

MATERIAL SAFETY DATA SHEET

MAKHRO ROSE PROTECTOR

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

Product name : MAKHRO ROSE PROTECTOR
Chemical name of active Ingredient(s) : Bifenthrin+Bupirimate+Propiconazole

Manufacturer : Makhteshim Chemical Works
P.O Box 60
Beer-Sheva, Israel

Formulator of preparation : Makhro-Agro SA (Pty) Ltd
P.O Box 498, Brackenfell, 7561

Emergency telephone Number : + 27 82 807 7102
: + 27 21 982 1460

2) COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation : Preparation

Information on hazardous ingredients

Common name	CAS No	%	EC Number	Symbol	R-phrases
Bupirimate	41483-43-6	75g/lit	255-391-2	Xi,N	R43-51/53
Bifenthrin	082657-04-3	10g/lit	-	-	-
Propiconazole	60207-90-1	25 g/lit	-	-	-

3) HAZARDS IDENTIFICATION

Human health hazards : Harmfull if swallowed
: Irritating to skin and eyes

Environmental hazards : Very toxic to aquatic organisms may cause long term effects in the aquatic environment

4) FIRST-AID MEASURES

Effects and symptoms

First-aid measures

Inhalation : Remove victim to fresh air. Keep victim warm and at rest. Consult a doctor in the event of any complaints

Ingestion : Wash out mouth with water. Do not induce vomiting. Immediately consult a doctor.

Skin contact : Remove contaminated clothing. Wash off with plenty of water and soap. Consult a doctor in the event of any complaints

Eye contact : Immediately wash out with plenty of water with the eyelid held wide open, for at least 15 minutes. Immediately consult an eye specialist.

Note to physician : Treat symptomatically and give supportive therapy; administer activated charcoal

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5) FIRE-FIGHTING MEASURES

Extinguishing media

- Suitable** : In case of a small fire: foam, dry chemical or carbon dioxide
In case of a large fire: water spray, fog or alcohol resistant foam
- Special fire-fighting** : Fight fire from a protection location. Dike fire control water for later disposal.
- Hazardous thermal** : Emits toxic and irritating fumes: CO₁, CO₂, NO_x, SO_x
- Protection of fire-fighters** : Wear suitable protective clothing. Self-contained breathing apparatus

6) ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Wear suitable protective clothing and chemical resistant gloves. Wear eye/face protection. Respiratory protection for large spills.
- Environmental precautions** : Do not discharge into drains or the environment. If the product has contaminated surface water, inform the appropriate authorities. Dispose of this material and its container at hazardous or special waste collection point
- Methods for cleaning up** : 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** : Avoid contact with skin and eyes. Do not breathe fumes/spray mist. When using do not eat, drink or smoke. Wash hands after working with the product.
- Storage** : Keep only in the original container. Keep container tightly closed. Keep in a cool, dry well ventilated place away from sources of ignition and heat. Keep away from food, drink and animal feedingstuffs. Protect from frost.
- Packaging materials** : Metal drums or Coextruded polyethylene bottles
- Suitable**

8) EXPOSURE CONTROLS/PERSONAL PROTECTION

- Industrial hygiene** : Wash hands thoroughly after handling. Wash clothing before re-using
- Occupational Exposure Limits** : No occupational exposure limits have been established
- Personal protection**
- **Respiratory protection** : During spray wear suitable respiratory equipment
 - **Skin protection** : Wear protective clothing
 - **Hand protection** : Wear suitable gloves
 - **Eye protection** : Chemical goggles or safety glasses

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9) PHYSICAL AND CHEMICAL PROPERTIES

Physical state : Clear liquid
Colour : Yellow
Odour : Chemical Odour
Flash point : 42 °C

10) STABILITY AND REACTIVITY

Stability : Stable under normal conditions
Hazardous reactions : None known
Hazardous decomposition :
Products : Emits toxic and irritating fumes CO; CO₂; NO_x; SO_x; HF
Materials to avoid : Strong basis and strong acids

11) TOXICOLOGICAL INFORMATION

Acute toxicity – Oral : LD50 300-2000 mg/kg
Acute toxicity – Dermal : LD50 >3000 mg/kg
Acute toxicity – Inhalation : LC50 > 5,25 mg/kg
Skin irritation : Irritant (rabbit)
Eye irritation : Irritant (rabbit)
Sensitization : Guinea pig maximization test: Non sensitizer

12) ECOLOGICAL INFORMATION

Birds : LD50 > 2150 mg/kg (Mallard Duck)
: LC50 = 1800 mg/kg (Bobwhite quail)
Fish : LC50 (rainbow trout) (96h) = 0,00015 mg/l (tech)
: LC50 (Daphnia) (48h) = 0,00016 mg/l (tech)
Bees : LD50 (contact) >100 ug/bee
: LD50 (oral) > 105 ug/bee

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13) DISPOSAL CONSIDERATIONS

Disposal : Dispose of this material and its container at hazardous or special waste collection point

14) TRANSPORT INFORMATION

International transport regulations

UN number : 3352

Land – Road/Railway

Proper shipping name : Harmful liquid

ADR/RID Class

Packing group : III

Hazard identification : 60

Class : 6.1

ADR class : 6.1

ADR Packaging group : III

IMDG Marine Pollutant : Yes

15) REGULATORY INFORMATION

Hazard symbol(s) : Nn, N



Risk phrases : R22, Harmful if swallowed
R36/38, Irritating to eyes and skin
R65, Harfnull: May cause lung damage if swallowed
R50/53, Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment

Safety phrases : S ½ Keep locked up and out of reach of children
S 36/37 Wear suitable protective clothing and gloves

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16) OTHER INFORMATION

Text of Risk Phrases in heading 2: R36/38 – Irritating to eyes and skin
R65 – Harmful: May cause lung damage if swallowed

The information contained in this MSDS is for this product only. It is a combination of the MSDS's for NIMROD 25 EC, SEIZER 10 EC and BUMPER 250 EC where the worst case scenario has been used for each section.