



**MICONAZOLE NITRATE  
SOLUTION (10 MG/ML)  
SAFETY DATA SHEET**

According to Regulation (EC) No. 1907/2006  
GENERIC EU SDS - NO COUNTRY SPECIFIC OEL DATA

Date of Issue: 16-03-2026

Revision Number: A/0

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE  
COMPANY/UNDERTAKING**

**1.1 Product identifier**

|                           |                                                                                                                                                                                                                                                  |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Identifier        | : Miconazole Nitrate Solution (10 mg/ml in water)                                                                                                                                                                                                |
| Product Number            | : M1005                                                                                                                                                                                                                                          |
| CAS Number                | : [22832-87-7]                                                                                                                                                                                                                                   |
| REACH Registration Number | : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration, or the registration is envisaged for a later registration deadline. |

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

|                      |                                                             |
|----------------------|-------------------------------------------------------------|
| Identified Uses      | : For research use only - restricted to professional users. |
| Uses Advised Against | : Not for human or animal use                               |

**1.3 Details of the supplier of the safety data sheet**

|                             |                                                                                       |
|-----------------------------|---------------------------------------------------------------------------------------|
| Company                     | : Plant Biotechnologies<br>Seinhuiswachter 17-19<br>3034 KH Rotterdam The Netherlands |
| Phone Number                | : +31 10323 2002                                                                      |
| E-mail Address              | : <a href="mailto:info.eu@toku-e.com">info.eu@toku-e.com</a>                          |
| Safety Data Sheet Issued by | : Plant Biotechnologies                                                               |

**1.4 Emergency telephone number**

|                                    |                                                |
|------------------------------------|------------------------------------------------|
| Emergency Phone Number (Internat.) | : +1 (352) 353-3500 (INFOTRAC, 24-Hour Number) |
| Emergency Phone Number (US Only)   | : 1 (800) 535-5053 (INFOTRAC, 24-Hour Number)  |

**SECTION 2: HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No. 1272/2008**

Skin Sensitisation (Category 1), H317

For the full text of the H-Statements mentioned in this section, see Section 16.

## 2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008

Hazard Pictogram(s):



**Signal Word:** Warning

### Hazard Statement(s)

H317 May cause an allergic skin reaction

### Precautionary Statement(s)

P261 Avoid breathing dust/fumes/gas/mist/vapors/spray.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of water/soap  
P333+P313 IF SKIN irritation or rash occurs: Get medical advice/attention.  
P321 Specific treatment, see applicable response statements on this label  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P501 Dispose of contents/container in accordance with governmental

### Supplemental Hazard Information

No data available

## 2.3 Other hazards

No data available

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

### 3.2 Mixtures

Synonym(s) : 1-[2-(2,4-dichlorophenyl)-2-[(2,4-dichlorophenyl)methoxy]ethyl]-1H-imidazole; nitric acid, Imidazole, 1-(2,4-dichloro-beta-((2,4-dichlorobenzyl)oxy)phenethyl)-, mononitrate  
Formula :  $C_{18}H_{14}Cl_4N_2O \cdot HNO_3$   
Molecular weight : 479,14 g/mol

### Hazardous ingredients according to Regulation (EC) No. 1272/2008

| Component                                        | Classification                                | Concentration |
|--------------------------------------------------|-----------------------------------------------|---------------|
| <b>Miconazole Nitrate</b>                        |                                               |               |
| CAS Number [22832-87-7]<br>EC Number [245-256-6] | Acute Tox. 4, H302<br>Aquatic Chronic 1, H410 | 1 %           |
| <b>Water</b>                                     |                                               |               |
| CAS Number [7732-18-5]<br>EC Number [231-791-2]  | /                                             | 99 %          |

For the full text of the H-Statements mentioned in this section, see Section 16.

## **SECTION 4: FIRST-AID MEASURES**

### **4.1 Description of first-aid measures**

#### **General information**

Consult a doctor/physician if exposed - additional medical care may be required. Show this safety data sheet to the medical provider.

#### **If inhaled**

If inhaled, move to fresh air. If not breathing, give artificial respiration. Consult a physician.

#### **In case of skin contact**

Wash skin thoroughly with soap and water. Remove any contaminated clothing. Consult a physician.

