

# Material Safety Data Sheet PROSPER EVERGOL

MSDS Number: 102000022377 MSDS Version 1.1 Revision Date: 03/21/2012 Print Date: 03/21/2012

#### **SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION**

Product name PROSPER EVERGOL

MSDS Number 102000022377

Product code (UVP) 79659202

Product Use 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** Avoid inhalation of vapour or mist. 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 blue

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

**Potential Environmental** 

**Effect** 

Toxic to aquatic organisms. Toxic to bees. Toxic to birds.



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

| Hazardous Component Name             | CAS-No.     | Average % by Weight |
|--------------------------------------|-------------|---------------------|
| Clothianidin                         | 210880-92-5 | 22.30               |
| Penflufen                            | 494793-67-8 | 0.82                |
| Trifloxystrobin                      | 141517-21-7 | 0.55                |
| Metalaxyl                            | 57837-19-1  | 0.55                |
| 1,2-Propanediol                      | 57-55-6     | 11.70               |
| Titanium dioxide                     | 13463-67-7  | 14.85               |
| Polyethylene-polypropylene copolymer | 9003-11-6   | 2.00                |

#### **SECTION 4. FIRST AID MEASURES**

**General** When possible, have the product container or label with you when calling a

poison control center or doctor or going for treatment.

**Eye** 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.

**skin** 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.

**Ingestion** 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.

**Inhalation** 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.

Notes to physician

**Treatment** Appropriate supportive and symptomatic treatment as indicated by the patient's

condition is recommended. There is no specific antidote.

### **SECTION 5. FIRE FIGHTING MEASURES**

Flash point No flash point - Determination conducted up to the boiling point.

Autoignition temperature no data available

**Lower Flammability** 

no data available

Limit



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Upper Flammability Limit no data available

Suitable extinguishing media

Water spray, Foam, Carbon dioxide (CO2), Dry chemical

Fire Fighting Instructions

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.

Firefighters should wear NIOSH approved self-contained breathing apparatus

and full protective clothing.

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled

product or contaminated surfaces.

Methods for cleaning up 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.

Additional advice Use personal protective equipment. Do not allow to enter soil, waterways or

waste water canal.

#### **SECTION 7. HANDLING AND STORAGE**

**Handling procedures** 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.

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. Protect from freezing.

Work/Hygienic Procedures

Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

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.



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

General Protection Follow manufacturer's instructions for cleaning/maintaining PPE. If no such

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.

**Eye/Face Protection** Safety glasses with side-shields

Hand protection Chemical resistant nitrile rubber gloves

**Body Protection** Wear long-sleeved shirt and long pants and shoes plus socks.

**Respiratory protection** 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**

| Clothianidin<br>Trifloxystrobin<br>Metalaxyl | 210880-92-5<br>141517-21-7<br>57837-19-1 | OES BCS*<br>OES BCS*<br>TX ESL<br>TX ESL         | TWA<br>TWA<br>ST ESL<br>AN ESL               | 2.8 mg/m3<br>2.7 mg/m3<br>50 ug/m3<br>5 ug/m3                       |
|--|--|--|--|---|
| 1,2-Propanediol                              | 57-55-6                                  | WEEL<br>TX ESL<br>TX ESL<br>TX ESL<br>TX ESL     | TWA<br>ST ESL<br>ST ESL<br>AN ESL<br>AN ESL  | 10 mg/m3<br>20 ug/m3<br>500 ppm<br>2 ug/m3<br>50 ppm                |
| Titanium dioxide                             | 13463-67-7                               | ACGIH<br>OSHA Z1<br>OSHA Z1A<br>TX ESL<br>TX ESL | TWA<br>PEL<br>TWA<br>ST ESL<br>AN ESL<br>TWA | 10 mg/m3<br>15 mg/m3<br>10 mg/m3<br>50 ug/m3<br>5 ug/m3<br>10 mg/m3 |

<sup>\*</sup>OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

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

Appearance blue

Physical State liquid

**Odor** characteristic



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**pH** 7.5 - 9.5 (100 %) at 23 °C

Vapor Pressure no data available

Vapor Density (Air = 1) no data available

**Density** 1.30 g/cm<sup>3</sup> at 20 °C

**Evaporation rate** no data available

**Boiling Point** no data available

Melting / Freezing Point no data available

Water solubility dispersible

Minimum Ignition Energy no data available

Decomposition temperature

no data available

Partition coefficient: n-

octanol/water

no data available

Viscosity 250 - 500 mPa.s

190 - 250 mPa.s at 20 °C Velocity gradient 20 /s

70 - 150 mPa.s at 20 °C Velocity gradient 100 /s

### **SECTION 10. STABILITY AND REACTIVITY**

**Conditions to avoid** Extremes of temperature and direct sunlight.

**Incompatibility** no data available

Hazardous Decomposition Products

no data available

Hazardous reactions No hazardous reactions when stored and handled according to prescribed

instructions.

