



## Material Safety Data Sheet EVERGOL ENERGY

MSDS Number: 102000022382

MSDS Version 1.1

Revision Date: 04/12/2012

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### SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

<b>Product name</b>	EVERGOL ENERGY
<b>MSDS Number</b>	102000022382
<b>Product code (UVP)</b>	79483929
<b>Product Use</b>	Seed treatment

Bayer CropScience  
2 T.W. Alexander Drive  
Research Triangle PK, NC 27709  
USA

For MEDICAL, TRANSPORTATION or other EMERGENCY call: 1-800-334-7577 (24 hours/day)  
For Product Information call: 1-866-99BAYER (1-866-992-2937)

### SECTION 2. HAZARDS IDENTIFICATION

*NOTE: Please refer to Section 11 for detailed toxicological information.*

**Emergency Overview** Caution! Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes and clothing. Do not take internally. Wash thoroughly with soap and water after handling.

**Physical State** liquid

**Odor** characteristic

**Appearance** beige

**Exposure routes** Inhalation, Eye contact, Skin contact, Ingestion

**Immediate Effects**  
**skin** Harmful if absorbed through skin. Avoid contact with skin, eyes and clothing.

**Ingestion** Harmful if swallowed. Do not take internally.

**Potential Environmental Effect** Toxic to fish and aquatic invertebrates.



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#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Prothioconazole	178928-70-6	7.18
Penflufen	494793-67-8	3.59
Metalaxyl	57837-19-1	5.74
Polyethylene-polypropylene copolymer	9003-11-6	2.00
1,2-Propanediol	57-55-6	19.90

#### SECTION 4. FIRST AID MEASURES

<b>General</b>	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
<b>Eye</b>	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.
<b>skin</b>	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.
<b>Inhalation</b>	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.
<b>Notes to physician Treatment</b>	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.

#### SECTION 5. FIRE FIGHTING MEASURES

<b>Flash point</b>	No flash point - Determination conducted up to the boiling point.
<b>Autoignition temperature</b>	no data available
<b>Lower Flammability Limit</b>	no data available
<b>Upper Flammability Limit</b>	no data available



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<b>Suitable extinguishing media</b>	Water spray, Foam, Carbon dioxide (CO2), Dry chemical
<b>Fire Fighting Instructions</b>	<p>Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.</p> <p>Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.</p>

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

<b>Personal precautions</b>	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.
<b>Additional advice</b>	Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal.

**SECTION 7. HANDLING AND STORAGE**

<b>Handling procedures</b>	Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.
<b>Storing Procedures</b>	Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.
<b>Work/Hygienic Procedures</b>	<p>Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.</p> <p>Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.</p>

**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

<b>General Protection</b>	Follow manufacturer's instructions for cleaning/maintaining PPE. If no such
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instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

Follow all label instructions. Train employees in safe use of the product.

<b>Eye/Face Protection</b>	Safety glasses with side-shields
<b>Hand protection</b>	Chemical resistant nitrile rubber gloves
<b>Body Protection</b>	Wear long-sleeved shirt and long pants and shoes plus socks.
<b>Respiratory protection</b>	When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

#### Exposure Limits

Prothioconazole	178928-70-6	OES BCS*	TWA	1.4 mg/m <sup>3</sup>
Metalaxyl	57837-19-1	TX ESL	ST ESL	50 ug/m <sup>3</sup>
		TX ESL	AN ESL	5 ug/m <sup>3</sup>
1,2-Propanediol	57-55-6	WEEL	TWA	10 mg/m <sup>3</sup>
		TX ESL	ST ESL	20 ug/m <sup>3</sup>
		TX ESL	ST ESL	500 ppm
		TX ESL	AN ESL	2 ug/m <sup>3</sup>
		TX ESL	AN ESL	50 ppm

\*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	beige
<b>Physical State</b>	liquid
<b>Odor</b>	characteristic
<b>pH</b>	6.0 - 8.0 (100 %) at 23 °C
<b>Vapor Pressure</b>	no data available
<b>Vapor Density (Air = 1)</b>	no data available
<b>Density</b>	1.07 g/cm <sup>3</sup> at 20 °C
<b>Evaporation rate</b>	no data available
<b>Boiling Point</b>	no data available



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<b>Melting / Freezing Point</b>	no data available
<b>Water solubility</b>	dispersible
<b>Minimum Ignition Energy</b>	no data available
<b>Decomposition temperature</b>	no data available
<b>Partition coefficient: n-octanol/water</b>	no data available
<b>Viscosity</b>	200 - 500 mPa.s 40 - 100 mPa.s at 20 °C Velocity gradient 100 /s

#### SECTION 10. STABILITY AND REACTIVITY

<b>Conditions to avoid</b>	Extremes of temperature and direct sunlight.
<b>Incompatibility</b>	no data available
<b>Hazardous Decomposition Products</b>	no data available
<b>Hazardous reactions</b>	No hazardous reactions when stored and handled according to prescribed instructions.
<b>Chemical Stability</b>	Stable under normal conditions.

#### SECTION 11. TOXICOLOGICAL INFORMATION

Only acute toxicity studies have been performed on this product as formulated. The non-acute information pertains to the technical-grade active ingredients.