#### **In case of eye contact**

Flush eye with water. After initial flush, remove any contact lenses and continue flushing for at least 15 minutes.

#### **If swallowed**

Rinse mouth with water. Immediately call a doctor, physician, or poison control center. Never give anything by mouth to an unconscious person.

#### **Self-protection of the first aider**

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent the spread of contamination.

### **4.2 Most important symptoms/effects, acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### **4.3 Indication of any immediate medical attention and special treatment needed**

No data available

## **SECTION 5: FIRE-FIGHTING MEASURES**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media**

Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### **Unsuitable extinguishing media**

No data available

### **5.2 Special hazards arising from the substance or mixture**

#### **Hazardous Combustion Products**

Carbon and nitrogen oxides, hydrogen chloride

### **5.3 Advice for firefighters**

Wear self-contained breathing apparatus if necessary.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Consult the safety measures listed in Section 7 and 8. Use personal protective equipment. Avoid breathing dust, vapors, mist or gas. Avoid direct contact with spilled substances. Ensure adequate ventilation.

For personal protection see Section 8.

### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### **6.3 Methods and materials for containment and cleaning up**

Soak up with inert absorbent material and dispose of as hazardous material. Keep in suitable, closed containers for disposal.

### **6.4 Reference to other sections**

Refer to section 8 for exposure control and personal protection. Refer to section 13 for disposal information.

## **SECTION 7: HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes.  
Avoid inhalation of vapor or mist.  
For precautionary statements see section 2.2

### **7.2 Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place. Protect from humidity. Recommended storage temperature: -20 °C  
Protect from light.

#### **Incompatibilities:**

None known

### **7.3 Specific end use(s)**

Refer to section 1.2

## **SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION**

### **8.1 Control parameters**

**Components with workplace control parameters:**  
No OEL data available

### **8.2 Exposure controls**

#### **Appropriate engineering controls:**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling this product.

## **Personal Protective Equipment (PPE):**

### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal techniques to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the selected EN 374 derived from it.

### **Eye/Face protection**

Wear eye protection. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

### **Body protection**

Wear protective clothing. The type of protective equipment must be selected according to the concentration of the dangerous substance at the specific work place.

### **Environmental exposure controls**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1 Information on basic physical and chemical properties**

|                                        |   |                   |
|----------------------------------------|---|-------------------|
| Appearance                             | : | Solution          |
| Odor                                   | : | No data available |
| Odor Threshold                         | : | No data available |
| pH                                     | : | No data available |
| Melting Point/Freezing Point           | : | No data available |
| Initial Boiling Point and Range        | : | No data available |
| Flash Point                            | : | No data available |
| Evaporation rate                       | : | No data available |
| Flammability (solid, gas)              | : | No data available |
| Upper/Lower Flammability or            |   |                   |
| Explosive Limits                       | : | No data available |
| Vapor Pressure                         | : | No data available |
| Vapor Density                          | : | No data available |
| Relative Density                       | : | No data available |
| Solubility(ies)                        | : | No data available |
| Partition Coefficient: n-octanol/water | : | No data available |
| Auto-Ignition Temperature              | : | No data available |
| Decomposition Temperature              | : | No data available |
| Viscosity                              | : | No data available |
| Explosive Properties                   | : | No data available |
| Oxidizing Properties                   | : | No data available |

## 9.2 Other information

No additional information relevant to safe use of the substance.

## **SECTION 10: STABILITY AND REACTIVITY**

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

Exposure to light

### 10.5 Incompatible materials

None known

### 10.6 Hazardous decomposition products

No data available

See Section 5 for hazardous combustion products.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

The toxicological properties of this mixture have not been fully investigated. Information provided is based on data available for the active substance.

### 11.1 Information on toxicological effects

#### **Acute Toxicity (active substance)**

|                                  |   |       |   |             |
|----------------------------------|---|-------|---|-------------|
| Oral LD <sub>50</sub>            | : | Rat   | : | 920 mg/kg   |
|                                  |   | Mouse | : | 578 mg/kg   |
| Intraperitoneal LD <sub>50</sub> | : | Rat   | : | 1060 mg/kg  |
|                                  |   | Mouse | : | 480 mg/kg   |
| Intravenous LD <sub>50</sub>     | : | Rat   | : | 14700 µg/kg |
|                                  |   | Mouse | : | 28 mg/kg    |
| Subcutaneous LD <sub>50</sub>    | : | Rat   | : | > 5 g/kg    |
|                                  |   | Mouse | : | > 5 g/kg    |

#### **Skin Corrosion/Irritation**

No data available

#### **Serious Eye Damage/ Eye Irritation**

No data available

#### **Respiratory or Skin Sensitization**

Miconazole nitrate is classified as a skin sensitizer (H317). This mixture contains the active substance at the classification threshold.

