

# SAFETY DATA SHEET



**ILEVO®**

Version 1.0 / USA  
102000032092

1/11

Revision Date: 09/08/2016  
Print Date: 09/09/2016

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

### Product identifier

**Trade name** ILEVO®  
**Product code (UVP)** 84973459  
**SDS Number** 102000032092  
**EPA Registration No.** 264-1167

### 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 supplier

**Supplier** Bayer CropScience  
2 T.W. Alexander Drive  
Research Triangle PK, NC 27709  
United States  
**Responsible Department** Email: SDSINFO.BCS-NA@bayer.com

### Emergency telephone no.

**Emergency Telephone Number (24hr/ 7 days)** 1-800-334-7577  
**Product Information Telephone Number** 1-866-99BAYER (1-866-992-2937)

## SECTION 2: HAZARDS IDENTIFICATION

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

Acute toxicity(Oral): Category 4

### Labelling in accordance with regulation HCS 29CFR §1910.1200



**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.

# SAFETY DATA SHEET



**ILEVO®**

Version 1.0 / USA  
102000032092

2/11

Revision Date: 09/08/2016  
Print Date: 09/09/2016

Rinse mouth.  
Dispose of contents/container in accordance with local regulation.

## **Hazards Not Otherwise Classified (HNOC)**

No physical hazards not otherwise classified.  
No health hazards not otherwise classified.

---

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

| <b>Hazardous Component Name</b> | <b>CAS-No.</b> | <b>Concentration % by weight</b> |
|---------------------------------|----------------|----------------------------------|
| Fluopyram                       | 658066-35-4    | 48.4                             |

---

## **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.

---

# SAFETY DATA SHEET



**ILEVO®**

Version 1.0 / USA  
102000032092

3/11

Revision Date: 09/08/2016  
Print Date: 09/09/2016

## 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 (NOx)

### Advice for firefighters

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

**Further information** 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** > 91 °C  
No flash point - Determination conducted up to the boiling point.

**Auto-ignition temperature** 420 °C / 788 °F

**Lower explosion limit** No data available

**Upper explosion limit** No data available

**Explosivity** Not explosive  
92/69/EEC, A.14 / OECD 113

## 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. If material is accidentally spilled, 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.

# SAFETY DATA SHEET



**ILEVO®**

Version 1.0 / USA  
102000032092

4/11

Revision Date: 09/08/2016  
Print Date: 09/09/2016

## SECTION 7: HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** 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 and out of the reach of children, preferably in a locked storage area. 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 <sup>3</sup><br>(TWA)   |         | OES BCS* |
| Glycerine<br>(Respirable fraction.)                     | 56-81-5     | 5 mg/m <sup>3</sup><br>(PEL)      | 02 2006 | OSHA Z1  |
| 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>(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     | 1000ug/m <sup>3</sup><br>(ST ESL) | 03 2014 | TX ESL   |
| Glycerine                                               | 56-81-5     | 100ug/m <sup>3</sup><br>(AN ESL)  | 03 2014 | TX ESL   |
| Glycerine                                               | 56-81-5     | 50ug/m <sup>3</sup><br>(ST ESL)   | 03 2014 | TX ESL   |

# SAFETY DATA SHEET



**ILEVO®**

Version 1.0 / USA  
102000032092

5/11

Revision Date: 09/08/2016  
Print Date: 09/09/2016

|           |         |                    |         |        |
|-----------|---------|--------------------|---------|--------|
| Glycerine | 56-81-5 | 5ug/m3<br>(AN ESL) | 03 2014 | 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

|                                               |                                 |
|-----------------------------------------------|---------------------------------|
| <b>Appearance</b>                             | white to beige                  |
| <b>Physical State</b>                         | suspension                      |
| <b>Odor</b>                                   | characteristic                  |
| <b>Odour Threshold</b>                        | No data available               |
| <b>pH</b>                                     | 4.5 - 9.0 at 100 % (23 °C)      |
| <b>Vapor Pressure</b>                         | No data available               |
| <b>Vapor Density (Air = 1)</b>                | No data available               |
| <b>Density</b>                                | 1.24 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>                       | dispersible                     |
| <b>Minimum Ignition Energy</b>                | Not applicable                  |
| <b>Decomposition temperature</b>              | No data available               |
| <b>Partition coefficient: n-octanol/water</b> | Not applicable                  |
| <b>Viscosity</b>                              | 700 - 950 mPa×s at 25 °C        |

# SAFETY DATA SHEET



**ILEVO®**

Version 1.0 / USA  
102000032092

6/11

Revision Date: 09/08/2016  
Print Date: 09/09/2016

---

|                                  |                                                                                                      |
|----------------------------------|------------------------------------------------------------------------------------------------------|
|                                  | 200 - 290 mPa×s at 20 °C Velocity gradient 20 /s<br>80 - 120 mPa×s at 20 °C Velocity gradient 100 /s |
| <b>Flash point</b>               | > 91 °C<br>No flash point - Determination conducted up to the boiling point.                         |
| <b>Auto-ignition temperature</b> | 420 °C / 788 °F                                                                                      |
| <b>Lower explosion limit</b>     | No data available                                                                                    |
| <b>Upper explosion limit</b>     | No data available                                                                                    |
| <b>Explosivity</b>               | Not explosive<br>92/69/EEC, A.14 / OECD 113                                                          |

