

SAFETY DATA SHEET



LUNA® FLEX

Version 2.0 / USA
102000035903

1/12

Revision Date: 04/24/2026
Print Date: 04/25/2026

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

Product identifier

Trade name	LUNA® FLEX
Product code (UVP)	85846086
SDS Number	102000035903
EPA Registration No.	264-1218

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

Use	Fungicide
Restrictions on use	See product label for restrictions.
Information on supplier	
Supplier	Bayer CropScience LLC 800 North Lindbergh Blvd. St. Louis, MO 63167 USA
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
Acute toxicity(Dermal): Category 4
Acute toxicity(Inhalation): Category 4
Skin sensitisation: Category 1
Reproductive toxicity: Category 2

Labelling in accordance with regulation HCS 29CFR §1910.1200



SAFETY DATA SHEET



LUNA® FLEX

Version 2.0 / USA
102000035903

2/12

Revision Date: 04/24/2026
Print Date: 04/25/2026

Signal word: Warning

Hazard statements

Harmful if swallowed.
Harmful in contact with skin.
Harmful if inhaled.
May cause an allergic skin reaction.
Suspected of damaging fertility or the unborn child.

Precautionary statements

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wash thoroughly after handling.
Avoid breathing mist/ vapours/ spray.
Do not eat, drink or smoke when using this product.
Wear protective gloves/ protective clothing.
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.
Rinse mouth.
IF ON SKIN: Wash with plenty of water/ soap.
Take off immediately all contaminated clothing and wash it before reuse.
If skin irritation or rash occurs: Get medical advice/ attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or concerned: Get medical advice/ attention.
Store locked up.
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	21.37
Difenoconazole	119446-68-3	10.68

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.

SAFETY DATA SHEET



LUNA® FLEX

Version 2.0 / USA
102000035903

3/12

Revision Date: 04/24/2026
Print Date: 04/25/2026

Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. 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.

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: Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Hydrogen chloride (HCl)

Advice for firefighters

Special protective equipment for firefighters In the event of fire and/or explosion do not breathe fumes. 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.

Specific hazards from the substance or mixture which can increase the fire

Flash point > 100 °C / > 212 °F
No flash point - Determination conducted up to the boiling point.

Auto-ignition temperature 414 °C / 777.2 °F

Lower explosion limit No data available

SAFETY DATA SHEET



LUNA® FLEX

Version 2.0 / USA
102000035903

4/12

Revision Date: 04/24/2026
Print Date: 04/25/2026

Upper explosion limit	No data available
Explosivity	Not explosive

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 the product 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.
------------------------------------	---

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling	Use only in area provided with appropriate exhaust ventilation. Handle and open container in a manner as to prevent spillage.
--------------------------------	---

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. 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. Keep away from direct sunlight.
--	--

Advice on common storage	Keep away from food, drink and animal feedingstuffs.
---------------------------------	--

SAFETY DATA SHEET



LUNA® FLEX

Version 2.0 / USA
102000035903

5/12

Revision Date: 04/24/2026
Print Date: 04/25/2026

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Fluopyram	658066-35-4	0.34 mg/m ³ (TWA)		OES BCS*

*OES BCS: Internal Bayer AG, Crop Science Division "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 gloves (barrier laminate, butyl rubber, nitrile rubber or Viton)
Eye protection	Tightly fitting safety goggles
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

Information on basic physical and chemical properties

Form	suspension
Colour	white to beige
Odour	No data available
Odour Threshold	No data available
pH	6.5 - 8.5 (100 %) (23 °C)
Melting point/ range	No data available
Boiling Point	No data available
Flash point	> 100 °C / > 212 °F No flash point - Determination conducted up to the boiling point.
Flammability	No data available
Auto-ignition temperature	414 °C / 777.2 °F

SAFETY DATA SHEET



LUNA® FLEX

Version 2.0 / USA
102000035903

6/12

Revision Date: 04/24/2026
Print Date: 04/25/2026

Thermal decomposition	No data available
Minimum ignition energy	No data available
Self-accelarating decomposition temperature (SADT)	No data available
Upper explosion limit	No data available
Lower explosion limit	No data available
Vapour pressure	No data available
Evaporation rate	No data available
Relative vapour density	No data available
Relative density	No data available
Density	ca. 1.17 g/cm ³ (20 °C)
Water solubility	No data available
Partition coefficient: n-octanol/water	Fluopyram: log Pow: 3.3 Difenoconazole: log Pow: 4.36
Viscosity, dynamic	300 - 600 mPa.s (20 °C) Velocity gradient 20 /s
Viscosity, kinematic	No data available
Oxidizing properties	No oxidizing properties
Explosivity	Not explosive
Other information	Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions.

