



## Safety Data Sheet

### CONCEPT™ LIQUID INSECTICIDE

SDS Number: 102000011078  
SDS Version 3.0  
Revision Date: 01/16/2015  
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#### SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

**Product name** CONCEPT™ LIQUID INSECTICIDE  
**SDS Number** 102000011078  
**Product code (UVP)** 06361331  
**PCP Registration No.** 29611  
**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** Warning! Hazard to humans and domestic animals. Keep out of the reach of children. Harmful if swallowed or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes and clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling.

**Physical State** dispersion  
**Odor** weak characteristic  
**Appearance** white  
**Exposure routes** Inhalation, Skin contact, Ingestion  
**Immediate Effects**  
    **Eye** Causes eye irritation. Avoid contact with eyes.  
    **Skin** Harmful if absorbed through skin. Avoid contact with skin, eyes and clothing.  
    **Ingestion** Harmful if swallowed. Do not take internally.  
    **Inhalation** May cause irritation. Avoid breathing spray mist.  
**Potential Environmental Effect** Extremely toxic to fish and aquatic organisms. Highly toxic to bees.



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#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Imidacloprid	138261-41-3	7.65
Deltamethrin	52918-63-5	1.02
2-Ethylhexanol propylene ethyleneglycol ether	64366-70-7	20.00
2-Ethylhexanole	104-76-7	4.50

#### SECTION 4. FIRST AID MEASURES

<b>General</b>	Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.
	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
<b>Eye</b>	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.
<b>Skin</b>	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.
<b>Ingestion</b>	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.
<b>Inhalation</b>	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.
<b>Notes to physician</b> <b>Signs and Symptoms</b>	<p>Local:</p> <p>Skin and eye paraesthesia which may be severe Usually transient with resolution within 24 hours Skin, eye and mucous membrane irritation Cough Sneezing</p> <p>Systemic:</p> <p>Discomfort in the chest Tachycardia Hypotension Nausea Abdominal pain Diarrhoea</p>



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Vomiting  
Dizziness  
Blurred vision  
Headache  
Anorexia  
Somnolence  
Coma  
Convulsions  
Tremors  
Prostration  
Airway hyperreaction  
Pulmonary oedema  
Palpitation  
Muscular fasciculation  
Apathy

**Hazards** This product contains a pyrethroid. Pyrethroid poisoning should not be confused with carbamate or organophosphate poisoning.

**Treatment** Local treatment: Initial treatment: symptomatic.

In case of skin irritation, application of oils or lotions containing vitamin E may be considered.

Systemic treatment: Initial treatment: symptomatic. Monitor: respiratory and cardiac functions. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. Keep respiratory tract clear. Oxygen or artificial respiration if needed. In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens. If not effective, phenobarbital may be used. Contraindication: atropine. Contraindication: derivatives of adrenaline. There is no specific antidote. Recovery is spontaneous and without sequelae.

### SECTION 5. FIRE FIGHTING MEASURES

**Flash point** 104 °C / 219.2 °F

**Autoignition temperature** 385 °C / 725 °F

**Lower Flammability Limit** no data available

**Upper Flammability Limit** no data available

**Explosiveness** Not explosive  
92/69/EEC, A.14 / OECD 113



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<b>Fire and Explosion Hazards</b>	In the event of fire the following may be released: Hydrogen chloride (HCl) Hydrogen cyanide (hydrocyanic acid) Carbon monoxide (CO) Nitrogen oxides (NOx)
<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable extinguishing media</b>	High volume water jet
<b>Fire Fighting Instructions</b>	Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.  In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.
<b>Dust explosion class</b>	no data available

## SECTION 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.

## SECTION 7. HANDLING AND STORAGE

<b>Handling procedures</b>	Use only in area provided with appropriate exhaust ventilation.
<b>Storing Procedures</b>	Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Store bulk material and packed materials in a closed warehouse or under cover protected against direct sunlight and frost.  Keep away from food, drink and animal feedingstuffs.
<b>Work/Hygienic Procedures</b>	Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands before breaks and immediately after handling the product. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).



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### SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>General Protection</b>	Follow all label instructions. Train employees in safe use of the product.
	Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water.
<b>Eye/Face Protection</b>	Tightly fitting safety goggles
<b>Hand protection</b>	Chemical resistant nitrile rubber gloves
<b>Body Protection</b>	Wear long-sleeved shirt and long pants and shoes plus socks.
<b>Respiratory protection</b>	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

Imidacloprid	138261-41-3	OES BCS*	TWA	0.7 mg/m <sup>3</sup>
Deltamethrin	52918-63-5	OES BCS*	TWA	0.02 mg/m <sup>3</sup>

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

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	white
<b>Physical State</b>	dispersion
<b>Odor</b>	weak characteristic
<b>pH</b>	4.0 - 6.0 (1 %) at 23 °C
<b>Vapor Pressure</b>	no data available
<b>Vapor Density (Air = 1)</b>	no data available
<b>Density</b>	ca. 0.98 g/cm <sup>3</sup> at 20 °C
<b>Evaporation rate</b>	no data available
<b>Boiling Point</b>	no data available
<b>Melting / Freezing Point</b>	no data available



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<b>Water solubility</b>	dispersible
<b>Minimum Ignition Energy</b>	no data available
<b>Decomposition temperature</b>	Stable under normal conditions.
<b>Partition coefficient: n-octanol/water</b>	no data available
<b>Other information</b>	Further safety related physical-chemical data are not known.

