

## Material Safety Data Sheet

### מאגנום - Magnum

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#### 1. IDENTIFICATION OF SUBSTANCE AND COMPANY

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**Common name:** Magnum

**Use:** Plant Growth Regulator

**Formulation Type:** SL

**Manufacturer:** Tapazol Chemical works Ltd.

**Address:** HaSolela 1, West ind. Zone, Beit Shemesh, 99052.

**Tel:** 972-2-992-6040 **Fax:** 972-2-9926050 **e-mail:** [info@tapazol.co.il](mailto:info@tapazol.co.il)

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#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

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Name	CAS no.	Quantity (g/l)
Uniconazole	83657-22-1	50
Propylene Glycol	57-55-6	230-250

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#### 3. HAZARDS IDENTIFICATION

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The product is harmful by ingestion and in contact with skin and may cause mild skin and eye irritation. The product may cause skin sensitization.

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#### 4. FIRST AID MEASURES

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**Eyes:** Flush eyes with large amounts of water while eyelids are open. If irritation develops and persists, get medical attention.

**Skin:** Flush with large amounts of water. Remove grossly contaminated clothing, including shoes, and launder before reuse. If irritation develops and persists, get medical attention.

**Ingestion:** If swallowed, DO NOT induce vomiting unless told to do so by the poison control center or doctor. Have a person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person. Keep at rest and get prompt medical attention.

**Inhalation:** Immediately remove the affected victim from exposure to an area of fresh air. Administer artificial respiration if breathing has stopped. Keep at rest and call for prompt medical attention.

**Note to physician:** No specific antidote, treat symptomatically.

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#### 5. FIRE-FIGHTING MEASURES

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**Extinguishing media:** Water spray or fog, foam, carbon dioxide, dry chemical. Do not use water jet.

**Protective equipment:** Full protective equipment, including self-contained breathing apparatus.

**Hazardous products of combustion may include:** Normal combustion forms carbon dioxide, water vapor and may produce oxides of nitrogen and toxic chlorine compounds. Incomplete combustion can produce carbon monoxide.

**More information:** Do not allow run-off from the fire enter drains or water courses.

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## 6. ACCIDENTAL RELEASE MEASURES

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**Personal protection:** Wear personal protective equipment as prescribed in section 8 – "Exposure controls/Personal protection".

**Environmental Protection:** Prevent the material from entering sewage and water courses.

**Procedure:** Absorb with material such as sand or sawdust and collect into containers for disposal. Dike area in case of large spills. Report large spills.

For spills in public area, keep public away and advise local authorities.

Wash clothes, equipment and work area after cleaning.

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## 7. HANDLING AND STORAGE

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**Storage:** Store in tightly closed original container in a cool, dry well-ventilated area out of direct sunlight and out from the reach of children. Do not store with food, feedstuffs, fertilizers and seeds.

**Handling:** Wear personal protective equipment as prescribed in section 8 – "Exposure controls/Personal protection".

Do not eat, drink or smoke while handling.

Change clothes and wash thoroughly when finishing working with the product.

Wash working clothes in separate from household laundry and do not re-use clothes that are not washed.

See product label for further handling/storage precautions relative to the end use of this product.

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## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

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**Engineering controls:** If airborne mists or vapors are likely to be generated, use local exhaust ventilation controls.

**Eye/ Face protection:** Chemical goggles with side shields.

**Skin/Body protection:** Long working clothes, closed shoes with socks and chemical resistant gloves.

**Respiratory protection:** Use this material only in well ventilated areas. Unless ventilation is adequate to keep airborne concentrations below recommended exposure standards, approved respiratory protection should be worn.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**Appearance:** Off-white liquid.

**Odor:** Solvent odor.

**pH:** 5.8

**Water solubility:** Soluble.

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## 10. STABILITY AND REACTIVITY

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**Chemical stability:** Stable under ordinary conditions of use and storage.