<b>Acute oral toxicity</b>	rat: LD50: > 2,000 mg/kg
<b>Acute dermal toxicity</b>	rat: LD50: > 2,000 mg/kg



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**Acute inhalation toxicity** rat: LC50: > 2.205 mg/l  
Exposure time: 4 h  
Determined in the form of liquid aerosol.

rat: LC50: > 8.82 mg/l  
Exposure time: 1 h  
Determined in the form of liquid aerosol.  
Extrapolated from the 4 hr LC50.

**Skin irritation** rabbit: No skin irritation

**Eye irritation** rabbit: No eye irritation

**Sensitisation** mouse: Non-sensitizing.

**Chronic toxicity** Prothioconazole did not cause specific target organ toxicity in experimental animal studies.

Penflufen did not cause specific target organ toxicity in experimental animal studies.

Metalaxyl caused liver effects in chronic studies in mice, rats and/or dogs.

#### Assessment Carcinogenicity

Prothioconazole was not carcinogenic in lifetime feeding studies in rats and mice.

Penflufen was not carcinogenic in lifetime feeding studies in rats and mice.

Metalaxyl was not carcinogenic in lifetime feeding studies in rats and mice.

#### ACGIH

None.

#### NTP

None.

#### IARC

None.

#### OSHA

None.

**Reproductive toxicity** Prothioconazole caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Prothioconazole is related to general toxicity.

Penflufen did not cause reproductive toxicity in a two-generation study in rats.

Metalaxyl did not cause reproductive toxicity in a multi-generation study in rats.

**Developmental Toxicity** Prothioconazole caused developmental toxicity only at doses toxic to the dams. The developmental effects seen with Prothioconazole are related to maternal toxicity.



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<b>Assessment neurotoxicity</b>	Penflufen did not cause developmental toxicity in rats and rabbits.
<b>Mutagenicity</b>	<p>Metalaxyl neurotoxicity studies are not required at this time.</p> <p>Prothioconazole was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.</p> <p>Penflufen was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.</p> <p>Metalaxyl was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.</p>

**SECTION 12. ECOLOGICAL INFORMATION**

<b>Toxicity to fish</b>	<p>Rainbow trout (<i>Oncorhynchus mykiss</i>) LC50: 1.83 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient prothioconazole.</p> <p>Cyprinus carpio (Carp) LC50: 0.103 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient penflufen.</p>
<b>Toxicity to aquatic plants</b>	<p><i>Pseudokirchneriella subcapitata</i> Growth rate IC50: 2.18 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient prothioconazole.</p> <p><i>Pseudokirchneriella subcapitata</i> Growth rate EC50: &gt; 5.1 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient penflufen. No acute toxicity was observed at its limit of water solubility.</p>
<b>Acute Toxicity to Aquatic Invertebrates</b>	<p>Water flea (<i>Daphnia magna</i>) EC50: 1.3 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient prothioconazole.</p> <p>Water flea (<i>Daphnia magna</i>) EC50: &gt; 4.66 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient penflufen.</p>



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No acute toxicity was observed at its limit of water solubility.

**Environmental precautions**

Do not allow to get into surface water, drains and ground water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label.

**SECTION 13. DISPOSAL CONSIDERATIONS**

**General Disposal Guidance**

Do not contaminate water, food, or feed by disposal. Dispose in accordance with all local, state/provincial and federal regulations. Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility. Follow advice on product label and/or leaflet.

**Container Disposal**

Do not re-use empty containers. Triple rinse containers. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke. Follow advice on product label and/or leaflet.

**RCRA Information**

Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

**SECTION 14. TRANSPORT INFORMATION**

**49CFR** Not dangerous goods / not hazardous material

**IMDG**

UN-Number **3082**  
Class 9  
Packaging group III  
Marine pollutant YES  
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROTHIOCONAZOLE, PENFLUFEN SOLUTION)

**IATA**

UN-Number **3082**  
Class 9  
Packaging group III  
Environm. Hazardous Mark YES  
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROTHIOCONAZOLE, PENFLUFEN SOLUTION )

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation





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requirements.

**SECTION 15. REGULATORY INFORMATION**

**US Federal Regulations**

**TSCA list**

Polyethylene-polypropylene copolymer 9003-11-6  
1,2-Propanediol 57-55-6

**US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)**

None.

**SARA Title III - Section 302 - Notification and Information**

None.

**SARA Title III - Section 313 - Toxic Chemical Release Reporting**

None.

**US States Regulatory Reporting**

**CA Prop65**

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

**US State Right-To-Know Ingredients**

1,2-Propanediol 57-55-6 MN, RI  
None.

**Canadian Regulations**

**Canadian Domestic Substance List**

Polyethylene-polypropylene copolymer 9003-11-6  
1,2-Propanediol 57-55-6

**Environmental**

**CERCLA**

None.

**Clean Water Section 307 Priority Pollutants**

None.

**Safe Drinking Water Act Maximum Contaminant Levels**

None.

**International Regulations**

**European Inventory of Existing Commercial Substances (EINECS)**

Metalaxyl 57837-19-1



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**SECTION 16. OTHER INFORMATION**

NFPA 704 (National Fire Protection Association):

Health - 2      Flammability - 0      Instability - 0      Others - none

HMS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1      Flammability - 0      Physical Hazard - 0      PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: Reviewed and updated for general editorial purposes. The following sections have been revised: Section 2: Hazards Identification. Section 11: Toxicological Information.

Revision Date: 04/12/2012

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