**Germ Cell Mutagenicity**

No data available

**Carcinogenicity**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by the International Agency for Research on Cancer Monograph.

**Reproductive Toxicity**

No data available

**Specific Target Organ Toxicity: Single Exposure**

No data available

**Specific Target Organ Toxicity: Repeated Exposure**

No data available

**Aspiration Hazard**

No data available

**Additional Information**

RTECS: Not available

Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity**

No data available

**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

**12.6 Other adverse effects**

No data available

In the absence of complete ecological information, treat product as environmentally Use proper storage, handling, and disposal to prevent unintentional release into the environment.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

### **13.1 Waste treatment methods**

#### **Product**

Offer surplus and non-recyclable products to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Avoid disposal of material in drains or sewers.

Waste material must be disposed of in accordance with the Directive on Waste 2008/98/EC as well as other national and local regulations.

#### **Contaminated Packaging**

Dispose of as unused product.

## **SECTION 14: TRANSPORT INFORMATION**

|             |                                   | <b>ADR/RID</b>      | <b>IMDG</b>          | <b>IATA</b>         |
|-------------|-----------------------------------|---------------------|----------------------|---------------------|
| <b>14.1</b> | <b>UN Number</b>                  | -                   | -                    | -                   |
| <b>14.2</b> | <b>UN Proper Shipping Name</b>    | Not Dangerous Goods | Not Dangerous Goods  | Not Dangerous Goods |
| <b>14.3</b> | <b>Transport Hazard Class(es)</b> | -                   | -                    | -                   |
| <b>14.4</b> | <b>Packing Group</b>              | -                   | -                    | -                   |
| <b>14.5</b> | <b>Environmental Hazards</b>      | No                  | Marine Pollutant: No | No                  |

### **14.6 Special precautions for user**

#### **Further Information**

No data available

### **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

## **SECTION 15: REGULATORY INFORMATION**

### **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 and Annex II No. 2020/878

#### **Authorizations and/or restrictions on use**

Restricted to professional users.

### **15.2 Chemical safety assessment**

For this product a chemical safety assessment was not carried out.

## **SECTION 16: OTHER INFORMATION**

### **Full text of H-Statements referred to under sections 2 and 3**

|      |                                     |
|------|-------------------------------------|
| H302 | Harmful if swallowed                |
| H317 | May cause an allergic skin reaction |

### **Abbreviations and acronyms**

ADR/RID: European Agreements Concerning the International Carriage of Dangerous Goods by Road (ADR) and Rail (RID)  
CAS No: Chemical Abstracts Service number  
EC: European Commission  
EC No: European Commission number  
EHS: Environmentally Hazardous Substance  
EU: European Union  
H-Statement: Hazard Statement  
IARC: International Agency for Research on Cancer  
IATA: International Air Transport Association  
IBC: International Bulk Chemical  
IMDG: International Maritime Dangerous Goods Code  
LC50: Lethal concentration, 50%  
LD50: Median Lethal dose  
MARPOL 73/78: International Convention for the Prevention of Pollution from Ships  
NIOSH: National Institute for Occupation Safety and Health  
OEL: Occupational Exposure Limit  
PBT: Persistent, Bioaccumulative and Toxic  
REACH: Registration, Evaluation, Authorisation and restrictions of Chemicals  
RTECS: Registry of Toxic Effects of Chemical Substances  
SDS: Safety Data Sheet  
UN: United Nations  
vPvB: Very Persistent and Very Bioaccumulative

### **Further information**

Revision Date: 16-03-2026

The above information is based upon the present state of our knowledge and is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information is believed to be correct but does not purport to be all inclusive. It does not represent any guarantees of the properties of the product. TOKU-E Company shall not be held liable for damage or injury resulting from contact, handling, or storage of the above product.