COMPANY/UNDERTAKING



Revision Date: 12/06/2018

Print Date: 12/06/2018

VELUM PRIME™

Version 1.0 / CDN 102000036907

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

Product identifier

Trade name VELUM PRIME™

Product code (UVP) 86243776

SDS Number 102000036907

PCP Registration No. 32108

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

Use Fungicide, Nematicide

Restrictions on useSee 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

This material is not hazardous under the criteria of Part 2 of the Hazardous Products 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 41.5



VELUM PRIME™

Version 1.0 / CDN Revision Date: 12/06/2018 102000036907 Print Date: 12/06/2018

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. Get medical attention if irritation

develops and persists.

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 No symptoms known or expected.

Indication of any immediate medical attention and special treatment needed

Treatment There is no specific antidote. 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

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 Contain the spread of the fire-fighting media. Do not allow run-off from

fire fighting to enter drains or water courses.

Flash point > 100 °C



VELUM PRIME™

Version 1.0 / CDN Revision Date: 12/06/2018 102000036907 Print Date: 12/06/2018

Auto-ignition temperatureNo data availableLower 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 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

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 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.



VELUM PRIME™

 Version 1.0 / CDN
 Revision Date: 12/06/2018

 102000036907
 Print Date: 12/06/2018

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*
		(TWA)		

^{*}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 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

Appearance white to beige

Physical State suspension

Odor characteristic

Odour Threshold No data available

pH 5.0 - 8.0 (100 %) (23 °C)

Vapor Pressure No data available
Vapor Density (Air = 1) No data available

Density ca. 1.20 g/cm³ (20 °C)

Evaporation rateNo data availableBoiling PointNo data availableMelting / Freezing PointNo data available

Water solubility dispersible

Minimum Ignition Energy Not applicable



VELUM PRIME™

 Version 1.0 / CDN
 Revision Date: 12/06/2018

 102000036907
 Print Date: 12/06/2018

Decomposition

temperature

No data available

Partition coefficient: n-

octanol/water

Not applicable

Viscosity 200 - 400 mPa.s Velocity gradient 20 /s

Flash point > 100 °C

Auto-ignition temperatureNo data availableLower explosion limitNo data availableUpper explosion limitNo data available

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

Thermal decomposition No data available

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.

Incompatible materials No data available

Hazardous decomposition

products

No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes Ingestion, Skin Absorption, Inhalation, Eye contact

Immediate Effects

Skin The product may be absorbed through the skin. Harmful if absorbed

through skin.

Ingestion Harmful if swallowed.

Information on toxicological effects

Acute oral toxicity LD50 (Rat) > 2,000 mg/kg
Acute inhalation toxicity LC50 (Rat) > 1.911 mg/l



VELUM PRIME™

Version 1.0 / CDN 102000036907

Revision Date: 12/06/2018 Print Date: 12/06/2018

Exposure time: 4 h

Determined in the form of liquid aerosol.

Highest attainable concentration.

Acute dermal toxicity LD50 (Rat) > 2,000 mg/kg
Skin corrosion/irritation No skin irritation (Rabbit)
Serious eye damage/eye No eye irritation (Rabbit)

irritation

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

sensitisation 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

Only acute toxicity studies have been performed on the formulated product.

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



VELUM PRIME™

Version 1.0 / CDN 102000036907

Revision Date: 12/06/2018 Print Date: 12/06/2018

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish LC50 (Cyprinus carpio (Carp)) > 200 mg/l

Exposure time: 96 h

Toxicity to aquatic

EC50 (Daphnia magna (Water flea)) 141 mg/l

invertebrates Exposure time: 48 h

Toxicity to aquatic plants EC50 (Raphidocelis subcapitata (freshwater green alga)) 14.6 mg/l

Growth rate: Exposure time: 72 h

EC50 (Lemna gibba (gibbous duckweed)) 8.1 mg/l

Growth rate; Exposure time: 7 d

Test conducted with a similar formulation.

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

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 Improper disposal of excess pesticide, spray mixture, or rinsate is a

violation of Federal Law.

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.

Contaminated packaging Do not re-use empty containers.

Triple rinse containers.



VELUM PRIME™

Version 1.0 / CDN Revision Date: 12/06/2018 102000036907 Print Date: 12/06/2018

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.

SECTION 14: TRANSPORT INFORMATION

TDG

UN number 3082
Labels 9
Packaging group III

Marine pollutant Marine pollutant

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(FLUOPYRAM)

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.

(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.

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.



Revision Date: 12/06/2018

Print Date: 12/06/2018

VELUM PRIME™

Version 1.0 / CDN 102000036907

SECTION 15: REGULATORY INFORMATION

PCP Registration No. 32108

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 - 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: New Safety Data Sheet due to change in numbering scheme.

Prepared by the HSE Department of Bayer CropScience Inc. (306)-721-0310.

Revision Date: 12/06/2018

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.