

**CALYPSO 480 SC**Version 3 / EU  
1020000075691/7  
Revision Date: 11.10.2010  
Print Date: 20.12.2010**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name CALYPSO 480 EC  
Product code (UVP) 05302064  
Usage Insecticide  
Company Bayer CropScience AG  
Alfred-Nobel-Straße 50  
40789 Monheim am Rhein  
Germany

Telefax +49(0)2173-38-7394  
Responsible Department Material and Transport Safety Management  
+49(0)2173-38-3409/3189 (during business hours only)  
Email: MSDS@bayercropscience.com

Emergency telephone nr. +49(0)2133-51-4233 (Sicherheitszentrale Dormagen, Bayer AG)

**2. HAZARDS IDENTIFICATION****Risk advice to man and the environment**

Harmful by inhalation and if swallowed.  
Limited evidence of a carcinogenic effect.  
May cause sensitization by skin contact.  
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Chemical nature**

Suspension concentrate (=flowable concentrate)(SC)  
Thiacloprid 480 g/l

**Hazardous components**

Chemical Name	CAS-No. / EC-No.	Symbol(s)	R-phrase(s)	Concentration [%]
Thiacloprid	111988-49-9	Xn, N	R20/22, R40, R50/53	40,40

For the full text of the R-phrases/ Hazard statements mentioned in this Section, see Section 16.

**4. FIRST AID MEASURES****General advice**

Move out of dangerous area. Place and transport victim in stable position (lying sideways).  
Remove contaminated clothing immediately and dispose of safely.

**Inhalation**

Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.



## CALYPSO 480 SC

Version 3 / EU  
102000007569

2/7  
Revision Date: 11.10.2010  
Print Date: 20.12.2010

### Skin contact

Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. If symptoms persist, call a physician.

### 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

Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately.

### Notes to physician

### Treatment

Treat symptomatically.  
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.

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## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

Water spray  
Carbon dioxide (CO<sub>2</sub>)  
Foam  
Sand

### Specific hazards during fire fighting

In the event of fire the following may be released:  
Hydrogen chloride (HCl)  
Hydrogen cyanide (hydrocyanic acid)  
Carbon monoxide (CO)  
nitrogen oxides (NO<sub>x</sub>)  
Sulphur oxides

### 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.

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## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Avoid contact with spilled product or contaminated surfaces.  
Use personal protective equipment.

### Environmental precautions

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

**CALYPSO 480 SC**Version 3 / EU  
1020000075693/7  
Revision Date: 11.10.2010  
Print Date: 20.12.2010**Methods for cleaning up**

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.

**Additional advice**

Information regarding safe handling, see section 7.

Information regarding personal protective equipment, see section 8.

Information regarding waste disposal, see section 13.

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**7. HANDLING AND STORAGE****Handling**

Advice on safe handling

Use only in area provided with appropriate exhaust ventilation.

**Storage**

Requirements for storage areas and containers

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.

Advice on common storage

Keep away from food, drink and animal feedingstuffs.

Temperature tolerance            min.            max.  
   -10 °C        40 °C

Suitable materials

HDPE (high density polyethylene)

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Components	CAS-No.	Control parameters	Update	Basis
Thiacloprid	111988-49-9	0,56 mg/m <sup>3</sup> (TWA)		OES BCS*

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

**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            If product is handled while not enclosed, and if contact may occur:  
Wear respirator with an organic vapours and gas filter mask  
(protection factor 10) conforming to EN140 type A or equivalent.

Hand protection                    Wear CE Marked (or equivalent) nitrile rubber gloves (minimum  
thickness 0,40 mm). Wash when contaminated. Dispose of when  
contaminated inside, when perforated or when contamination  
outside cannot be removed. Wash hands always before eating,  
drinking, smoking or using the toilet.

