

Conforms to 93/112/EC and ISO 11014-1

MATERIAL SAFETY DATA SHEET

MAGNATE 80 EC

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

Product name : MAGNATE 80 EC
Chemical name of active ingredient(s) : 1-[2-(Allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole.
Chemical formula : Imazalil: C₁₄H₁₄Cl₂N₂O.
EU Cat. No. : Imazalil: 613-042-00-5
Methanol: 603-001-00-X
Code no. : R-6655.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
Imazalil	35554-44-0	800 g/l	252-615-0	Xn, N.	R20/22-41-50/53
Methanol	000067-56-1	Approx. 150 g/l	200-659-6	F, T	R11-23/25

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

3. HAZARDS IDENTIFICATION

Physical/chemical hazards : Highly flammable.
Human health hazards : Harmful by inhalation and if swallowed.
IRRITANT. Risk of serious damage to eyes.
Environmental hazards : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST-AID MEASURES

Effects and symptoms

Inhalation : Inhalation may cause lung irritation and lung oedema.
Ingestion : May be fatal if swallowed.
Metabolic acidosis, blurred vision, blindness, vomiting.
Eye contact : Redness, tears.

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. Immediately get medical attention.
Skin contact	: Remove contaminated clothing. Wash off with plenty of water and soap. Consult a doctor in the event of any complaints.
Eye contact	: Wash off with plenty of water for at least 15 minutes. Immediately consult an eye specialist.
Notes to a physician	: There is no specific antidote. Treat symptomatically and give supportive therapy. If ingested perform gastric lavage and administer activated charcoal. Methanol intoxication may occur.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable	: In case of a small fire: dry chemical, carbon dioxide. In case of a large fire : Water spray, fog or regular foam.
Special fire-fighting procedures	: Fight fires from a protected location. Dike fire control water for later disposal.
Hazardous thermal (de)composition products	: NO _x , CO, CO ₂ , HCl and Chlorides.
Protection of fire-fighters	: Wear suitable protective clothing. Self-contained breathing apparatus. During cleaning activity, shut off ignition sources.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	: Use appropriate protection (see section 8). During cleaning activity, shut off ignition sources
Environmental precautions	: Dispose of this material and its container at hazardous or special waste collection point, if the product has contaminated surface water, inform the appropriate authorities. Contaminated soil layers have to be dug out.
Methods for cleaning up	: in the event of minor spillage: Absorb in sand or other inert material. Use appropriate containment to avoid environmental contamination. In the event of major spillage: Collect and contain as much free liquid as possible. Dike spills using absorbent or impervious materials such as sand or clay for later disposal.

7. HANDLING AND STORAGE

Handling	: Do not breathe fumes. Avoid contact with skin and eyes.
Storage	: Keep locked up. Keep container tightly closed. Keep only in the original container in a cool, well-ventilated place (<50°C). Keep container dry. Keep away from sources of ignition - No smoking.

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.

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Occupational Exposure Limits

Common name	: Imazalil
TLV (USA)	: Not established.
Common name	: Methanol
TLV (USA)	: 262 mg/m ³ , skin (1976).

Personal protective equipment

Respiratory system	: During spraying wear suitable respiratory equipment.
Skin and body	: Wear suitable protective clothing and chemical resistant boots.
Hands	: Wear suitable gloves.
Eyes	: Safety goggles or face shield.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Liquid.
Colour	: Light brown.
Odour	: Characteristic odour.
Molecular weight	: Imazalil: 297.18.
Melting point	: Imazalil: 51.5-54°C.
Vapour pressure	: 2.02X10 ⁻⁴ Pa at a temperature of 25°C.
Specific gravity (H ₂ O=1)	: 1.12-1.15.
Solubility in water	: Emulsifiable. Imazalil: 0.018 g/100 ml.
Octanol/water partition coefficient	: Imazalil: log Pow = 4.03.
pH	: 7.6.
Flash point	: 19°C (Closed cup).
Other properties	: Explosion properties: Methanol: Lower explosion limit = 5.5% Upper explosion limit = 44%

10. STABILITY AND REACTIVITY

Stability	: Stable under normal conditions.
Conditions to avoid	: Protect from (sun)light, open flame and sources of heat. Decomposes upon heating.
Materials to avoid	: Avoid contact with: strong acids and strong bases.
Hazardous reactions	: Hazardous polymerization will not occur.
Hazardous decomposition products	: NO _x , CO, CO ₂ , HCl and Chlorides.

11. TOXICOLOGICAL INFORMATION

Acute toxicity - Oral	: LD ₅₀ = 716 mg/kg (rat).
Acute toxicity - Dermal	: LD ₅₀ > 2000 mg/kg (rat).
Acute toxicity - Inhalation	: LC ₅₀ = 1.61 mg/l, 4 hours (rat).
Skin irritation	: Mildly irritating to skin (rabbit).
Eye irritation	: Moderately irritating (rabbit).
Sensitization	: Guinea pig maximization test: Non sensitizer.

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Common name : Imazalil
Carcinogenicity : Not carcinogenic.
Mutagenicity : Not mutagenic.
Reproduction toxicity : Not teratogenic in animal experiments.

12. ECOLOGICAL INFORMATION

Common name : Imazalil
Mobility : Imazalil does not leach to ground water.
Ecotoxicity : Fish:
 LC₅₀ = 2.5 mg/l, (rainbow trout).
Birds:
 LD₅₀ > 2000 mg/kg.

13. DISPOSAL CONSIDERATIONS

Methods of disposal : Disposal according to the local legislation.

14. TRANSPORT INFORMATION

International transport regulations

UN number : 3021

Land - Road/Railway

Proper shipping name : Pesticide, liquid, flammable, toxic, N.O.S., Imazalil.
ADR/RID Class : 3, Label: 3 + 6.1
ADR/RID Item number : 41^o(b)
Packing group : II
Hazard Identification Number : 336

Inland waterways

Proper shipping name : Pesticide, liquid, flammable, toxic, N.O.S., Imazalil.

Sea

Proper shipping name : Pesticide, liquid, flammable, toxic, N.O.S., Imazalil.
IMDG Class : 3.2
IMDG Page number : 3270
Packing group : II
Emergency Schedules (EmS) : 3-03

Air

Proper shipping name : Pesticide, liquid, flammable, toxic, N.O.S., Imazalil.
UN/ID Number : 3021

National transport regulations

No additional national transport regulations are known to the supplier

15. REGULATORY INFORMATION

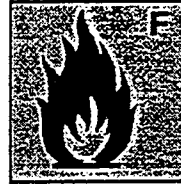
Classification : EU Classification (67/548/EEC-88/379/EEC).

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Hazard symbol(s) : Xn, F, N.



HARMFUL (Xn)



HIGHLY FLAMMABLE (F)



DANGEROUS FOR THE ENVIRONMENT (N)

Risk phrases : R11: Highly flammable.
R20/22: Harmful by inhalation and if swallowed.
R41: Risk of serious damage to eyes.
R50/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases : S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S39: Wear eye/face protection.
S60: This material and its container must be disposed of as hazardous waste.
S61: Avoid release to the environment. Refer to special instructions/Safety data sheets.

Contains : 800 g/l Imazalil,
Approximately 150 g/l Methanol.

16. OTHER INFORMATION

Recommended use : Fungicide.

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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The version-number is made up of three parts; part 1 is a general information code, part 2 a country-specific code and part 3 a language-specific code