



ILEVO™
Version 5.0 / USA
102000027535

1/10
Revision Date: 02/11/2015
Print Date: 02/11/2015

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

Product identifier

Trade name ILEVO™
Product code (UVP) 80966261
SDS Number 102000027535
EPA Registration No. 264-1167

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

Use Seed treatment
Fungicide

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 no.

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
Acute toxicity (Oral): Category 4



Signal word: Warning

Hazard statements
Harmful if swallowed.

Precautionary statements
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.



ILEVO™
Version 5.0 / USA
102000027535

2/10
Revision Date: 02/11/2015
Print Date: 02/11/2015

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 |
|--------------------------|-------------|---------------------------|
| Fluopyram | 658066-35-4 | 48.40 |
| Glycerine | 56-81-5 | 8.00 |

SECTION 4: FIRST AID MEASURES

Description of first aid measures

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

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.



ILEVO™
Version 5.0 / USA
102000027535

3/10
Revision Date: 02/11/2015
Print Date: 02/11/2015

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable High volume water jet

Special hazards arising from the substance or mixture In the event of fire the following may be released: Hydrogen chloride (HCl), Hydrogen cyanide (hydrocyanic acid), Hydrogen fluoride, Carbon monoxide (CO), Nitrogen oxides (NO_x)

Advice for firefighters

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

Flash point > 91 °C
No flash point - Determination conducted up to the boiling point.

Autoignition temperature 420 °C / 788 °F

Lower explosion limit no data available

Upper explosion limit no data available

Explosivity Not explosive

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.

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 Do not allow to enter soil, waterways or waste water canal. Do not allow product to contact non-target plants.

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.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling



ILEVO™
Version 5.0 / USA
102000027535

4/10
Revision Date: 02/11/2015
Print Date: 02/11/2015

- Advice on safe handling** Avoid contact with skin, eyes and clothing. Handle and open container in a manner as to prevent spillage. Use only in area provided with appropriate exhaust ventilation.
- 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. Store in a place accessible by authorized persons only.
Protect from freezing.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Components | CAS-No. | Control parameters | Update | Basis |
|---|-------------|-------------------------------------|---------|----------|
| Fluopyram | 658066-35-4 | 0.34 mg/m ³ (OES BCS) | | OES BCS* |
| 1,2-Propanediol (Vapor.) | 57-55-6 | 1000ug/m ³ (ST ESL) | 02 2013 | TX ESL |
| 1,2-Propanediol (Vapor.) | 57-55-6 | 500ppb (ST ESL) | 02 2013 | TX ESL |
| 1,2-Propanediol (Vapor.) | 57-55-6 | 100ug/m ³ (AN ESL) | 02 2013 | TX ESL |
| 1,2-Propanediol (Vapor.) | 57-55-6 | 50ppb (AN ESL) | 02 2013 | TX ESL |
| 1,2-Propanediol (Aerosol.) | 57-55-6 | 10 mg/m ³ (TWA) | 2010 | WEEL |
| Glycerine (Respirable fraction.) | 56-81-5 | 5 mg/m ³ (PEL) | 02 2006 | OSHA Z1 |
| Glycerine (Total dust.) | 56-81-5 | 15 mg/m ³ (PEL) | 02 2006 | OSHA Z1 |
| Glycerine (Total dust.) | 56-81-5 | 10 mg/m ³ (TWA) | 1989 | OSHA Z1A |
| Glycerine (Respirable fraction.) | 56-81-5 | 5 mg/m ³ (TWA) | 1989 | OSHA Z1A |
| Glycerine (Total dust and mist.) | 56-81-5 | 10 mg/m ³ (TWA) | 06 2008 | TN OEL |
| Glycerine (Respirable fraction and dust or fume.) | 56-81-5 | 5 mg/m ³ (TWA) | 06 2008 | TN OEL |



ILEVO™
Version 5.0 / USA
102000027535

5/10
Revision Date: 02/11/2015
Print Date: 02/11/2015

| | | | | |
|--------------------------|---------|--------------------|---------|--------|
| Glycerine (Vapor.) | 56-81-5 | 1000ug/m3 (ST ESL) | 02 2013 | TX ESL |
| Glycerine (Particulate.) | 56-81-5 | 50ug/m3 (ST ESL) | 02 2013 | TX ESL |
| Glycerine (Vapor.) | 56-81-5 | 100ug/m3 (AN ESL) | 02 2013 | TX ESL |
| Glycerine (Particulate.) | 56-81-5 | 5ug/m3 (AN 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 Safety glasses with side-shields

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

| | |
|---------------------------------|---------------------------------|
| Appearance | white to beige |
| Physical State | suspension |
| Odor | characteristic |
| Odour Threshold | no data available |
| pH | 5.0 - 9.0 at 100 % (23 °C) |
| Vapor Pressure | no data available |
| Vapor Density (Air = 1) | no data available |
| Density | 1.24 g/cm ³ 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 | not applicable |