**Chemical Stability** Stable under normal conditions.



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### **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.

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

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

Acute inhalation toxicity rat: LC50: > 2.254 mg/l

Exposure time: 4 h

Determined in the form of liquid aerosol.

rat: LC50: > 9.016 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 Clothianidin did not cause specific target organ toxicity in experimental animal

studies.

Penflufen did not cause specific target organ toxicity in experimental animal

studies.

Trifloxystrobin 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**

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

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

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

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

**ACGIH** 

Titanium dioxide 13463-67-7 Group A4

NTP None.



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Titanium dioxide

OSHA None. 13463-67-7

Overall evaluation: 2B

#### Reproductive toxicity

Clothianidin 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 Clothianidin is related to general toxicity.

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

Trifloxystrobin 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 Trifloxystrobin is related to general toxicity.

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

#### **Developmental Toxicity**

Clothianidin did not cause developmental toxicity in rats.

Clothianidin caused developmental toxicity in rabbit only at dose levels toxic to the dams. The developmental effects seen with Clothianidin are related to maternal toxicity.

Penflufen did not cause developmental toxicity in rats and rabbits.

Trifloxystrobin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Trifloxystrobin are related to maternal toxicity.

#### Assessment neurotoxicity

Clothianidin was not a neurotoxicant in acute, subchronic and developmental neurotoxicity screening studies in rats.

Trifloxystrobin is not a primary neurotoxicant based on an acute (oral gavage) neurotoxicity screening study in rats.

## Assessment neurotoxicity

Metalaxyl neurotoxicity studies are not required at this time.

### Mutagenicity

Clothianidin was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

Penflufen was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Trifloxystrobin was not mutagenic or genotoxic in a battery of in vitro and in vivo

Metalaxyl was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.



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#### **SECTION 12. ECOLOGICAL INFORMATION**

**Toxicity to fish** Rainbow trout (Oncorhynchus mykiss)

LC50: > 104.2 mg/l Exposure time: 96 h

The value mentioned relates to the active ingredient clothianidin.

Rainbow trout (Oncorhynchus mykiss)

LC50: 0.015 mg/l Exposure time: 96 h

The value mentioned relates to the active ingredient trifloxystrobin.

Toxicity to aquatic plants Pseudokirchneriella subcapitata

Growth rate IC50: > 120 mg/l Exposure time: 72 h

The value mentioned relates to the active ingredient clothianidin.

Desmodesmus subspicatus

Growth rate IC50: 0.0053 mg/l Exposure time: 72 h

The value mentioned relates to the active ingredient trifloxystrobin.

**Acute Toxicity to Aquatic** 

**Invertebrates** 

Water flea (Daphnia magna)

EC50: > 119 mg/l Exposure time: 48 h

The value mentioned relates to the active ingredient clothianidin.

Chironomus riparius (non-biting midge)

EC50: 0.00106 mg/l Exposure time: 28 d

The value mentioned relates to the active ingredient clothianidin.

Water flea (Daphnia magna)

EC50: 0.016 mg/l Exposure time: 48 h

The value mentioned relates to the active ingredient trifloxystrobin.

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.



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#### **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.

(CLOTHIANIDIN, TRIFLOXYSTROBIN 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.

(CLOTHIANIDIN, TRIFLOXYSTROBIN 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 requirements.



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#### **SECTION 15. REGULATORY INFORMATION**

#### **US Federal Regulations**

**TSCA list** 

1,2-Propanediol57-55-6Titanium dioxide13463-67-7Polyethylene-polypropylene copolymer9003-11-6

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 Titanium dioxide 13463-67-7 IL, MN, RI

### **Canadian Regulations**

**Canadian Domestic Substance List** 

1,2-Propanediol57-55-6Titanium dioxide13463-67-7Polyethylene-polypropylene copolymer9003-11-6

#### **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 Titanium dioxide 13463-67-7



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#### **SECTION 16. OTHER INFORMATION**

NFPA 704 (National Fire Protection Association):

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

HMIS (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: New Material Safety Data Sheet.

Revision Date: 03/21/2012

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