep container dry. Keep away from strong bases. Avoid generation of dust.

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Packaging materials

Suitable : Fiber drums.  
PVA bags in laminate bags.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures : Ventilation required. Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.

Hygiene measures : Wash hands thoroughly after handling. Wash clothing separately before re-use.

Occupational Exposure Limits

Common name : Methomyl  
TLV (USA) : 2.5 mg/m<sup>3</sup>, A4 (1996).

Personal protective equipment

Respiratory system : During spraying wear suitable respiratory equipment.

Skin and body : Wear suitable protective clothing.

Hands : Wear suitable gloves.

Eyes : Safety goggles or face shield.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : Crystalline solid.

Colour : Off-white - yellowish.

Odour : Slightly sulfurous.

Molecular weight : Methomyl: 162.2.

Boiling point : Not applicable.

Melting point : Methomyl: 75-78°C.

Vapour pressure : 5-6.5 X 10<sup>-5</sup> mm Hg at a temperature of 25°C.

Solubility in water : 5.8 g/100 ml at a temperature of 25°C - (Pure).

Octanol/water partition coefficient : log Pow = 1.37.

Flash point : Not applicable.

Explosion properties : May be explosive after prolonged heating above 75°C

### 10. STABILITY AND REACTIVITY

Stability : Stable under normal conditions.  
Decomposes at elevated temperatures.

Conditions to avoid : Protect from (sun)light and excessive heat. Avoid temperatures above: 75°C.

Materials to avoid : Strong oxidizing agents, strong acids, strong bases.

Hazardous reactions : Hazardous polymerization will not occur.

Hazardous decomposition products : SO<sub>x</sub>, NO<sub>x</sub>, CO, CO<sub>2</sub>, CS<sub>2</sub>, HCN and Methyl isocyanate.

### 11. TOXICOLOGICAL INFORMATION

Acute toxicity : Toxicological information is known for the product  
METHOMEX TECHNICAL:

Acute toxicity - Oral : LD<sub>50</sub> = 24 mg/kg (rat).

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Acute toxicity - Dermal : LD<sub>50</sub> > 2000 mg/kg (rabbit).  
 Acute toxicity - Inhalation : LC<sub>50</sub> = 0.272 mg/l 4 hours (rat).  
 Skin irritation : Not irritating to skin (rabbit).  
 Eye irritation : Not irritating to eyes (rabbit).  
 Sensitization : Guinea pig maximization test: Non sensitizer.  
 Carcinogenicity : Not carcinogenic.  
 Mutagenicity : Not mutagenic.  
 Reproduction toxicity : Not teratogenic in animal experiments.

#### 12. ECOLOGICAL INFORMATION

**Common name** : Methomyl  
**Persistence/degradability** : The product is rapidly degraded in soil and ground water.  
**Bioaccumulative potential** : Methomyl does not bioaccumulate in aquatic organisms.  
**Ecotoxicity** : LD<sub>50</sub> = 15.9 mg/kg (ducks).  
                   LC<sub>50</sub> = 3.4 mg/l (fish).  
                   EC<sub>50</sub> = 28.7 µg/l (Daphnia magna).  
                   Toxic to bees.

#### 13. DISPOSAL CONSIDERATIONS

**Methods of disposal** : Disposal according to the local legislation.

#### 14. TRANSPORT INFORMATION

##### International transport regulations

UN number : 2757

##### Land - Road/Railway

Proper shipping name : Carbamate pesticide, solid, toxic, Methomyl.  
 ADR/RID Class : 6.1  
 ADR/RID Item number : 73(b)  
 Packing group : II  
 Hazard Identification : 60  
 Number

##### Inland waterways

Proper shipping name : Carbamate pesticide, solid, toxic, Methomyl.

##### Sea

Proper shipping name : Carbamate pesticide, solid, toxic, Methomyl.  
 IMDG Class : 6.1  
 IMDG Page number : 6221, Marine pollutant  
 Packing group : II  
 Medical First Aid Guide : 505  
 (MFAG)  
 Emergency Schedules : 6.1-04  
 (EmS)

##### Air

Proper shipping name : Carbamate pesticide, solid, toxic, Methomyl.  
 UN/ID Number : 2757

##### National transport regulations

No additional national transport regulations are known to the supplier

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**15. REGULATORY INFORMATION**

**Classification** : This product is provisionally labelled by the supplier in accordance with the suppliers understanding of the EU regulations:

**Hazard symbol(s)** : T+



TOXIC (T+)

**Risk phrases** : R23: Toxic by inhalation.  
R28: Very toxic if swallowed.

**Safety phrases** : S01/02: Keep locked up and out of the reach of children.  
S13: Keep away from food, drink and animal feedingstuffs.  
S22: Do not breathe dust.  
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Contains** : 90% Methomyl.

**16. OTHER INFORMATION**

**Recommended use** : Insecticide.

The information contained in the Safety Data sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for combinations with other materials or in processes other than those specifically described herein.

**HISTORY**

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