

MATERIAL SAFETY DATA SHEET

MAVRIK 2F / KLARTAN

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

Product name : MAVRIK 2F / KLARTAN
Chemical name of active ingredient(s) : Tau-fluvalinate
Code no. : R-10834.DPD
Manufacturer : Makhteshim Chemical Works, Ltd.
 P.O.B. 60, Beer Sheva 84100, Israel.
 Fax no.: 972-8-6296848-(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
Tau-fluvalinate	102851-06-9	24		Xn, N	R22-38-50/53
1,2-ethanediol	000107-21-1	1-10	203-473-3	Xn	R22

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

3. HAZARDS IDENTIFICATION

Human health hazards : Not hazardous.
Environmental hazards : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST-AID MEASURES

Effects and symptoms

First-aid measures

Inhalation : Remove victim to fresh air.
Ingestion : If swallowed, seek medical advice immediately and show this container or label; administer active carbon in a large amount of water. Never give anything by mouth to an unconscious person.
 Do not induce vomiting.
Skin contact : Wash off with plenty of water and soap. Remove contaminated clothing.
Eye contact : Wash out with plenty of water. Consult an eye specialist.
Notes to a physician : There is no specific antidote. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable : Dry chemical, water spray, foam, carbon dioxide.
Not suitable : Direct water jets.

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Special fire-fighting procedures : Dike fire control water for later disposal. Prevent all discharge into the environment.
Unusual fire/explosion hazards : Combustion products are toxic and/or irritant. Measures must be taken to prevent the contaminated extinguishing agent from seeping into the ground or from spreading uncontrollably.
Hazardous thermal (de)composition products : Toxic and/or irritating gas.
Protection of fire-fighters : Self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Wear suitable protective clothing, nitrile rubber gloves, safety glasses or face shield.
Environmental precautions : Do not discharge into drains or the environment.
Methods for cleaning up : Collect and contain as much free liquid as possible. Absorb remainder in sand or other inert material. Place into a clean container and cover container loosely for later disposal.

7. HANDLING AND STORAGE

Handling : Avoid contact with skin and eyes. Do not breathe fumes. Wear suitable protective clothing, nitrile rubber gloves, safety glasses or face shield.
Storage : Keep only in the original container at a temperature not exceeding 40°C. Keep away from food, drink and animal feedingstuffs.
Packaging materials
Suitable : Coextruded polyethylene bottles; Drums with polyethylene liner.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits
Common name : **1,2-ethanediol**
TLV (USA) : 100 mg/m³; 39.4 ppm.
Personal protective equipment
Respiratory system : In case of insufficient ventilation, wear suitable respiratory equipment.
Skin and body : Wear suitable protective clothing and boots.
Hands : nitrile rubber gloves.
Eyes : Safety goggles or face shield.
Other information : Wash hands thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : Liquid.
Colour : White - yellowish.
Odour : Characteristic.

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Density : 1.07 - 1.11 g/cm³ (20°C).
Solubility in water : Miscible.
pH : 5.0 - 6.5 (1% solution).
Flash point : > 100°C (Closed cup).
Flammability : Not flammable (Combustible).
Explosion properties : Not explosive.

10. STABILITY AND REACTIVITY

Stability : Stable under normal conditions.
Conditions to avoid : Avoid temperatures above 40°C.
Materials to avoid : strong acids, strong bases.
Hazardous reactions : Not known.
Hazardous decomposition products : Emits toxic fumes.

11. TOXICOLOGICAL INFORMATION

Acute toxicity - Oral : LD₅₀ > 5000 mg/kg, rat (male & female).
Acute toxicity - Dermal : LD₅₀ > 2000 mg/kg, rat.
Acute toxicity - Inhalation : LC₅₀ > 5.5 mg/l (4 hours) rat.
Skin irritation : Not irritating (rabbit).
Eye irritation : Not irritating (rabbit).
Sensitization : Guinea pig maximization test: Non sensitizer

12. ECOLOGICAL INFORMATION

Very toxic to aquatic organisms.

Ecotoxicity : Fish: LC₅₀ > 0.024 mg/l, 96 hours (rainbow trout).
 Algae: EC₅₀ = >100 mg/l (72 hours).
 Daphnia: LC₅₀ = 0.011 mg/l (48 hours)

13. DISPOSAL CONSIDERATIONS

Methods of disposal : Disposal according to the local legislation.

14. TRANSPORT INFORMATION

International transport regulations

UN number : 3082

Land - Road/Railway

Proper shipping name : Environmentally hazardous substance, liquid, N.O.S. (24% Tau-fluvalinate).

ADR/RID Class : 9

Packing group : III

Inland waterways

Sea

Proper shipping name : Environmentally hazardous substance, liquid, N.O.S. (24% Tau-fluvalinate).

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IMDG Class : 9
Packing group : III
Emergency Schedules (EmS) : None.

Air

Proper shipping name : Environmentally hazardous substance, liquid, N.O.S. (Tau-fluvalinate).
IATA-DGR Class : 9

National transport regulations

No additional national transport regulations are known to the supplier

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) : N



DANGEROUS FOR THE ENVIRONMENT (N)

Risk phrases : R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases : S2: Keep out of the reach of children
S13: Keep away from food, drink and animal feedingstuffs.
S20/21: When using do not eat, drink or smoke.
S61: Avoid release to the environment. Refer to special instructions/Safety data sheets.

Contains : 240 g/l Tau-fluvalinate.

16. OTHER INFORMATION

Recommended use : Insecticide

Text of R-phrases in section 2

R22: Harmful if swallowed

R38: Irritating to skin

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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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.

Text of R-phrases in section 2

R22: Harmful if swallowed

R38: Irritating to skin

R50: Very toxic to aquatic organisms

R53: May cause long-term adverse effects in the aquatic environment

HISTORY

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