



MAKHTESHIM
CHEMICAL WORKS LTD.

MATERIAL SAFETY DATA SHEET

Page : 1

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Azinphos 350 WP

R-7566

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

Trade name : Azinphos 350 WP
Type of product : Insecticide
Chemical formula : Azinphos-methyl : C₁₀H₁₂N₃O₃PS₂
Company identification : Makhteshim-Agan SA (Pty) Ltd
21 Viben Street
PO Box 498
Brackenfell 7561
Emergency phone nr : +27-21-9821460

2. HAZARDS IDENTIFICATION

Main hazards : THIS COMPOUND INHIBITS CHOLINESTERASE.
Physical/Chemical Hazards : Prevent heating of material .
Dust explosion hazards .
Human health hazards : Very toxic by inhalation and if swallowed.
May cause sensitization by skin contact.
Environmental hazard : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS

This product is considered to be hazardous and contains hazardous components.

Substance name	Value(s)	CAS No	EC No	Index No	Classification
Azinphos-methyl (ISO)	35 %	86-50-0	201-676-1	015-039-00-9	T+; R26/28 T; R24 R43 N; R50-53

4. FIRST AID MEASURES

Effects and symptoms : may result in
Exposure excessive sweating , weakness , salivation , nausea , diarrhea ,
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
Inhalation : Remove victim to fresh air. Keep victim warm and at rest. If breathing is difficult,
give oxygen. If not breathing, give artificial respiration. Immediately get medical
attention.
Ingestion : Do not induce vomiting. Wash out mouth with plenty of water. Never give anything
by mouth to an unconscious person. If breathing is difficult, give oxygen. If not
breathing, give artificial respiration. Immediately get medical attention.
Skin contact : Remove affected clothing and wash all exposed skin area with soap and water,
followed by warm water rinse. Obtain medical attention.
Eye contact : Consult an eye specialist.
In case of eye contact, immediately rinse with clean water for 10-15 minutes.

Note to physician : Antidote 1 : Atropine sulfate
Antidote 2 : Obidoxime chloride or Pralidoxime (PAM).
Suggest serum and/or RBC cholinesterase determination.
If ingested perform gastric lavage and administer activated charcoal.

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5. FIRE-FIGHTING MEASURES

- Extinguishing media** : For small fire : dry chemical , carbon dioxide .
For large fire : water spray , alcohol resistant foam .
- Special procedures** : Fight fires from a protected location . Dike fire control water for later disposal.
Keep container cool by spraying with water .
- Special exposure hazards** : When exposed to heat, may decompose liberating hazardous gases : carbon dioxide , carbon monoxide , nitrogen oxides , phosphorus oxides , sulfur oxide .
- Protection against fire** : 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.
- After spillage and/or leakage** : 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** : 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 .
- Packing** : Laminated bags, polyester + aluminium + polyethylene - boxes .
Woven polypropylene bags with multi-ply paper inserts and polyethylene lining .

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Industrial hygiene** : Ventilation required. Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower . Wash hands thoroughly after handling. Wash clothing before re-using. Discard contaminated leather articles.
- Personal protection**
- **Respiratory protection** : During spraying wear suitable respiratory equipment.
 - **Skin protection** : Wear suitable protective clothing
 - **Hand protection** : Wear suitable gloves.
 - **Eye protection** : Chemical goggles or face shield.
- Occupational Exposure Limits**
- TLV-TWA [mg/m3]** : Azinphos-methyl (USA) : 0.2, A4 skin (1996)

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state** : Amorphous powder
- Colour** : Off-white
- Odour** : Faint characteristic
- Molecular weight** : Azinphos-methyl : 317.3
- Melting point [°C]** : Azinphos-methyl : 72 - 74 (Pure)
- Vapour pressure** : Azinphos-methyl : 0.18 mPa (20°C- Pure)
- Solubility in water** : Azinphos-methyl : 25.9 mg/l (25 °C- Pure)



Azinphos 350 WP

R-7566

9. PHYSICAL AND CHEMICAL PROPERTIES (continued)

Flash point [°C] : Not applicable
Explosion limits : May be explosive after prolonged heating above 75°C

10. STABILITY AND REACTIVITY

Physico-chemical stability : Stable under normal conditions.
Decomposes at elevated temperatures .
Hazardous decomposition products : Thermal decomposition may generate : carbon dioxide , carbon monoxide ,
nitrogen oxides , phosphorus oxides , sulfur oxide .
Hazardous reactions : Avoid contact with : strong acids , strong oxidizing agents , strong bases .
Hazardous Polymerization : Will not occur.
Conditions to avoid : Protect from (sun)light and excessive heat . Avoid temperatures above 40 °C .

11. TOXICOLOGICAL INFORMATION

Toxicity information : No toxicological information is known on the product.
Rat oral LD50 [mg/kg] : Calculated : 22
Rat dermal LD50 [mg/kg] : Cotnion-methyl Tech: > 2000
Rat inhalation LC50 [mg/kg] : Cotnion-methyl Tech: 0.21
Dermal irritation (rabbit) : Cotnion-methyl 50 WP : Not irritating
Eyes irritation (rabbit) : Cotnion-methyl 25 WP : Not irritating
Sensitization : Guinea pig maximization test: Cotnion-methyl Tech : Non sensitizer
Carcinogenicity : Cotnion-methyl Tech: Not carcinogenic
Mutagenicity : Cotnion-methyl Tech: Not mutagenic
Reproductive toxicity : Cotnion-methyl Tech: Not teratogenic in animal experiments

12. ECOLOGICAL INFORMATION

Ecological effects information : The data below are for Azinphos-methyl :
96 Hour - LC50- fish [ppm] : 0.014
LD50 Birds [mg/kg] : 136 (Mallard duck)
Persistence and degradability : Half-life time (t1/2) = 21 - 68 days.
Mobility : Low mobility
Bioaccumulative potential : Azinphos-methyl does not bioaccumulate in aquatic organisms .

13. DISPOSAL CONSIDERATIONS

Disposal : Avoid release to the environment.
Dispose in a safe manner in accordance with local/national regulations.

14. TRANSPORT INFORMATION

- **UN No.** : 2783
- **Proper shipping name** : ORGANOPHOSPHORUS PESTICIDE, SOLID, TOXIC (AZINPHOS-METHYL 35%)
- **Packing group** : II
- **Class** : 6.1
- **H.I. nr** : 60
- **IMDG-Marine pollution** : YES



Azinphos 350 WP

R-7566

15. REGULATORY INFORMATION

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

Symbol(s)



R Phrase(s) : T+: Toxic
N: Dangerous for the environment.
: R26/28 - Very toxic by inhalation and if swallowed.
R43 - May cause sensitization by skin contact.
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S Phrase(s) : S01/02 - Keep locked up and out of reach of children.
S13 - Keep away from food, drink and animal feedingstuffs.
S20/21 - When using, do not eat, drink or smoke.
S24 - Avoid contact with skin.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).
S37 - Wear suitable gloves.
S61 - Avoid release to the environment. Refer to special instructions/Safety data sheets.

16. OTHER INFORMATION

Recommended uses and restrictions : Dust explosion hazards .
Prevent heating of material .

Text of R-phrases in heading 3 : : *R24 - Toxic in contact with skin.*
R26/28 - Very toxic by inhalation and if swallowed.
R43 - May cause sensitization by skin contact.
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Further information : None.

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