



Safety Data Sheet

CALYPSO® 480 SC INSECTICIDE

SDS Number: 102000008338

SDS Version 1.2

Revision Date: 03/10/2014

Print Date: 05/13/2014

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product name	CALYPSO® 480 SC INSECTICIDE
SDS Number	102000008338
Product code (UVP)	06265790
PCP Registration No.	28429
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! May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid breathing spray mist. Avoid contact with skin, eyes and clothing.

Physical State viscous Liquid

Odor very faint

Appearance white to beige

Exposure routes Eye contact, Skin contact, Skin Absorption, Inhalation, Ingestion

Immediate Effects

Eye May cause eye irritation.

Skin Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Ingestion May be fatal if swallowed.

Inhalation Harmful if inhaled.



Safety Data Sheet

CALYPSO® 480 SC INSECTICIDE

SDS Number: 102000008338

SDS Version 1.2

Potential Environmental Effect Toxic to aquatic organisms.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Thiacloprid	111988-49-9	40.40
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	> 93.3 °C / > 199.9 °F
Autoignition temperature	no data available



Safety Data Sheet

CALYPSO® 480 SC INSECTICIDE

SDS Number: 102000008338
SDS Version 1.2

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 chloride (HCl) Carbon monoxide (CO) Nitrogen oxides (NOx) Hydrogen cyanide (hydrocyanic acid) Sulphur oxides
Suitable extinguishing media	Water spray, Foam, Dry powder, Carbon dioxide (CO2), Sand
Unsuitable extinguishing media	None known.
Fire Fighting Instructions	Avoid contact with spilled product or contaminated surfaces. 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. Contaminated soil may have to be removed and disposed. 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.
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Safety Data Sheet

CALYPSO® 480 SC INSECTICIDE

SDS Number: 102000008338
SDS Version 1.2

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 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 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

Glycerine	56-81-5	CAD AB OEL	TWA	10 mg/m3
		CAD BC OEL	TWA	3 mg/m3
		CAD BC OEL	TWA	10 mg/m3
		CAD ON OEL	TWAEV	10 mg/m3
		CAD SK OEL	8 HR ACL	10 mg/m3
		CAD SK OEL	15 MIN ACL	20 mg/m3
		OEL (QUE)	TWA	10 mg/m3

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance white to beige

Physical State viscous Liquid

Odor very faint



Safety Data Sheet

CALYPSO® 480 SC INSECTICIDE

SDS Number: 102000008338
SDS Version 1.2

pH	7 - 9 (5 %) at 23 °C dispersion in water
Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available
Density	1.18 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	1,000 - 1,200 mPa.s at 20 °C

SECTION 10. STABILITY AND REACTIVITY

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

SECTION 11. TOXICOLOGICAL INFORMATION

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

Acute oral toxicity	rat: LD50: > 300 - < 500 mg/kg
Acute dermal toxicity	rat: LD50: > 4,000 mg/kg



Safety Data Sheet

CALYPSO® 480 SC INSECTICIDE

SDS Number: 102000008338
SDS Version 1.2

Acute inhalation toxicity female rat: LC50: > 1.0 - < 2.2 mg/l
Exposure time: 4 h
Determined in the form of liquid aerosol.

female rat: LC50: > 4.0 - < 8.8 mg/l
Exposure time: 1 h
Determined in the form of liquid aerosol.
Extrapolated from the 4 hr LC50.

male rat: LC50: > 2.2 mg/l
Exposure time: 4 h
Determined in the form of liquid aerosol.

male rat: LC50: > 8.8 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: No eye irritation

Sensitisation guinea pig: Sensitising
OECD Test Guideline 406, Magnusson & Kligman test

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

Assessment Carcinogenicity

Thiacloprid caused at high dose levels an increased incidence of tumours in rats in the following organ(s): uterus, thyroid.

Thiacloprid caused at high dose levels an increased incidence of tumours in mice in the following organ(s): ovaries. The tumours seen with Thiacloprid were caused through a non-genotoxic mechanism, which is not relevant at low doses. The mechanism that triggers tumours in rodents is not relevant for the low exposures encountered under normal use conditions.

- ACGIH**
None.
- NTP**
None.
- IARC**
None.
- OSHA**
None.

Reproductive toxicity Thiacloprid caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. Thiacloprid caused difficulties in parturition in rats. The mechanism of action for this effect is not considered to be relevant to man.



Safety Data Sheet

CALYPSO® 480 SC INSECTICIDE

SDS Number: 102000008338

SDS Version 1.2

Developmental Toxicity	Thiacloprid caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Thiacloprid are related to maternal toxicity.
Mutagenicity	Thiacloprid was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity to fish	Lepomis macrochirus (Bluegill sunfish) LC50: 80.7 mg/l Exposure time: 96 h
Toxicity to aquatic plants	Desmodosmus subspicatus IC50: 96.7 mg/l Exposure time: 72 h Selenastrum capricornutum IC50: > 100 mg/l Exposure time: 72 h
Acute Toxicity to Aquatic Invertebrates	Daphnia EC50: \geq 85.1 mg/l Exposure time: 48 h
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. 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

General Disposal Guidance	Do not contaminate water, food, or feed by disposal. Follow container label instructions for disposal of wastes generated during use in compliance with the product label.
Container Disposal	Do not re-use empty containers. Triple rinse containers. Puncture container to avoid re-use. 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. Follow advice on product label and/or leaflet.

SECTION 14. TRANSPORT INFORMATION

According to national and international transport regulations this material is not classified as dangerous goods / hazardous material.



Safety Data Sheet

CALYPSO® 480 SC INSECTICIDE

SDS Number: 102000008338
SDS Version 1.2

Freight Classification: INSECTICIDES OR FUNGICIDES, N.O.I., POISON, OTHER THAN GASES THAT ARE POISONOUS BY INHALATION

SECTION 15. REGULATORY INFORMATION

PCP Registration No. 28429

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.

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

Canadian Regulations

Canadian Domestic Substance List

Glycerine 56-81-5

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



Safety Data Sheet

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SDS Version 1.2

SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 2 Flammability - 1 Instability - 1 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 2 Flammability - 1 Physical Hazard - 1 PPE -

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.

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

Revision Date: 03/10/2014

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