

Version 1.0 / CDN 102000036911

1/12 Revision Date: 12/14/2022 Print Date: 12/15/2022

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

Product identifier

Trade name	LUNA SENSATION™ SUSPENSION FUNGICIDE
Product code (UVP)	86282631
SDS Number	102000036911
PCP Registration No.	32107

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 Inc #200, 160 Quarry Park Blvd, SE Calgary, Alberta T2C 3G3 Canada
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	1-888-283-6847

SECTION 2: HAZARDS IDENTIFICATION

Classified in accordance with Part 2 of the Hazardous Products Regulations Acute toxicity(Oral): Category 4 Reproductive toxicity: Effects on or via lactation

Labelling in accordance with Part 3 of the Hazardous Products Regulations



Signal word: Warning Hazard statements

SAFETY DATA SHEET



LUNA SENSATION™ SUSPENSION FUNGICIDE

Version 1.0 / CDN 102000036911

2/12 Revision Date: 12/14/2022 Print Date: 12/15/2022

Harmful if swallowed. May cause harm to breast-fed children.

Precautionary statements

Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Do not breathe mist. Avoid contact during pregnancy/ while nursing. IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell. Rinse mouth. IF exposed or concerned: Get medical advice/ attention. 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	21.4
Trifloxystrobin	141517-21-7	21.4

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.
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



Version 1.0 / CDN 102000036911

3/12 Revision Date: 12/14/2022 Print Date: 12/15/2022

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	Water spray, Carbon dioxide (CO2), Alcohol-resistant foam, Sand
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 (HCI), Hydrogen cyanide (hydrocyanic acid), Hydrogen fluoride, Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx)
Advice for firefighters	
Special protective equipment for firefighters	Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing. In the event of fire and/or explosion do not breathe fumes.
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
Auto-ignition temperature	380 °C / 716 °F
Lower explosion limit	No data available
Upper explosion limit	No data available
Explosivity	Not explosive 92/69/EEC, A.14 / OECD 113



Version 1.0 / CDN 102000036911

4/12 Revision Date: 12/14/2022 Print Date: 12/15/2022

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 Soak up with inert absorbent material (e.g. sand, silica gel, acid Methods for cleaning up binder, universal binder, sawdust). Clean contaminated floors and objects thoroughly, observing environmental regulations. Collect and transfer the product into a properly labelled and tightly closed container. 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. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly with soap and water after handling.
Conditions for safe storage, i	ncluding 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. Keep away from direct sunlight.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Fluopyram	658066-35-4	0.34 mg/m3		OES BCS*
		(TWĂ)		



LUNA SENSATION[™] SUSPENSION FUNGICIDE

Version 1.0 / CDN 102000036911

5/12 Revision Date: 12/14/2022 Print Date: 12/15/2022

Trifloxystrobin	141517-21-7	2.7 mg/m3	OES BCS*
		(SK-SEN)	

*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	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

Information on basic physical and chemical properties

Form	suspension
Colour	white to beige
Odour	characteristic
Odour Threshold	No data available
рН	5.0 - 8.0 (100 %) (23 °C)
Melting point/range	No data available
Boiling Point	No data available
Flash point	> 100 °C
Flammability	No data available
Auto-ignition temperature	380 °C
Thermal decomposition	No data available
Minimum ignition energy	Not applicable
Self-accelarating decomposition temperature (SADT)	No data available

SAFETY DATA SHEET



LUNA SENSATION[™] SUSPENSION FUNGICIDE

Version 1.0 / CDN 102000036911

6/12 Revision Date: 12/14/2022 Print Date: 12/15/2022

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/cm³ (20 °C)
Water solubility	suspensive
Partition coefficient: n- octanol/water	Fluopyram: log Pow: 3.3
	Trifloxystrobin: log Pow: 4.5 (25 °C)
Viscosity, dynamic	240 - 350 mPa.s (20 °C) Velocity gradient 20 /s
Viscosity, kinematic	No data available
Surface tension	38 mN/m (25 °C) Determined in the undiluted form.
Oxidizing properties	No oxidizing properties
Explosivity	Not explosive 92/69/EEC, A.14 / OECD 113
Other information	Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

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



Version 1.0 / CDN 102000036911

7/12 Revision Date: 12/14/2022 Print Date: 12/15/2022

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Ingestion, Inhalation, Eye contact, Skin contact
Immediate Effects Eye	Not expected to produce significant adverse effects when recommended use instructions are followed.
Skin	May be harmful in contact with skin.
Ingestion	May be harmful if swallowed.
Inhalation	May be harmful if inhaled.
Information on toxicological effects	
Acute oral toxicity	LD50 (female Rat) 2,000 mg/kg
Acute inhalation toxicity	LC50 (Rat) > 1.7 mg/l Exposure time: 4 h Determined in the form of liquid aerosol. Highest attainable concentration. No deaths
Acute dermal toxicity	LD50 (Rat) > 2,000 mg/kg
Skin corrosion/irritation	No skin irritation (Rabbit)
Serious eye damage/eye irritation	No eye irritation (Rabbit)
Respiratory or skin sensitisation	Skin: Non-sensitizing. (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. Trifloxystrobin: 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. Trifloxystrobin 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. Trifloxystrobin 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. Trifloxystrobin was not carcinogenic in lifetime feeding studies in rats and mice.



