

Revision Date: 06/30/2021

Print Date: 07/01/2021

LUNA® EXPERIENCE

COMPANY/UNDERTAKING

Version 4.0 / USA 102000021448

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

Product identifier

Trade name LUNA® EXPERIENCE

Product code (UVP) 84476838

SDS Number 102000021448

EPA Registration No. 264-1091

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

Use Fungicide

Restrictions on useSee product label for restrictions.

Information on supplier

Supplier Bayer CropScience LP

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)

e 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

Reproductive toxicity: Category 2 Eye irritation: Category 2B

Labelling in accordance with regulation HCS 29CFR §1910.1200



Signal word: Warning

Hazard statements

Suspected of damaging fertility or the unborn child.

Causes eye irritation.



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Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood. Wear protective gloves/ protective clothing/ eye protection/ face protection.

Wash thoroughly after handling.

IF exposed or concerned: Get medical advice/ attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

If eye irritation persists: 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	17.6	
Tebuconazole	107534-96-3	17.6	
Alkyl polysaccharide	68515-73-1	4.0	
Alcohols, C11-14-iso-, C13-rich, ethoxylated	78330-21-9	2.2	

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 Rinse immediately with plenty of water, also under the eyelids, for at

least 15 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



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Symptoms No symptoms known or expected.

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 (HCl), 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 Contain the spread of the fire-fighting media. Do not allow run-off from

fire fighting to enter drains or water courses.

Flash point $> 101 \,^{\circ}\text{C} / > 213.8 \,^{\circ}\text{F}$

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

Auto-ignition temperature 440 °C / 824 °F

Lower 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.



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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.

, ...,,

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. Keep away from direct sunlight.

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*
Tebuconazole	107534-96-3	0.2 mg/m3 (SK-ABS)		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



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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.

characteristic

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 Threshold No data available

pH 5.0 - 8.0 (100 %) (23 °C)

Melting point/rangeNo data availableBoiling Point101 °C / 213.8 °FFlash point> 101 °C / > 213.8 °F

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

Minimum ignition energy No data available
Self-accelarating No data available
decomposition temperature

(SADT)

Odour

Upper explosion limitNo data availableLower explosion limitNo data availableVapour pressureNo data availableEvaporation rateNo data availableRelative vapour densityNo data availableRelative densityNo data available

Density ca. 1.13 g/cm³ (20 °C)

Water solubility dispersible

Partition coefficient: n- Tebuconazole: log Pow: 3.7



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octanol/water

Fluopyram: log Pow: 3.3

Viscosity, dynamic 280 - 450 mPa.s (20 °C)

Velocity gradient 20 /s

Viscosity, kinematic No data available Surface tension 28 mN/m (25 °C)

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 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.

Conditions to avoid Extremes of temperature and direct sunlight.

freezing

Incompatible materialsNo incompatible materials known.

Hazardous decomposition

products

No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes Ingestion, Inhalation, Skin contact, Eye contact

Immediate Effects

Eye May cause eye irritation.

Skin Harmful if absorbed through skin.

Ingestion Harmful if swallowed.

Harmful if inhaled.

Information on toxicological effects

Acute oral toxicity LD50 (Rat) > 2,000 mg/kg

Test conducted with a similar formulation.

No deaths

Acute inhalation toxicity LC50 (Rat) > 1.9 mg/l



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Exposure time: 4 h

Determined in the form of liquid aerosol. Highest attainable concentration.

No deaths

Test conducted with a similar formulation.

Acute dermal toxicity LD50 (Rat) > 2,000 mg/kg

Test conducted with a similar formulation.

No deaths

Skin corrosion/irritation No skin irritation (Rabbit)

Test conducted with a similar formulation.

Serious eye damage/eye

irritation

Irritating to eyes. (Rabbit)

Respiratory or skin Skin: Non-sensitizing. (Mouse)

sensitisation OECD Test Guideline 429, local lymph node assay (LLNA)

Test conducted with a similar formulation.

Assessment STOT Specific target organ toxicity - single exposure

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

Assessment STOT Specific target organ toxicity – repeated exposure

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

Assessment mutagenicity

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

Assessment carcinogenicity

Tebuconazole caused at high dose levels an increased incidence of tumours in mice in the following organ(s): Liver. The mechanism of tumour formation is not considered to be relevant to man. 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.



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Assessment toxicity to reproduction

Tebuconazole 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 Tebuconazole is related to parental toxicity.

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

Tebuconazole caused developmental toxicity only at dose levels toxic to the dams. Tebuconazole caused an increased incidence of post implantation losses, an increased incidence of non-specific malformations.

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

Aspiration hazard

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

Further information

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

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)) 21.7 mg/l

static test; Exposure time: 96 h

Test conducted with a similar formulation.

Toxicity to aquatic

invertebrates

EC50 (Daphnia magna (Water flea)) 56.9 mg/l

Exposure time: 48 h

Test conducted with a similar formulation.

Chronic toxicity to aquatic

invertebrates

NOEC (Daphnia (water flea)): 0.01 mg/l

Exposure time: 21 d

The value mentioned relates to the active ingredient tebuconazole.

Toxicity to aquatic plants EC50 (Raphidocelis subcapitata (freshwater green alga)) 17.7 mg/l

Growth rate: Exposure time: 72 h

Test conducted with a similar formulation.

EC50 (Lemna gibba (gibbous duckweed)) 0.237 mg/l

Growth rate; Exposure time: 7 d

The value mentioned relates to the active ingredient tebuconazole.

Biodegradability Tebuconazole:

Not rapidly biodegradable

Fluopyram:

Not rapidly biodegradable



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Koc Tebuconazole: Koc: 769

Fluopyram: Koc: 279

Bioaccumulation Tebuconazole: Bioconcentration factor (BCF) 35 - 59

Does not bioaccumulate.

Fluopyram: Bioconcentration factor (BCF) 18

Does not bioaccumulate.

Mobility in soil Tebuconazole: Slightly mobile in soils

Fluopyram: Moderately mobile in soils

Results of PBT and vPvB assessment

PBT and vPvB assessment Tebuconazole: 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).

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).

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.

Do not contaminate surface or ground water by cleaning equipment or

disposal of wastes, including equipment wash water.

Do not apply when weather conditions favor runoff or drift.

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

Product Dispose in accordance with all local, state/provincial and federal

regulations.

Follow container label instructions for disposal of wastes generated

during use in compliance with the product label.

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. Follow advice on product label and/or leaflet.

Contaminated packaging Do not re-use empty containers.

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.



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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.

(TEBUCONAZOLE SOLUTION)

IATA

UN number 3082
Class 9
Packaging group III
Environm. Hazardous Mark YES

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(TEBUCONAZOLE 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. 264-1091

US Federal Regulations

TSCA list

Water 7732-18-5
Alkyl polysaccharide 68515-73-1
1,2-Propanediol 57-55-6
Alcohols, C11-14-iso-, C13-rich, 78330-21-9

ethoxylated

Polyethylene-polypropylene copolymer 9003-11-6

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



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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

1,2-Propanediol 57-55-6 MN, RI

Environmental CERCLA None.

Clean Water Section 307(a)(1)

None.

Safe Drinking Water Act Maximum Contaminant Levels

Yes

Tebuconazole 107534-96-3

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.

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



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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 Third 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

Reason for Revision: The following sections have been revised: Section 3: Composition / Information on Ingredients. Section 5: Fire Fighting Measures. Section 8: Exposure Controls / Personal Protection. Section 9: Physical and Chemical Properties. Section 15: Regulatory information. Reviewed and updated for general editorial purposes.

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

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