



Safety Data Sheet
KONTOS® INSECTICIDE

SDS Number: 102000017161
 SDS Version 2.0
 Revision Date: 04/15/2014
 Print Date: 04/17/2014

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product name KONTOS® INSECTICIDE
SDS Number 102000017161
Product code (UVP) 79273932
PCP Registration No. 29567
Product Use Insecticide

Bayer CropScience Inc
 #200, 160 Quarry Park Blvd, SE
 Calgary, Alberta T2C 3G3
 Canada

For MEDICAL, TRANSPORTATION or other EMERGENCY call: 1-800-334-7577 (24 hours/day)
 For Product Information call: 1-888-283-6847

SECTION 2. HAZARDS IDENTIFICATION

NOTE: Please refer to Section 11 for detailed toxicological information.

Emergency Overview Caution! Harmful if swallowed or absorbed through skin. Avoid contact with skin and clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling.

Physical State Liquid

Odor weak chalk-like

Appearance white to light beige

Exposure routes Skin contact, Skin Absorption, Ingestion

Immediate Effects

Eye May cause mild irritation to eyes.

Skin Harmful if absorbed through skin.

Ingestion Harmful if swallowed.

Chronic or Delayed Long-Term This product or its components may have target organ effects.



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Potential Environmental Effect Toxic to oysters and shrimp.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Spirotetramat	203313-25-1	22.40
Glycerine	56-81-5	10.00

SECTION 4. FIRST AID MEASURES

General	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
Eye	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.
Skin	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.
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.
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.
Notes to physician	
Signs and Symptoms	To date no symptoms are known.
Treatment	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.

SECTION 5. FIRE FIGHTING MEASURES

Flash point	> 100 °C / 212 °F
Autoignition temperature	no data available



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Lower Flammability Limit	no data available
Upper Flammability Limit	no data available
Explosiveness	not applicable
Fire and Explosion Hazards	In the event of fire the following may be released: Hydrogen cyanide (hydrocyanic acid) Carbon monoxide (CO) Nitrogen oxides (NOx)
Suitable extinguishing media	Water spray, Carbon dioxide (CO ₂), Foam, Sand
Unsuitable extinguishing media	None known.
Fire Fighting Instructions	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. Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.
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.

SECTION 7. HANDLING AND STORAGE

Handling procedures	Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.
Storing Procedures	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



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storage area.

Work/Hygienic Procedures

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.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General Protection

Remove contaminated clothing immediately and dispose of safely.

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.

Eye/Face Protection

Safety glasses with side-shields

Hand protection

Chemical resistant nitrile rubber gloves

Body Protection

Wear long-sleeved shirt and long pants and shoes plus socks.

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.

Exposure Limits

Spirotetramat	203313-25-1	OES BCS*	TWA	2.8 mg/m ³
	Glycerine	56-81-5	CAD AB OEL	TWA
CAD BC OEL			TWA	3 mg/m ³
CAD BC OEL			TWA	10 mg/m ³
CAD ON OEL			TWAEV	10 mg/m ³
CAD SK OEL			8 HR ACL	10 mg/m ³
CAD SK OEL			15 MIN ACL	20 mg/m ³
OEL (QUE)			TWA	10 mg/m ³

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance white to light beige

Physical State Liquid



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Odor	weak chalk-like
pH	4.5
Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available
Density	1.07 g/cm ³ at 20 °C
Evaporation rate	no data available
Boiling Point	no data available
Melting / Freezing Point	no data available
Water solubility	dispersible
Minimum Ignition Energy	not applicable
Decomposition temperature	not applicable
Partition coefficient: n-octanol/water	no data available
Viscosity	900 - 1,400 mPa.s

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	freezing
Incompatibility	no data available
Hazardous Decomposition Products	no data available
Hazardous reactions	No dangerous reaction known under conditions of normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Only acute toxicity studies have been performed on this product as formulated. The non-acute information pertains to the technical-grade active ingredient, spirotetramat.

Acute oral toxicity	female rat: LD50: > 2,000 mg/kg
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Acute dermal toxicity	male/female combined rat: LD50: > 4,000 mg/kg
Acute inhalation toxicity	male/female combined rat: LC50: > 3 mg/l Exposure time: 4 h Determined in the form of liquid aerosol. highest concentration tested No deaths
	male/female combined rat: LC50: > 12 mg/l Exposure time: 1 h Determined in the form of liquid aerosol. Extrapolated from the 4 hr LC50.
Skin irritation	rabbit: No skin irritation
Eye irritation	rabbit: Mild eye irritation.
Sensitisation	guinea pig: Sensitising
Chronic toxicity	Spirotetramat did not cause specific target organ toxicity in experimental animal studies.

Assessment Carcinogenicity

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

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

Reproductive toxicity	Spirotetramat caused male reproductive toxicity in the presence of general toxicity in the rat at very high experimental dose levels. There were no effects on male fertility in mice and dogs. The reproductive toxicity seen with Spirotetramat is due to an overwhelmed elimination capacity at high doses. The high dose levels needed for this effect cannot be achieved even in a worst case exposure scenario.
Developmental Toxicity	Spirotetramat caused developmental toxicity only at dose levels toxic to the dams. Spirotetramat caused a delayed foetal growth, an increased incidence of variations.
Mutagenicity	Spirotetramat was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

SECTION 12. ECOLOGICAL INFORMATION



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Toxicity to fish	<p>Lepomis macrochirus (Bluegill sunfish) LC50: 2.20 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient spirotetramat.</p>
Toxicity to aquatic plants	<p>Pseudokirchneriella subcapitata Growth rate IC50: 8.15 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient spirotetramat.</p>
Acute Toxicity to Aquatic Invertebrates	<p>Water flea (Daphnia magna) EC50: > 42.7 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient spirotetramat.</p> <p>Chironomus riparius (non-biting midge) EC50: 0.46 mg/l Exposure time: 28 d The value mentioned relates to the active ingredient spirotetramat.</p> <p>Chironomus riparius (non-biting midge) NOEC: 0.1 mg/l Exposure time: 28 d The value mentioned relates to the active ingredient spirotetramat.</p>
Environmental precautions	<p>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 allow to get into surface water, drains and ground water.</p> <p>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. 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.</p> <p>Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.</p>



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SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance	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. Dispose in accordance with all local, state/provincial and federal regulations.
Container Disposal	Follow advice on product label and/or leaflet. Do not re-use empty containers. Triple rinse containers. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning. If burned, stay out of smoke.

SECTION 14. TRANSPORT INFORMATION

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

PCP Registration No.	29567
US Federal Regulations	
TSCA list	
Glycerine	56-81-5
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

Glycerine	56-81-5	MN
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Canadian Regulations

Canadian Domestic Substance List

Glycerine	56-81-5
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Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

International Regulations

European Inventory of Existing Commercial Substances (EINECS)

Glycerine	56-81-5
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SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 1	Flammability - 1	Instability - 0	Others - none
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HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1	Flammability - 1	Physical Hazard - 0	PPE -
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0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: Reviewed and updated for general editorial purposes. The following sections have been revised: Section 9: Physical and Chemical Properties. Section 10: Stability and reactivity. Section 16: Other Information.

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

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