Version 1.0 / CDN 102000036911

8/12 Revision Date: 12/14/2022 Print Date: 12/15/2022

None.
NTP
None.
IARC
None.
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. Trifloxystrobin caused reduced body weight development in offspring during lactation only at doses also producing systemic toxicity in adult 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.

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

Aspiration hazard

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

Further information

Only acute toxicity studies have been performed on the formulated product. The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) 0.091 mg/l Exposure time: 96 h
Toxicity to aquatic	EC50 (Daphnia magna (Water flea)) 0.086 mg/l
invertebrates	Exposure time: 48 h

LC50 (Mysidopsis bahia (mysid shrimp)) 0.00862 mg/l



Exposure time: 96 h

Version 1.0 / CDN 102000036911

9/12 Revision Date: 12/14/2022 Print Date: 12/15/2022

	The value mentioned relates to the active ingredient trifloxystrobin.
Toxicity to aquatic plants	IC50 (Raphidocelis subcapitata (freshwater green alga)) 0.292 mg/l Growth rate; Exposure time: 72 h
	EC10 (Desmodesmus subspicatus (green algae)) 0.0025 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient trifloxystrobin.
Biodegradability	Fluopyram: Not rapidly biodegradable Trifloxystrobin: Not rapidly biodegradable
Кос	Fluopyram: Koc: 279 Trifloxystrobin: Koc: 2377
Bioaccumulation	Fluopyram: Bioconcentration factor (BCF) 18 Does not bioaccumulate. Trifloxystrobin: Bioconcentration factor (BCF) 431 Does not bioaccumulate.
Mobility in soil	Fluopyram: Moderately mobile in soils Trifloxystrobin: Slightly mobile in soils
Results of PBT and vPvB ass	essment
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). Trifloxystrobin: 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 apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Do not apply when weather conditions favor runoff or drift. 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.

SAFETY DATA SHEET



LUNA SENSATION[™] SUSPENSION FUNGICIDE

Version 1.0 / CDN 102000036911

10/12 Revision Date: 12/14/2022 Print Date: 12/15/2022

Contaminated packaging

Consult state and local regulations regarding the proper disposal of container. Follow advice on product label and/or leaflet.

SECTION 14: TRANSPORT INFORMATION

TDG UN number Labels Packaging group Marine pollutant Proper shipping name	3082 9 III Marine pollutant ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIFLOXYSTROBIN)
49CFR	Not dangerous goods / not hazardous material
IMDG UN number Class Packaging group Marine pollutant Proper shipping name	3082 9 III YES ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIFLOXYSTROBIN SOLUTION)
IATA UN number Class Packaging group Environm. Hazardous Mark Proper shipping name	3082 9 III YES ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIFLOXYSTROBIN 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.

Further Information	Exempt from regulation when transported by road or rail, in accordance with TDG Regulations 1.45.1. This exemption provides that this product does not require dangerous goods shipping documentation or safety marks when transported on land by road or rail.



Version 1.0 / CDN 102000036911

11/12 Revision Date: 12/14/2022 Print Date: 12/15/2022

SECTION 15: REGULATORY INFORMATION

PCP Registration No. 32107

PMRA Information:

Read the label, authorized under the Pest Control Products Act, prior to using or handling the pest control product.

This chemical is a pest control product regulated by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. The following is the hazard information required on the pest control product label:

Hazard statements:

Keep out of the reach of children.

There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

Appleviations and actor	
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
ΙΑΤΑ	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):	

NFPA 704 (National Fire Protection Association): Health - 2

Instability - 0 Flammability - 1

HMIS (Hazardous Materials Identification System, based on the Fourth Edition Ratings Guide) Health - 2* Flammability - 1 Physical Hazard - 0 PPE -

Others - none

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



LUNA SENSATION[™] SUSPENSION FUNGICIDE

Version 1.0 / CDN 102000036911

12/12 Revision Date: 12/14/2022 Print Date: 12/15/2022

Reason for Revision: New Safety Data Sheet.

Revision Date: 12/14/2022

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.