

MATERIAL SAFETY DATA SHEET OF

DIAZINON 60% EC

1. IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product name: Diazinon 60% EC

Supplier: Shanghai Bosman Industrial Co., Ltd

Street address: No. 1611, North Sichuan Road, Hongkou, Shanghai R.P. China

Tel: + 86 21 63065878

Fax: + 86 21 63065878

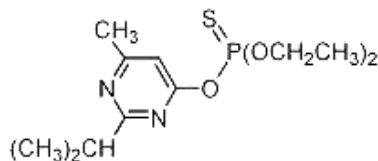
2. COMPOSITION/INFORMATION ON INGREDIENTS

Formulation Type: Emulsifiable concentrate (EC)

Active Ingredients: Diazinon

IUPAC name: O,O-diethyl O-2-isopropyl-6-methylpyrimidin-4-yl phosphorothioate

Structural Formula:



Composition:

INGREDIENT	CAS NO	PROPORTION
Diazinon	333 - 41 - 5	60%
other	Not available	Up to 100%

Other ingredients determined not to be hazardous

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Hazardous chemical. Straw coloured liquid with a mild petroleum odor.

POTENTIAL HEALTH EFFECTS:

EYE: Essentially non-irritating to the eyes.

SKIN: Prolonged contact is essentially non-irritating to the skin. Did not cause allergic skin reactions when tested in guinea pigs. The LD50 for skin absorption in rats is >4000 mg/kg.

INGESTION: Single dose oral toxicity is extremely low.

INHALATION: Vapors are unlikely due to physical properties. Excessive exposure to mists of the petroleum distillate may cause respiratory and eye irritation.

CANCER INFORMATION: Malathion did not cause cancer in laboratory studies.

TERATOLOGY (BIRTH DEFECTS): Malathion did not cause birth defects; other fetal effects occurred only at doses toxic to the mother.

4. FIRST AID MEASURES

General First-aid information: You should call The National Poisons Centre or a doctor immediately if you feel that you may have been poisoned, burned or irritated by this product. Have this MSDS with you when you call.

Inhalation: Remove victim to fresh air. Keep victim warm and at rest. If breathing is difficult, give oxygen. Obtain medical attention at once.

Ingestion: If swallowed DO NOT induce vomiting, rinse mouth thoroughly with water and contact National Poisons Centre or a doctor at once. Give activated charcoal if instructed.

Skin contact: Wash gently and thoroughly with warm water (use non-abrasive soap if necessary) for 10-20 minutes or until product is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts) and completely decontaminate them before reuse or discard.

Eye contact: Wash out immediately with water. First aid is not generally required. If in doubt, contact National Poisons Centre or a doctor.

Note to physician:

If ingested administer activated charcoal.

5. FIRE FIGHTING MEASURES

Flash point: >68 °C

TDG Flammability: Not Pertinent

Explosion sensitivity to impact : No

Combustible Material : Yes

Explosive Material: No

Hazardous Polymerization: No

Flammable Material : Yes Oxidizer : No

Hazardous Combustion Products: When heated to decomposition, it emits toxic fumes of NO_x, PO_x, SO_x, Cl-

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions some components of this product may decompose. Hazardous combustion products may include and are not limited to sulfur oxides, phosphorus compounds, nitrogen oxides, hydrogen chloride, carbon monoxide, and carbon dioxide.

EXTINGUISHING MEDIA: To extinguish combustible residues of this product use carbon

dioxide, dry chemical or foam.

6. ACCIDENT RELEASE MEASURES

Personal precautions: Wear full protective clothing. This means wearing chemically resistant clothing including eye/face protection, gauntlets and self contained breathing apparatus. (See section 8)

Environmental precautions: Washings must be prevented from entering surface water drains or waterways. Dispose of the waste safely in an approved landfill.

Methods for cleaning up: In the event of a major spill, prevent spillage from entering drains and water course. Immediately call the Fire Brigade.