---

## SECTION 10: STABILITY AND REACTIVITY

### Reactivity

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

---

## SECTION 11: TOXICOLOGICAL INFORMATION

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

### Immediate Effects

**Ingestion** Harmful if swallowed.

### Information on toxicological effects

**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)

# SAFETY DATA SHEET



**ILEVO®**

Version 1.0 / USA  
102000032092

7/11

Revision Date: 09/08/2016  
Print Date: 09/09/2016

**Eye irritation** No eye irritation (Rabbit)

**Sensitisation** Non-sensitizing. (Mouse)  
OECD Test Guideline 429, local lymph node assay (LLNA)

## **Assessment STOT Specific target organ toxicity – repeated exposure**

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

## **Assessment mutagenicity**

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

## **Assessment carcinogenicity**

Fluopyram caused at high dose levels an increased incidence of tumours in rats in the following organ(s): Liver.

Fluopyram caused at high dose levels 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. The mechanism that triggers these tumours is not relevant to humans.

## **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).

---

## **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.

# SAFETY DATA SHEET



## ILEVO®

Version 1.0 / USA  
102000032092

8/11

Revision Date: 09/08/2016  
Print Date: 09/09/2016

|                                          |                                                                                                                                                                                                                                              |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                          | No acute toxicity was observed at its limit of water solubility.                                                                                                                                                                             |
| <b>Toxicity to aquatic invertebrates</b> | EC50 (Daphnia magna (Water flea)) > 20 mg/l<br>Exposure time: 48 h<br>The value mentioned relates to the active ingredient fluopyram.<br>No acute toxicity was observed at its limit of water solubility.                                    |
| <b>Toxicity to aquatic plants</b>        | EC50 (Raphidocelis subcapitata (freshwater green alga)) 8.9 mg/l<br>Growth rate; Exposure time: 72 h<br>The value mentioned relates to the active ingredient fluopyram.                                                                      |
| <b>Biodegradability</b>                  | Fluopyram:<br>Not rapidly biodegradable                                                                                                                                                                                                      |
| <b>Koc</b>                               | Fluopyram: Koc: 279                                                                                                                                                                                                                          |
| <b>Bioaccumulation</b>                   | Fluopyram: Bioconcentration factor (BCF) 18<br>Does not bioaccumulate.                                                                                                                                                                       |
| <b>Mobility in soil</b>                  | Fluopyram: Moderately mobile in soils                                                                                                                                                                                                        |
| <b>Environmental precautions</b>         | Do not allow to get into surface water, drains and ground water.<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

### Waste treatment methods

|                               |                                                                                                                                                                                                                                                                                                                          |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product</b>                | It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines.<br>Do not contaminate water, food, or feed by disposal.                                                           |
| <b>Contaminated packaging</b> | Triple rinse containers.<br>Completely empty container into application equipment, then dispose of empty container in a sanitary landfill, by incineration or by other procedures approved by state/provincial and local authorities.<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 |
| <b>IMDG</b>  |                                              |

# SAFETY DATA SHEET



## ILEVO®

Version 1.0 / USA  
10200032092

9/11

Revision Date: 09/08/2016  
Print Date: 09/09/2016

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

### IATA

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

None.

#### 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

None.

#### Canadian Regulations

##### Canadian Domestic Substance List

None.

#### Environmental

##### CERCLA

# SAFETY DATA SHEET



**ILEVO®**

Version 1.0 / USA  
102000032092

10/11

Revision Date: 09/08/2016  
Print Date: 09/09/2016

None.

## **Clean Water Section 307 Priority Pollutants**

None.

## **Safe Drinking Water Act Maximum Contaminant Levels**

None.

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

## **SECTION 16: OTHER INFORMATION**

### **Abbreviations and acronyms**

|         |                                                                       |
|---------|-----------------------------------------------------------------------|
| 49CFR   | Code of Federal Regulations, Title 49                                 |
| ACGIH   | US. ACGIH Threshold Limit Values                                      |
| ATE     | Acute toxicity estimate                                               |
| CAS-Nr. | Chemical Abstracts Service number                                     |
| CERCLA  | Comprehensive Environmental Response, Compensation, and Liability Act |
| EINECS  | European inventory of existing commercial substances                  |
| ELINCS  | European list of notified chemical substances                         |
| IARC    | International Agency for Research on Cancer                           |
| IATA    | International Air Transport Association                               |
| IMDG    | International Maritime Dangerous Goods                                |
| N.O.S.  | Not otherwise specified                                               |
| NTP     | US. National Toxicology Program (NTP) Report on Carcinogens           |
| OECD    | Organization for Economic Co-operation and Development                |
| TDG     | Transportation of Dangerous Goods                                     |
| TWA     | Time weighted average                                                 |
| UN      | United Nations                                                        |
| WHO     | World health organisation                                             |

### **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

# SAFETY DATA SHEET



**ILEVO®**

Version 1.0 / USA  
102000032092

**11/11**

Revision Date: 09/08/2016  
Print Date: 09/09/2016

---

**Reason for Revision:** New Safety Data Sheet.

**Revision Date:** 09/08/2016

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.