



**TRILEX® 2000**

Version 2.0 / USA  
102000020382

1/10

Revision Date: 07/01/2014  
Print Date: 03/16/2015

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

**Product identifier**

**Trade name** TRILEX® 2000

**Product code (UVP)** 79402996

**SDS Number** 102000020382

**EPA Registration No.** 264-1068

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

**Use** Seed treatment

**Restrictions on use** See product label for restrictions.

**Information on manufacturer**

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

**Emergency Telephone  
Number (24hr/ 7 days)** 1-800-334-7577

**Product Information  
Telephone Number** 1-866-99BAYER (1-866-992-2937)

**SDS Information or Request** SDSINFO.BCS-NA@bayer.com

**SECTION 2: HAZARDS IDENTIFICATION**

**Classification in accordance with regulation HCS 29CFR §1910.1200**

Eye irritation : Category 2B

Acute toxicity (Oral): Category 4



**Signal word:** Warning

**Hazard statements**

Causes eye irritation.

Harmful if swallowed.

**Precautionary statements**

Wash face, hands and any exposed skin thoroughly after handling.

Do not eat, drink or smoke when using this product.



**TRILEX® 2000**

Version 2.0 / USA  
102000020382

2/10

Revision Date: 07/01/2014  
Print Date: 03/16/2015

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

Rinse mouth.

Dispose of contents/container in accordance with local regulation.

**Other hazards**

No other hazards known.

---

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

| Hazardous Component Name | CAS-No.     | Concentration % by weight |
|--------------------------|-------------|---------------------------|
| Trifloxystrobin          | 141517-21-7 | 7.12                      |
| Metalaxyl                | 57837-19-1  | 5.69                      |
| Glycerine                | 56-81-5     | 13.90                     |

---

**SECTION 4: FIRST AID MEASURES**

**Description of first aid measures**

|                       |   |
|-----------------------|---|
| <b>General advice</b> | When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.  |
| <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>Skin contact</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>Eye contact</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>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. |

**Most important symptoms and effects, both acute and delayed**

**Symptoms** To date no symptoms are known.

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

**Treatment** Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.

---



**TRILEX® 2000**

Version 2.0 / USA  
102000020382

3/10

Revision Date: 07/01/2014  
Print Date: 03/16/2015

---

**SECTION 5: FIREFIGHTING MEASURES**

**Extinguishing media**

**Suitable** Carbon dioxide (CO<sub>2</sub>), Foam, Dry chemical, Water spray

**Unsuitable** None known.

**Special hazards arising from the substance or mixture** Dangerous gases are evolved in the event of a fire.

**Advice for firefighters**

**Special protective equipment for fire-fighters** Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

**Further information** Evacuate personnel to safe areas. Avoid contact with spilled product or contaminated surfaces. 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.

**Flash point** no data available

**Autoignition temperature** no data available

**Lower explosion limit** no data available

**Upper explosion limit** no data available

**Explosivity** not applicable

---

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

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

**Precautions** Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

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

**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.

**Reference to other sections** Information regarding safe handling, see section 7.  
Information regarding personal protective equipment, see section 8.  
Information regarding waste disposal, see section 13.

---



**TRILEX® 2000**

Version 2.0 / USA  
102000020382

4/10

Revision Date: 07/01/2014  
Print Date: 03/16/2015

## SECTION 7: HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** 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.

**Advice on protection against fire and explosion** Keep away from heat and sources of ignition.

**Hygiene measures** 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.

### Conditions for safe storage, including any incompatibilities

**Requirements for storage areas and containers** 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.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

| Components  | CAS-No.     | Control parameters              | Update  | Basis    |
|---|-------------|---------------------------------|---------|----------|
| Trifloxystrobin   | 141517-21-7 | 2.7 mg/m <sup>3</sup><br>(TWA)  |         | OES BCS* |
| Metalaxyl   | 57837-19-1  | 50ug/m <sup>3</sup><br>(ST ESL) | 07 2011 | TX ESL   |
| Metalaxyl   | 57837-19-1  | 5ug/m <sup>3</sup><br>(AN ESL)  | 07 2011 | TX ESL   |
| Glycerine<br>(Total dust.)                              | 56-81-5     | 15 mg/m <sup>3</sup><br>(PEL)   | 02 2006 | OSHA Z1  |
| Glycerine<br>(Respirable fraction.)                     | 56-81-5     | 5 mg/m <sup>3</sup><br>(PEL)    | 02 2006 | OSHA Z1  |
| Glycerine<br>(Respirable fraction.)                     | 56-81-5     | 5 mg/m <sup>3</sup><br>(TWA)    | 1989    | OSHA Z1A |
| Glycerine<br>(Total dust.)                              | 56-81-5     | 10 mg/m <sup>3</sup><br>(TWA)   | 1989    | OSHA Z1A |
| Glycerine<br>(Total dust and mist.)                     | 56-81-5     | 10 mg/m <sup>3</sup><br>(TWA)   | 06 2008 | TN OEL   |
| Glycerine<br>(Respirable fraction and<br>dust or fume.) | 56-81-5     | 5 mg/m <sup>3</sup><br>(TWA)    | 06 2008 | TN OEL   |
| Glycerine   | 56-81-5     | 50ug/m <sup>3</sup>             | 02 2013 | TX ESL   |