Extinguish all ignition sources. Exclude all bystanders from the vicinity of the spill. Stop leak if safe to do so and contain spill and prevent material from entering waterways. Absorb onto sand, vermiculite or other suitable absorbent material and place in waste containers. Wash area with water and alkaline detergent then absorb any remaining

7. HANDLING AND STORAGE

Handling: Keep out of reach of children. Do not eat, drink or smoke while using.

Storage: Store in tightly closed original containers under cool, dry, dark conditions and away from sources of ignition, stockfeed, seeds or foodstuffs and under lock and key. DO NOT allow water to enter this container. DO NOT rinse the lid with water.

Packing: Fluorinated or co-extruded polyethylene containers. Resin-lined metal drums.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Industrial Hygiene: No special ventilation is usually needed when occasionally handling small quantities. However make sure the work environment remains clean and that vapours and mists are minimised.

Occupational Exposure Limits: Diazinon

TWA [mg/m³]: 0.1

STEL [mg/m³]: Not set

Personal protective equipment:

Respiratory system: Usually no respirator is necessary when using this product.

Skin and body: When mixing and applying wear appropriate protective clothing including cotton overalls buttoned to the neck and wrist and chemical resistant boots

Hands: Wear impervious elbow-length gloves.

Eyes: Chemical goggles or safety glasses.

Wash hands, arms and face with soap and water before meals and after work. Wash protective clothing

after use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light brown liquid

Odour: Strong odor

Density: NA

Boiling point: Not applicable

Vapor pressure: Not applicable

Solubility (water): Emulsifiable in water

Volatility: Not applicable

10. STABILITY AND REACTIVITY

Conditions to avoid: Excessive heat and ignition sources.

Incompatibility: Strong bases, acids, and oxidizers.

Hazardous decomposition products: Thermal decomposition – aliphatic organophosphates, substituted pyrimidines, and hydrogen cyanide.

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Acute toxicity - Oral: LD₅₀ (rat) 1250 mg/kg

Acute toxicity - Dermal: LD₅₀ (rat) >2150 mg/kg

Acute toxicity - Inhalation: LC₅₀ (rat) >2.33 mg/L

Skin irritation: Not an irritant (rabbit).

Eye irritation: Not an irritant (rabbit).

Sensitization : Non Sensitizer (Guinea-pig)

Chronic toxicity:

NOEL (2 y) for rats 0.06 mg/kg b.w.; (1 y) for dogs 0.015 mg/kg b.w. daily, for humans 0.02 mg/kg b.w..

Carcinogenic Potential: Not listed in OSHA, NTP, or IARC. Not Classifiable as a Human Carcinogen.

12. ECOLOGICAL INFORMATION

Birds Acute oral LD₅₀ for mallard ducklings 2.7, young pheasants 4.3 mg/kg.

Fish LC₅₀ (96 h) for bluegill sunfish 16, rainbow trout 2.6–3.2, carp 7.6–23.4 mg/l.

Daphnia LC₅₀ (48 h) 0.96 µg/l.

Algae EC₅₀ for *Selenastrum* spp. >1 ppm.

Bees Highly toxic to bees.

Worms Slightly toxic to earthworms.

Persistence/degradability:

Degradation involves oxidation to the phosphate (diazoxon) and hydrolysis . DT50 c. 11–21 d (laboratory).

Diazinon is fairly strongly adsorbed onto soil; Kom 332 mg/g o.m. Mobility is low.

13. DISPOSAL CONSIDERATION

Product Disposal: Product Disposal On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals.

Container Disposal: Do not use this container for any other purpose. Triple or preferably pressure rinse empty containers before disposal or recycling. Add rinsings to spray tank. Contact licensed industrial waste collector for proper disposal.

14. TRANSPORT INFORMATION

UN Number: 3077

Proper shipping name: Environmentally hazardous substance, Liquid, N.O.S, (Diazinon)

DG Class: 9

Packing Group: III

15. REGULATORY INFORMATION

Follow all local and international laws and regulations.

16. OTHER INFORMATION

This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of the how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact the company.

--END OF MSDS--