

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.



ILEVO® Version 1.0 / USA

Revision Date: 09/08/2016 102000032092 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

Hazardous Component Name CAS-No. Concentration % by weight

Fluopyram 658066-35-4 48.4

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.

Take off contaminated clothing and shoes immediately. Wash off Skin contact

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 1.0 / USA
 Revision Date: 09/08/2016

 102000032092
 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 temperature420 °C / 788 °FLower explosion limitNo data availableUpper explosion limitNo 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.



ILEVO®

Version 1.0 / USA 102000032092

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/m3 (TWA)		OES BCS*
Glycerine (Respirable fraction.)	56-81-5	5 mg/m3 (PEL)	02 2006	OSHA Z1
Glycerine (Total dust.)	56-81-5	15 mg/m3 (PEL)	02 2006	OSHA Z1
Glycerine (Respirable fraction.)	56-81-5	5 mg/m3 (TWA)	1989	OSHA Z1A
Glycerine (Total dust.)	56-81-5	10 mg/m3 (TWA)	1989	OSHA Z1A
Glycerine (Total dust and mist.)	56-81-5	10 mg/m3 (TWA)	06 2008	TN OEL
Glycerine (Respirable fraction and dust or fume.)	56-81-5	5 mg/m3 (TWA)	06 2008	TN OEL
Glycerine	56-81-5	1000ug/m3 (ST ESL)	03 2014	TX ESL
Glycerine	56-81-5	100ug/m3 (AN ESL)	03 2014	TX ESL
Glycerine	56-81-5	50ug/m3 (ST ESL)	03 2014	TX ESL



ILEVO® Version 1.0 / USA Revision Date: 09/08/2016 102000032092 Print Date: 09/09/2016

Glycerine	56-81-5	5ug/m3	03 2014	TX ESL
		(AN 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.

Chemical resistant nitrile rubber gloves Hand protection

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

pН 4.5 - 9.0 at 100 % (23 °C)

Vapor Pressure No data available Vapor Density (Air = 1) No data available **Density** 1.24 g/cm3 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 **Decomposition**

temperature

No data available

Partition coefficient: n-

octanol/water

Not applicable

Viscosity 700 - 950 mPaxs at 25 °C



 ILEVO®

 Version 1.0 / USA
 Revision Date: 09/08/2016

 102000032092
 Print Date: 09/09/2016

200 - 290 mPaxs at 20 °C Velocity gradient 20 /s

80 - 120 mPaxs at 20 °C Velocity gradient 100 /s

Flash point > 91 °C

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

Auto-ignition temperature420 °C / 788 °FLower explosion limitNo data availableUpper explosion limitNo data available

Explosivity Not explosive

92/69/EEC, A.14 / OECD 113

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition No data available

Chemical stability Stable under normal 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 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)



ILEVO®

Version 1.0 / USA Revision Date: 09/08/2016 102000032092 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.



ILEVO® Version 1.0 / USA 102000032092

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

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 (Raphidocelis subcapitata (freshwater green alga)) 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 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.

Do not contaminate water, food, or feed by disposal.

Contaminated packaging Triple rinse containers.

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.

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



ILEVO®

Version 1.0 / USA Revision Date: 09/08/2016 102000032092 Print Date: 09/09/2016

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 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



Print Date: 09/09/2016

 ILEVO®
 10/11

 Version 1.0 / USA
 Revision Date: 09/08/2016

None.

102000032092

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



ILEVO®

Version 1.0 / USA 102000032092

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.