**Conditions to avoid:** Heat, flame, ignition sources, strong acids and bases.

**Hazardous polymerization:** Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

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### Acute toxicity:

**Oral:** LD50 for rat: >2000 mg/kg.

**Dermal:** LD50 for rat: >2000 mg/kg.

**Inhalation:** LC50 for rat: 2.75 mg/l (for AI).

**Skin irritation:** Mild irritant (rabbit).

**Eye irritation:** Moderate irritant (rabbit).

**Skin sensitization:** Sensitizer (mouse).

### Chronic toxicity:

For AI Uniconazole:

**Subchronic:** Anemia, liver effects, thyroid changes and altered lipid metabolism were observed in rats treated with 1000 ppm or greater Uniconazole Technical in the diet for 3 months. The No-Observable- Effect-Level (NOEL) was 100 ppm (10 mg/kg/day). Anemia, liver effects, and clinical chemistry changes were observed in mice treated with 1000 ppm or greater Uniconazole Technical in the diet for 5 weeks. The No-Observable-Effect-Level (NOEL) was 300 ppm.

Liver effects, and clinical chemistry changes were observed in dogs treated with 20 mg/kg/day or greater Uniconazole Technical for 3 months. The No-Observable-Effect-Level (NOEL) was 5 mg/kg/day.

Skin irritation, and liver changes were observed at 25 mg/kg/day or higher in a 28-day dermal study in rats. The NOEL was 5 mg/kg/day.

**Chronic/Carcinogenicity:** A cancer bioassay in mice revealed an increased incidence of liver tumors among males exposed to 210 mg/kg/day Uniconazole via the diet. There was no increase in tumors of any type in males exposed to 1-25 mg/kg/day or in any of the treated female groups (1.5-240 mg/kg/day). The biological significance of this finding is unclear because the tumors arose late in the study and fewer untreated animals were still alive at that time. Uniconazole was not carcinogenic in

rats exposed to 0.4-40 mg/kg/day in the diet for a lifetime. The only toxic effects observed in rats were decreased body weight gains and changes in the blood chemistry and liver cell. Repeated oral or dermal exposure to Uniconazole resulted in nonspecific depression of the central nervous system and changes in the liver, kidney, and blood systems in rats, mice, and dogs at dose levels greater than 15, 140, and 20 mg/kg/day for the three species, respectively. The most prominent effects were produced in the liver.

A chronic toxicity study in dogs revealed blood chemistry changes, increased liver, kidney, and adrenal weights, and decreased thymus weights at levels of 20-200 mg/kg/day. The only cellular effect observed was liver cell enlargement.

**Developmental Toxicity:** In teratology studies, minor skeletal variations were observed in the offspring of rats exposed to 25 mg/kg/day Uniconazole, a dose that was also toxic to the dam. The NOEL for this study was 5 mg/kg/day. No evidence of developmental toxicity or teratogenicity was seen in rabbits.

**Reproduction:** Uniconazole did not produce malformations or adverse reproductive effects in a two-generation rat reproduction study.

**Mutagenicity:** Genetic toxicity tests in cultured mammalian cells and in mice indicate that Uniconazole may damage genetic material, but only at dose levels that are severely toxic to the test organisms. Uniconazole was not mutagenic in bacteria.

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## 12. ECOLOGICAL INFORMATION

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For AI Uniconazole:

**Fish:** LC50 (96h) for rainbow trout: 14.8 mg/l, for carp: 7.64 mg/l.

**Daphnia:** 48-hour LC50: >10 mg/L.

**Birds:** Toxic to avian species. Oral LD50 for bobwhite quail: 1461 mg/kg, for mallard duck: >2315 mg/kg. Dietary LC50 for bobwhite quail: >5782 ppm, for mallard duck: 3345 ppm.

One generation reproduction, bobwhite quail: NOEC = 320 ppm

One generation reproduction, mallard duck: NOEC = 80 ppm, treatment related effects observed at 320 ppm.

**Bees:** LD50 by contact: >20 µg/bee.

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### 13. DISPOSAL CONSIDERATIONS

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Dispose of according to local regulations. Avoid entry of product into sewer system or water surfaces.

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### 14. TRANSPORT INFORMATION

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This product is not classified as dangerous goods for transportation.

**UN no.:** N/A

**Class:** N/A

**Packaging group:** N/A

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### 15. REGULATORY INFORMATION

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**R phrases:**

R36/38: Irritating to eyes and skin

R43: May cause sensitization by skin contact

R52/53: Harmful to aquatic organisms, May cause long-term adverse effects in the aquatic environment

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### 16. OTHER INFORMATION

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**Disclaimer:** The information provided by TAPAZOL CHEMICAL WORKS Ltd.

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However, no warranty is expressed or implied.