ILEVO™
Version 5.0 / USA
102000027535

6/10
Revision Date: 02/11/2015
Print Date: 02/11/2015

| | |
|---|--|
| Decomposition temperature | no data available |
| Partition coefficient: n-octanol/water | no data available |
| Viscosity | 400 - 900 mPa.s at 25 °C 130 - 250 mPa.s at 20 °C Velocity gradient 20 /s 50 - 120 mPa.s at 20 °C Velocity gradient 100 /s |
| Flash point | > 91 °C No flash point - Determination conducted up to the boiling point. |
| Autoignition temperature | 420 °C / 788 °F |
| Lower explosion limit | no data available |
| Upper explosion limit | no data available |
| Explosivity | Not explosive |

SECTION 10: STABILITY AND REACTIVITY

Reactivity

| | |
|---|--|
| Thermal decomposition | no data available |
| Chemical stability | Stable under recommended storage conditions. |
| Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| Conditions to avoid | freezing |
| Incompatible materials | no data available |
| Hazardous decomposition products | No decomposition products expected under normal conditions of use. |

SECTION 11: TOXICOLOGICAL INFORMATION

| | |
|---|--|
| Exposure routes | Eye contact, Skin contact, Inhalation, Ingestion |
| Immediate Effects | |
| Eye | May cause eye irritation. |
| Skin | Harmful if absorbed through skin. |
| Ingestion | Harmful if swallowed. |
| Inhalation | May be harmful if inhaled. |
| Information on toxicological effects | |



ILEVO™
Version 5.0 / USA
102000027535

7/10
Revision Date: 02/11/2015
Print Date: 02/11/2015

| | |
|----------------------------------|--|
| Acute oral toxicity | LD50 (rat) 1,750 mg/kg |
| Acute inhalation toxicity | LC50 (rat) > 5.11 mg/l Exposure time: 4 h Determined in the form of liquid aerosol. Highest attainable concentration. |
| Acute dermal toxicity | LD50 (rat) > 5,000 mg/kg |
| Skin irritation | No skin irritation (rabbit) |
| Eye irritation | No eye irritation (rabbit) |
| Sensitisation | Non-sensitizing. (mouse) OECD Test Guideline 429, local lymph node assay (LLNA) |

Assessment repeated dose toxicity

Fluopyram caused specific target organ toxicity in experimental animal studies in the following organ(s): liver.

Assessment Mutagenicity

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

Assessment Carcinogenicity

Fluopyram caused an increased incidence of tumours in rats in the following organ(s): liver.
Fluopyram caused an increased incidence of tumours in mice in the following organ(s): Thyroid.
The tumours seen with Fluopyram were caused through a non-genotoxic mechanism, which is not relevant at low doses.

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

Assessment toxicity to reproduction

Fluopyram 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 Fluopyram is related to parental toxicity.

Assessment developmental toxicity

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

Further information

Acute toxicity studies have been bridged from a similar formulation(s).
The non-acute information pertains to the active ingredient(s).



ILEVO™
Version 5.0 / USA
102000027535

8/10
Revision Date: 02/11/2015
Print Date: 02/11/2015

SECTION 12: ECOLOGICAL INFORMATION

| | |
|--|--|
| Toxicity to fish | LC50 (Oncorhynchus mykiss (rainbow trout)) > 2 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient fluopyram. No acute toxicity was observed at its limit of water solubility. |
| Toxicity to aquatic invertebrates | EC50 (Daphnia magna (Water flea)) > 20 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient fluopyram. No acute toxicity was observed at its limit of water solubility. |
| Toxicity to aquatic plants | EC50 (Pseudokirchneriella subcapitata) 8.9 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient fluopyram. |
| Biodegradability | Fluopyram: ; not rapidly biodegradable |
| Koc | Fluopyram: Koc: 279 |
| Bioaccumulation | Fluopyram: Bioconcentration factor (BCF) 18; Does not bioaccumulate. |
| Mobility in soil | Fluopyram: Moderately mobile in soils |
| 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

| | |
|--------------------------------|--|
| Waste treatment methods | |
| Product | Dispose in accordance with all local, state/provincial and federal regulations. Do not contaminate water, food, or feed by disposal. Do not empty into drains. Follow advice on product label and/or leaflet. |
| Contaminated packaging | Consult state and local regulations regarding the proper disposal of container. Do not re-use empty containers. Triple rinse containers. 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. |



ILEVO™
Version 5.0 / USA
102000027535

9/10
Revision Date: 02/11/2015
Print Date: 02/11/2015

SECTION 14: TRANSPORT INFORMATION

49CFR Not dangerous goods / not hazardous material

IMDG

UN number **3082**
Class **9**
Packaging group **III**
Marine pollutant **YES**
Proper shipping name **ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FLUOPYRAM SOLUTION)**

IATA

UN number **3082**
Class **9**
Packaging group **III**
Environm. Hazardous Mark **YES**
Proper shipping name **ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FLUOPYRAM 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.

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 264-1167

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



ILEVO™
Version 5.0 / USA
102000027535

10/10
Revision Date: 02/11/2015
Print Date: 02/11/2015

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.
Avoid contact with skin, eyes and clothing.
Avoid breathing spray mist.
Remove and wash contaminated clothing before re-use.

SECTION 16: OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 2 Instability - 0 Others - none

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

Health - 1 Flammability - 2 Physical Hazard - 0 PPE -

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

Reason for Revision: The following sections have been revised: Section 2: Hazards Identification. Section 5: Fire Fighting Measures. Section 14: Transport Information.

Revision Date: 02/11/2015

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.