**TRILEX® 2000**

Version 2.0 / USA  
102000020382

5/10

Revision Date: 07/01/2014  
Print Date: 03/16/2015

|                             |         |                       |         |        |
|-----------------------------|---------|-----------------------|---------|--------|
| (Particulate.)              |         | (ST ESL)              |         |        |
| Glycerine<br>(Particulate.) | 56-81-5 | 5ug/m3<br>(AN ESL)    | 02 2013 | TX ESL |
| Glycerine<br>(Vapor.)       | 56-81-5 | 100ug/m3<br>(AN ESL)  | 02 2013 | TX ESL |
| Glycerine<br>(Vapor.)       | 56-81-5 | 1000ug/m3<br>(ST ESL) | 02 2013 | TX ESL |

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

**Exposure controls**

**Personal protective equipment**

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

**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.

**Hand protection**

Chemical resistant nitrile rubber gloves

**Eye protection**

Chemical resistant goggles must be worn.

**Skin and body protection**

Wear long-sleeved shirt and long pants and shoes plus socks.

**General protective measures**

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.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

|                                 |                                 |
|---------------------------------|---------------------------------|
| <b>Appearance</b>               | white to light beige            |
| <b>Physical State</b>           | Liquid                          |
| <b>Odor</b>                     | characteristic                  |
| <b>Odour Threshold</b>          | no data available               |
| <b>pH</b>                       | 6.3 - 7.8 at 100 % (23 °C)      |
| <b>Vapor Pressure</b>           | no data available               |
| <b>Vapor Density (Air = 1)</b>  | no data available               |
| <b>Density</b>                  | 1.08 g/cm <sup>3</sup> at 20 °C |
| <b>Evaporation rate</b>         | no data available               |
| <b>Boiling Point</b>            | no data available               |
| <b>Melting / Freezing Point</b> | no data available               |
| <b>Water solubility</b>         | no data available               |
| <b>Minimum Ignition Energy</b>  | not applicable                  |



**TRILEX® 2000**

Version 2.0 / USA  
102000020382

6/10

Revision Date: 07/01/2014  
Print Date: 03/16/2015

---

|   |                   |
|---|-------------------|
| <b>Decomposition temperature</b>              | not applicable    |
| <b>Partition coefficient: n-octanol/water</b> | no data available |
| <b>Flash point</b>                            | no data available |
| <b>Autoignition temperature</b>               | no data available |
| <b>Lower explosion limit</b>                  | no data available |
| <b>Upper explosion limit</b>                  | no data available |
| <b>Explosivity</b>                            | not applicable    |

---

**SECTION 10: STABILITY AND REACTIVITY**

**Reactivity**

|   |  |
|---|--|
| <b>Thermal decomposition</b>              | not applicable   |
| <b>Chemical stability</b>                 | Stable under recommended storage conditions.   |
| <b>Possibility of hazardous reactions</b> | No hazardous reactions when stored and handled according to prescribed instructions. |
| <b>Conditions to avoid</b>                | Extremes of temperature and direct sunlight.   |
| <b>Incompatible materials</b>             | Strong acids, Strong bases, Oxidizing agents   |
| <b>Hazardous decomposition products</b>   | No decomposition products expected under normal conditions of use.                   |

---

**SECTION 11: TOXICOLOGICAL INFORMATION**

|   |  |
|---|--|
| <b>Exposure routes</b>                      | Eye contact, Inhalation, Skin contact, Ingestion   |
| <b>Immediate Effects</b>                    |  |
| <b>Eye</b>                                  | Moderate eye irritation.   |
| <b>Skin</b>                                 | Harmful if absorbed through skin.  |
| <b>Ingestion</b>                            | Harmful if swallowed.  |
| <b>Inhalation</b>                           | Harmful if inhaled.  |
| <b>Information on toxicological effects</b> |  |
| <b>Acute oral toxicity</b>                  | LD50 (female rat) 2,000 mg/kg  |
| <b>Acute inhalation toxicity</b>            | LC50 (rat) > 2.6 mg/l<br>Exposure time: 4 h<br>Determined in the form of liquid aerosol. |



**TRILEX® 2000**

Version 2.0 / USA  
102000020382

7/10

Revision Date: 07/01/2014  
Print Date: 03/16/2015

No deaths

LC50 (rat) > 10.4 mg/l

Exposure time: 1 h

Determined in the form of liquid aerosol.