SAFETY DATA SHEET



LUNA® FLEX

Version 2.0 / USA
102000035903

7/12

Revision Date: 04/24/2026
Print Date: 04/25/2026

Conditions to avoid	Extremes of temperature and direct sunlight.
Incompatible materials	No incompatible materials known.
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Ingestion, Skin contact, Inhalation, Eye contact
Immediate Effects	
Eye	Not expected to produce significant adverse effects when recommended use instructions are followed.
Skin	Harmful in contact with skin. May cause sensitisation by skin contact.
Ingestion	Harmful if swallowed.
Inhalation	May be harmful if inhaled.
Information on toxicological effects	
Acute oral toxicity	LD50 (female Rat) 1,030 mg/kg
Acute inhalation toxicity	LC50 (male/female combined Rat) > 2.20 mg/l Determined in the form of liquid aerosol. highest concentration tested
Acute dermal toxicity	Dermal toxicity was assessed based on the result of the oral toxicity study. Dermal toxicity study has been waived by competent regulatory authority.
Skin corrosion/irritation	slight irritation (Rabbit)
Serious eye damage/eye irritation	Minimally irritating. (Rabbit)
Respiratory or skin sensitisation	Skin: Sensitising (Mouse) OECD Test Guideline 429, local lymph node assay (LLNA)
Assessment STOT Specific target organ toxicity – single exposure	
Fluopyram: Based on available data, the classification criteria are not met. Difenoconazole: Based on available data, the classification criteria are not met.	
Assessment STOT Specific target organ toxicity – repeated exposure	
Fluopyram did not cause specific target organ toxicity in experimental animal studies. Difenoconazole 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.	

SAFETY DATA SHEET



LUNA® FLEX

Version 2.0 / USA
102000035903

8/12

Revision Date: 04/24/2026
Print Date: 04/25/2026

Difenoconazole 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.

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

ACGIH

None.

NTP

None.

IARC

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.

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

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.

Difenoconazole caused developmental toxicity only at dose levels toxic to the dams.

Aspiration hazard

Based on available data, the classification criteria are not met.

Further information

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

No further toxicological information is available.

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.

LC50 (Oncorhynchus mykiss (rainbow trout)) 1.1 mg/l

Exposure time: 96 h

The value mentioned relates to the active ingredient difenoconazole.

Toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)) > 20 mg/l

Exposure time: 48 h

SAFETY DATA SHEET



LUNA® FLEX

Version 2.0 / USA
102000035903

9/12

Revision Date: 04/24/2026
Print Date: 04/25/2026

The value mentioned relates to the active ingredient fluopyram.
No acute toxicity was observed at its limit of water solubility.

EC50 (*Daphnia magna* (Water flea)) 0.77 mg/l
Exposure time: 48 h

The value mentioned relates to the active ingredient difenoconazole.

Toxicity to aquatic plants

ErC50 (*Raphidocelis subcapitata* (freshwater green alga)) 8.9 mg/l
Growth rate; Exposure time: 72 h
The value mentioned relates to the active ingredient fluopyram.

ErC50 (*Desmodesmus subspicatus* (green algae)) 0.0876 mg/l
Exposure time: 72 h
The value mentioned relates to the active ingredient difenoconazole.

Biodegradability

Fluopyram:
Not rapidly biodegradable
Difenoconazole:
Not rapidly biodegradable

Koc

Fluopyram: Koc: 279
Difenoconazole: Koc: 3760

Bioaccumulation

Fluopyram: Bioconcentration factor (BCF) 18
Does not bioaccumulate.
Difenoconazole: Bioconcentration factor (BCF) 330
Does not bioaccumulate.

Mobility in soil

Fluopyram: mobile in soil
Difenoconazole: criterion of mobility not fulfilled

Results of PBT and vPvB assessment

PBT and vPvB assessment

Fluopyram: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
Difenoconazole: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

Additional ecological information

No other effects to be mentioned.

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.
Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites.
Apply this product as specified on the label.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

SAFETY DATA SHEET



LUNA® FLEX

Version 2.0 / USA
102000035903

10/12

Revision Date: 04/24/2026
Print Date: 04/25/2026

Product	Dispose in accordance with all local, state/provincial and federal regulations.
Contaminated packaging	Consult state and local regulations regarding the proper disposal of container. 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
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIFENOCONAZOLE SOLUTION)
IATA	
UN number	3082
Class	9
Packaging group	III
Environm. Hazardous Mark	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIFENOCONAZOLE 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.	264-1218
US Federal Regulations	
TSCA list	
Water	7732-18-5
Glycerine	56-81-5
Polyethylene-polypropylene copolymer	9003-11-6

SAFETY DATA SHEET



LUNA® FLEX

Version 2.0 / USA
102000035903

11/12

Revision Date: 04/24/2026
Print Date: 04/25/2026

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

No export notification needs to be made.

SARA Title III - Section 302 - Notification and Information

Not applicable.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Toluene 108-88-3 Developmental toxin.

This product does not contain any substances known to the State of California to cause cancer.

US State Right-To-Know Ingredients

Glycerine 56-81-5 MN, RI

Environmental

CERCLA

None.

Clean Water Section 307(a)(1)

Yes

Toluene 108-88-3

Safe Drinking Water Act Maximum Contaminant Levels

Yes

Toluene 108-88-3

EPA/FIFRA Information:

This chemical is a pesticide product regulated 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 or absorbed through skin.
Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

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

SAFETY DATA SHEET



LUNA® FLEX

Version 2.0 / USA
102000035903

12/12

Revision Date: 04/24/2026
Print Date: 04/25/2026

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 - 2 Flammability - 1 Instability - 0 Others - none

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

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

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

* = chronic health hazard

Reason for Revision: The following sections have been revised: Section 2: Hazards Identification. Section 3: Composition / Information on Ingredients. Section 11: Toxicological Information. Section 12. Ecological information. Section 15: Regulatory information. Section 16: Other Information. Reviewed and updated for general editorial purposes.

Revision Date: 04/24/2026

Changes since the last version are highlighted in the margin. This version replaces all previous versions.
--

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.