## SECTION 10. STABILITY AND REACTIVITY

<b>Conditions to avoid</b>	Extremes of temperature and direct sunlight.
<b>Incompatibility</b>	Store only in the original container.
<b>Hazardous Decomposition Products</b>	No decomposition products expected under normal conditions of use.
<b>Hazardous reactions</b>	No dangerous reaction known under conditions of normal use.

## SECTION 11. TOXICOLOGICAL INFORMATION

Only acute toxicity studies have been performed on the formulated product. The non-acute information pertains to the technical-grade active ingredients

<b>Acute oral toxicity</b>	rat: LD50: 2,500 mg/kg
<b>Acute dermal toxicity</b>	rat: LD50: > 4,000 mg/kg
<b>Acute inhalation toxicity</b>	rat: LC50: > 5.383 mg/l Exposure time: 4 h Determined in the form of a respirable aerosol. Highest attainable concentration.
<b>Skin irritation</b>	rabbit: No skin irritation
<b>Eye irritation</b>	rabbit: Irritating to eyes.
<b>Sensitisation</b>	guinea pig: Non-sensitizing. OECD Test Guideline 406, Magnusson & Kligman test
<b>Chronic toxicity</b>	Imidacloprid did not cause specific target organ toxicity in experimental animal studies.  Deltamethrin caused neurobehavioral effects and/or neuropathological changes



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in animal studies. The toxic effects of Deltamethrin are related to transient hyperactivity typical for pyrethroid neurotoxicity.

### Assessment Carcinogenicity

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

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

### ACGIH

None.

### NTP

None.

### IARC

Deltamethrin

52918-63-5

Overall evaluation: 3

### OSHA

None.

### Reproductive toxicity

Imidacloprid 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 Imidacloprid is related to parental toxicity.

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

### Developmental Toxicity

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

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

### Mutagenicity

Imidacloprid was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

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

## SECTION 12. ECOLOGICAL INFORMATION

### Toxicity to fish

Oncorhynchus mykiss (rainbow trout)

LC50: 211 mg/l

Exposure time: 96 h

The value mentioned relates to the active ingredient imidacloprid.

Oncorhynchus mykiss (rainbow trout)

LC50: 0.00091 mg/l

Exposure time: 96 h

The value mentioned relates to the active ingredient deltamethrin.



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**Toxicity to aquatic plants** Desmodesmus subspicatus  
Growth rate  
EC50: > 10 mg/l  
Exposure time: 72 h  
The value mentioned relates to the active ingredient imidacloprid.

Algae  
Growth rate  
EC50: > 9.1 mg/l  
Exposure time: 96 h  
The value mentioned relates to the active ingredient deltamethrin.

**Acute Toxicity to Aquatic Invertebrates** Daphnia magna (Water flea)  
EC50: 85 mg/l  
Exposure time: 48 h  
The value mentioned relates to the active ingredient imidacloprid.

Chironomus riparius (non-biting midge)  
LC50: 0.0552 mg/l  
Exposure time: 24 h  
The value mentioned relates to the active ingredient imidacloprid.

Daphnia magna (Water flea)  
EC50: 0.00056 mg/l  
Exposure time: 48 h  
The value mentioned relates to the active ingredient deltamethrin.

**Environmental precautions** Do not allow to get into surface water, drains and ground water.

**Ecological Information** No other effects to be mentioned.

### SECTION 13. DISPOSAL CONSIDERATIONS

**General Disposal Guidance** Dispose in accordance with all local, state/provincial and federal regulations.

**Container Disposal** Not completely emptied packagings should be disposed of as hazardous waste.

### SECTION 14. TRANSPORT INFORMATION

**TDG** Not dangerous goods / not hazardous material

**49CFR** Not dangerous goods / not hazardous material

**IMDG**  
UN number **3082**



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Class	9
Packaging group	III
Marine pollutant	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DELTAMETHRIN SOLUTION)

### IATA

UN number	<b>3082</b>
Class	9
Packaging group	III
Environm. Hazardous Mark	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DELTAMETHRIN 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.** 29611

### US Federal Regulations

#### TSCA list

2-Ethylhexanol propylene ethyleneglycol ether 64366-70-7  
2-Ethylhexanole 104-76-7

**US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)**  
None.

**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

2-Ethylhexanole	104-76-7	CT
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### Canadian Regulations

#### Canadian Domestic Substance List

2-Ethylhexanol propylene ethyleneglycol ether	64366-70-7
2-Ethylhexanole	104-76-7

### Environmental

#### CERCLA

None.

#### Clean Water Section 307 Priority Pollutants



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None.

#### Safe Drinking Water Act Maximum Contaminant Levels

None.

#### International Regulations

##### European Inventory of Existing Commercial Substances (EINECS)

Deltamethrin	52918-63-5
2-Ethylhexanole	104-76-7

## 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: The following sections have been revised: Section 14: Transport Information.

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

Revision Date: 01/16/2015

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