Extrapolated from the 4 hr LC50.

**Acute dermal toxicity** LD50 (rat) > 5,000 mg/kg

**Skin irritation** Slight irritation (rabbit)

**Eye irritation** Minimally irritating. (rabbit)

**Sensitisation** Non-sensitizing. (guinea pig)

**Assessment repeated dose toxicity**

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

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

**Assessment Mutagenicity**

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

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

**Assessment Carcinogenicity**

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**

None.

**NTP**

None.

**IARC**

None.

**OSHA**

None.

**Assessment toxicity to reproduction**

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 parental toxicity.

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

**Assessment developmental toxicity**

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

Metalaxyl did not cause developmental toxicity in rats and rabbits.

**Further information**

Only acute toxicity studies have been performed on the formulated product.

The non-acute information pertains to the active ingredient(s).



**TRILEX® 2000**

Version 2.0 / USA  
102000020382

8/10

Revision Date: 07/01/2014  
Print Date: 03/16/2015

---

**SECTION 12: ECOLOGICAL INFORMATION**

|  |  |
|--|--|
| <b>Biodegradability</b>                  | Trifloxystrobin: ; not rapidly biodegradable<br>Metalaxyl: ; not rapidly biodegradable   |
| <b>Koc</b>                               | Trifloxystrobin: Koc: 2377<br>Metalaxyl: Koc: 163  |
| <b>Bioaccumulation</b>                   | Trifloxystrobin: Bioconcentration factor (BCF) 431; Does not bioaccumulate.<br>Metalaxyl: Bioconcentration factor (BCF) < 7; Does not bioaccumulate.   |
| <b>Mobility in soil</b>                  | Trifloxystrobin: Slightly mobile in soils<br>Metalaxyl: Moderately mobile in soils   |
| <b>Additional ecological information</b> | Exposed treated seed may be hazardous to birds.  |
| <b>Environmental precautions</b>         | Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.<br>Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.<br>Apply this product as specified on the label. |

---

**SECTION 13: DISPOSAL CONSIDERATIONS**

|                                |  |
|--------------------------------|--|
| <b>Waste treatment methods</b> |  |
| <b>Product</b>                 | Open dumping is prohibited.<br>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.<br>Follow advice on product label and/or leaflet.   |
| <b>Contaminated packaging</b>  | Do not re-use empty containers.<br>Triple rinse containers.<br>Puncture container to avoid re-use.<br>Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning.<br>If burned, stay out of smoke.<br>Follow advice on product label and/or leaflet. |
| <b>RCRA Information</b>        | 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**

|              |  |
|--------------|--|
| <b>49CFR</b> | Not dangerous goods / not hazardous material |
|--------------|--|





**TRILEX® 2000**

Version 2.0 / USA  
102000020382

9/10

Revision Date: 07/01/2014  
Print Date: 03/16/2015

**IMDG**

|                      |   |
|----------------------|---|
| UN number            | 3082  |
| Class                | 9   |
| Packaging group      | III   |
| Marine pollutant     | YES   |
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,<br>N.O.S.<br>(TRIFLOXYSTROBIN, METALAXYL SOLUTION) |

**IATA**

|                          |  |
|--------------------------|--|
| UN number                | 3082   |
| Class                    | 9  |
| Packaging group          | III  |
| Environm. Hazardous Mark | YES  |
| Proper shipping name     | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,<br>N.O.S.<br>(TRIFLOXYSTROBIN, METALAXYL 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.

Freight Classification: INSECTICIDES OR FUNGICIDES, N.O.I., OTHER THAN  
POISON

---

**SECTION 15: REGULATORY INFORMATION**

**EPA Registration No.** 264-1068

**US Federal Regulations**

**TSCA list**

Glycerine 56-81-5

**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**

|           |         |    |
|-----------|---------|----|
| Glycerine | 56-81-5 | MN |
|-----------|---------|----|

**Canadian Regulations**



**TRILEX® 2000**

Version 2.0 / USA  
102000020382

10/10

Revision Date: 07/01/2014  
Print Date: 03/16/2015

**Canadian Domestic Substance List**

Glycerine 56-81-5

**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)**

Glycerine 56-81-5

**EPA/FIFRA Information:**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

**Signal word:** Caution!

**Hazard statements:** Harmful if swallowed, inhaled or absorbed through the skin.  
Moderate eye irritation.  
Avoid contact with skin, eyes and clothing.

---

**SECTION 16: OTHER INFORMATION**

**NFPA 704 (National Fire Protection Association):**

Health - 1      Flammability - 1      Instability - 0      Others - none

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

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

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

**Reason for Revision:** Revised according to the current OSHA Hazard Communication Standard (29CFR1910.1200)

**Revision Date:** 07/01/2014

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.