



SIVANTO™ 200 SL

Version 2.1 / USA
102000021884

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Revision Date: 01/16/2015
Print Date: 02/26/2016

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

Product identifier

Trade name SIVANTO™ 200 SL

Product code (UVP) 79718845

SDS Number 102000021884

EPA Registration No. 264-1141

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

Use Insecticide

Restrictions on use See product label for restrictions.

Information on manufacturer

Bayer CropScience
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
United States

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days) 1-800-334-7577

Product Information Telephone Number

SDS Information or Request SDSINFO.BCS-NA@bayer.com

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Skin sensitisation : Category 1

Acute toxicity (Inhalation): Category 4



Signal word: Warning

Hazard statements

May cause an allergic skin reaction.

Harmful if inhaled.

Precautionary statements

Avoid breathing mist and spray.

Contaminated work clothing should not be allowed out of the workplace.



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Wear protective gloves.
IF ON SKIN: Wash with plenty of water/soap.
If skin irritation or rash occurs: Get medical advice/attention.
Specific treatment (see supplemental first aid instructions on this label).
Wash contaminated clothing before reuse.
Dispose of contents/container in accordance with local regulation.

Other hazards

No particular hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
Flupyradifurone	951659-40-8	17.09
Propylene carbonate	108-32-7	42.88

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. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Rinse out mouth and give water in small sips to drink. 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 Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.



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SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Water spray, Carbon dioxide (CO₂), Foam, Sand
Unsuitable None known.

Special hazards arising from the substance or mixture Dangerous gases are evolved in the event of a fire.

Advice for firefighters

Special protective equipment for fire-fighters In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

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

Autoignition temperature 420 °C / 788 °F

Lower explosion limit no data available

Upper explosion limit no 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. 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



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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. Protect from freezing. Keep away from direct sunlight.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Propylene carbonate (Particulate.)	108-32-7	5ug/m3 (AN ESL)	02 2013	TX ESL
Propylene carbonate (Particulate.)	108-32-7	50ug/m3 (ST ESL)	02 2013	TX ESL
Propylene carbonate (Vapor.)	108-32-7	500ug/m3 (ST ESL)	02 2013	TX ESL
Propylene carbonate (Vapor.)	108-32-7	50ug/m3 (AN ESL)	02 2013	TX ESL

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 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.



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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	light yellow to brown, shades of orange
Physical State	Liquid slightly turbid
Odor	characteristic
Odour Threshold	no data available
pH	5.0 - 7.0 at 1 % (23 °C) (deionized water)
Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available
Density	ca. 1.17 g/cm ³ at 20 °C
Evaporation rate	no data available
Boiling Point	no data available
Melting / Freezing Point	no data available
Water solubility	soluble
Minimum Ignition Energy	not applicable
Decomposition temperature	not applicable
Partition coefficient: n-octanol/water	no data available
Viscosity	no data available
Flash point	> 100 °C
Autoignition temperature	420 °C / 788 °F
Lower explosion limit	no data available
Upper explosion limit	no 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	not applicable
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.



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Conditions to avoid	freezing 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 contact, Eye contact
Immediate Effects	
Eye	Moderate eye irritation.
Skin	Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
Ingestion	Harmful if swallowed.

Information on toxicological effects

Acute oral toxicity	LD50 (female rat) > 2,000 mg/kg
Acute inhalation toxicity	LC50 (female rat) ca. 3.496 mg/l Exposure time: 4 h Determined in the form of a respirable aerosol. LC50 (female rat) ca. 13.984 mg/l Exposure time: 1 h Determined in the form of a respirable aerosol. Extrapolated from the 4 hr LC50.
Acute dermal toxicity	LD50 (male/female combined rat) > 2,000 mg/kg
Skin irritation	No skin irritation (rabbit)
Eye irritation	No eye irritation (rabbit)
Sensitisation	Sensitising (mouse) OECD Test Guideline 429, local lymph node assay (LLNA)

Assessment repeated dose toxicity

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

Assessment Mutagenicity

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

Assessment Carcinogenicity

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

ACGIH

None.

NTP



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None.

IARC

None.

OSHA

None.

Assessment toxicity to reproduction

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

Assessment developmental toxicity

Flupyradifurone did not cause developmental toxicity in rats and rabbits.

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 aquatic invertebrates	EC50 (Daphnia magna (Water flea)) 684 mg/l Exposure time: 48 h
Chronic toxicity to aquatic invertebrates	EC50 (Chironomus riparius (non-biting midge)): 0.161 mg/l Exposure time: 28 d
Toxicity to aquatic plants	IC50 (Pseudokirchneriella subcapitata) > 250 mg/l Growth rate; Exposure time: 72 h
Biodegradability	Flupyradifurone: ; not rapidly biodegradable
Koc	Flupyradifurone: Koc: 93
Bioaccumulation	Flupyradifurone: ; Does not bioaccumulate.
Mobility in soil	Flupyradifurone: Moderately mobile in soils
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.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods



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Product	In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.
Contaminated packaging	Do not re-use empty containers. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and Local authorities, by burning. 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. (FLUPYRADIFURONE SOLUTION)
IATA	
UN number	3082
Class	9
Packaging group	III
Environm. Hazardous Mark	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FLUPYRADIFURONE 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.	264-1141
US Federal Regulations	
TSCA list	
Propylene carbonate	108-32-7
US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)	
None.	



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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

None.

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 or absorbed through skin.
Moderate eye irritation.
Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SECTION 16: OTHER INFORMATION



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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

Reason for Revision: The following sections have been revised: Section 12. Ecological information.

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