**CALYPSO 480 SC**Version 3 / EU  
102000007569

4/7

Revision Date: 11.10.2010

Print Date: 20.12.2010

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Eye protection	Wear goggles conforming to EN166 (Field of Use 5 or equivalent).
Skin and body protection	Wear standard coverall and type 3 suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently. If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.
Hygiene measures	Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands immediately after work, if necessary take a shower. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).
Protective measures	If product is handled while not enclosed, and if contact may occur: Complete suit protecting against chemicals

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**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

Form	liquid, suspension
Colour	white to light beige
Odour	weak, characteristic

**Safety data**

pH	6,5 - 8,5 at 100 % (23 °C)
Flash point	> 100 °C
Density	ca. 1,19 g/cm <sup>3</sup> at 20 °C
Water solubility	miscible

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**10. STABILITY AND REACTIVITY**

Hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions. Stable under recommended storage conditions.
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**11. TOXICOLOGICAL INFORMATION**

Acute oral toxicity	LD50 (rat) > 300 - < 500 mg/kg
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**CALYPSO 480 SC**Version 3 / EU  
1020000075695/7  
Revision Date: 11.10.2010  
Print Date: 20.12.2010

Acute inhalation toxicity	LC50 (rat) > 0,9 - < 2,2 mg/l Exposure time: 4 h Determined in the form of a respirable aerosol.
Acute dermal toxicity	LD50 (rat) > 4.000 mg/kg
Skin irritation	No skin irritation (rabbit)
Eye irritation	No eye irritation (rabbit)
Sensitisation	Sensitising (guinea pig) OECD Test Guideline 406, Magnusson & Kligman test

**12. ECOLOGICAL INFORMATION****Ecotoxicity effects**

Toxicity to fish	LC50 (Lepomis macrochirus (Bluegill sunfish)) 80,7 mg/l Exposure time: 96 h
Toxicity to aquatic invertebrates	EC50 (Water flea (Daphnia magna)) >= 85,1 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient.
Toxicity to aquatic invertebrates	LC50 (Chironomus riparius (non-biting midge)) 0,032 mg/l Exposure time: 24 h
Toxicity to aquatic plants	IC50 (Desmodosmus subspicatus) 96,7 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient.

**13. DISPOSAL CONSIDERATIONS****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.

**Waste key for the unused product**

020108 agrochemical waste containing dangerous substances

**14. TRANSPORT INFORMATION****ADR/RID/ADNR**

UN-Number	<b>2902</b>
Labels	6.1
Packaging group	III
Hazard no.	60
Description of the goods	PESTICIDE, LIQUID, TOXIC, N.O.S. (THIACLOPRID SOLUTION)
Tunnel Code	E

**CALYPSO 480 SC**Version 3 / EU  
1020000075696/7  
Revision Date: 11.10.2010  
Print Date: 20.12.2010

This classification is in principle not valid for carriage by tank vessel on inland waterways.  
Please refer to the manufacturer for further information.

**IMDG**

UN-Number	<b>2902</b>
Labels	6.1
Packaging group	III
EmS	F-A , S-A
Marine pollutant	Marine Pollutant
Description of the goods	PESTICIDE, LIQUID, TOXIC, N.O.S. (THIACLOPRID SOLUTION)

**IATA**

UN-Number	<b>2902</b>
Labels	6.1
Packaging group	III
Description of the goods	PESTICIDE, LIQUID, TOXIC, N.O.S. (THIACLOPRID SOLUTION)

**15. REGULATORY INFORMATION****Labelling in accordance with the EC Directive on dangerous preparations 1999/45/EC as amended.**

Classified as hazardous for supply/use.

Hazardous components which must be listed on the label:

- Thiachloprid

## Symbol(s)

Xn	Harmful
N	Dangerous for the environment

## R-phrase(s)

R20/22	Harmful by inhalation and if swallowed.
R40	Limited evidence of a carcinogenic effect.
R43	May cause sensitization by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## S-phrase(s)

S35	This material and its container must be disposed of in a safe way.
S36/37	Wear suitable protective clothing and gloves.
S57	Use appropriate container to avoid environmental contamination.

## Exceptional labelling

To avoid risks to man and the environment, comply with the instructions for use.

## Further information

WHO-classification: II (Moderately hazardous)

**16. OTHER INFORMATION****Further information**

Text of R-phrases mentioned in Section 3



## CALYPSO 480 SC

Version 3 / EU  
102000007569

7/7  
Revision Date: 11.10.2010  
Print Date: 20.12.2010

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R40	Limited evidence of a carcinogenic effect.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The information given in this Data Sheet has been included in accordance with the guidelines established by Regulation (EC) 1907/2006. This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.
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