



## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Trade name : **Camposan Extra SL**

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use : Plant protection agent

### 1.3. Details of the supplier of the safety data sheet

Nufarm GmbH & Co KG  
St.-Peter-Str. 25  
A-4021 Linz  
Austria  
Telephone: +43/732/6918-4010  
Telefax: +43/732/6918-64010  
E-mail address: Johann.Mayr@at.nufarm.com

### 1.4. Emergency telephone number

+43/732/6914-2466 (Linz/Austria production site)

## 2. HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

EEC/99/45 :	Xn	R21 - Harmful in contact with skin.
	C	R34 - Causes burns.
	-	R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 2.2. Label elements

according directive 1999/45/EG

Pictogram:



C



Xn

- R21 - Harmful in contact with skin.  
 R34 - Causes burns.  
 R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- S 2 - Keep out of the reach of children.  
 S13 - Keep away from food, drink and animal feedingstuffs.  
 S20/21 - When using do not eat, drink or smoke.  
 S23 - Do not breathe gas/fumes/vapour/spray.  
 S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 S29/35 - Do not empty into drains; dispose of this material and its container in a safe way.  
 S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.  
 S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
 S57 - Use appropriate container to avoid environmental contamination.  
 S60 - This material and its container must be disposed of as hazardous waste.  
 S61 - Avoid release to the environment. Refer to special instructions/ Safety data sheets.

### 2.3. Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical nature** : Mixture of active ingredient and additives, Aqueous solution  
 2-Chlorethylphosphonsäure 660g/l

### 3.2. Mixtures

#### Components:

#### Ethephon

CAS-No.: 16672-87-0  
 EINECS-No. / ELINCS No.: 240-718-3  
 REACH No.:  
 Concentration: 51,6 % (w/w)

#### Classification:

EG\_1272/08 : AcuteTox.4 H312 + H332 - Harmful in contact with skin or if inhaled  
 SkinCorr.1B H314 - Causes severe skin burns and eye damage.



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EEC/67/548 :	AquaticChronic3 Xn C	H412 - Harmful to aquatic life with long lasting effects. R20/21 - Harmful by inhalation and in contact with skin. R34 - Causes burns. R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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## 4. FIRST AID MEASURES

### 4.1. Description of first aid measures

General advice	:	Take off all contaminated clothing immediately.
Eye contact	:	Call a physician immediately. In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Skin contact	:	Call a physician immediately. Wash off immediately with soap and plenty of water.
Inhalation	:	Move to fresh air. If symptoms persist, call a physician. In case of unconsciousness place and transport person in the recovery position.
Ingestion	:	Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Ingest activated charcoal. Call a physician immediately.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms	:	perforation of the stomach, Gastrointestinal discomfort
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### 4.3. Indication of any immediate medical attention and special treatment needed

Treatment	:	No specific antidote, symptomatic treatment.
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## 5. FIREFIGHTING MEASURES

### 5.1. Extinguishing media

Suitable extinguishing media	:	Water spray, Dry powder, Sand, Foam, Carbon dioxide (CO2)
Extinguishing media which shall not be used for safety reasons	:	High volume water jet



## 5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting : In the event of fire (HCl, NO<sub>x</sub>, P<sub>2</sub>O<sub>5</sub>, CO<sub>x</sub>) may be formed.

## 5.3. Advice for firefighters

Special protective equipment for firefighters : Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.

Further Information : Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. (see Chapter 8) Keep people away from and upwind of spill/leak.

### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

### 6.3. 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). Use mechanical handling equipment. Keep in suitable, closed containers for disposal.

Additional advice : Never return spills in original containers for re-use.

### 6.4. Reference to other sections

see Chapter 13

## 7. HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Safe handling advice : Wear personal protective equipment. Keep out of the reach of children. Avoid formation of aerosol. Use only in area provided with appropriate exhaust ventilation.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.



## 7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Store in original container. Keep away from heat and sources of ignition.

Advice on common storage : Keep away from food, drink and animal feeding stuffs.

German storage class : 8L (Corrosive Liquids)

### Storage stability

Storage temperature : < 30 °C

## 7.3. Specific end use(s)

none

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Components with workplace control parameters  
no data available

### 8.2. Exposure controls

#### Personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment (gas filter type A).

Hand protection : chemical resistant gloves, fluororubber gloves (e.g. Vitoject)

Eye protection : Tightly fitting safety goggles, face protection

Skin and body protection : Boots, acid-resistant chemical protection suit (according to DIN EN 465)

Hygiene measures : Take off all contaminated clothing immediately. Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling the product. Do not inhale aerosol. When using, do not eat, drink or smoke.

Protective measures : Keep working clothes separately. Avoid contact with the skin and the eyes.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

#### Appearance

Physical state	: liquid
Form	: Liquid
Colour	: colourless yellowish
Odour	: almost odourless
Melting point/range	: > -10 °C
Boiling point/boiling range	: ca.100 °C
Flash point	: > 100 °C
Ignition temperature	: > 495 °C
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: no data available
Density	: 1,275 g/cm <sup>3</sup> at 20 °C
Water solubility	: completely miscible
pH	: 1,6 at 10 g/l ( 20 °C)
Partition coefficient: n-octanol/water	: log POW = -1,05
Dissociation constant	: no data available
Viscosity, dynamic	: 3 - 15 mPa.s at 20 °C



## 9.2. Other information

none

## 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

no data available

### 10.2. Chemical stability

No decomposition if stored and applied as directed.

### 10.3. Possibility of hazardous reactions

Gives off hydrogen by reaction with metals.

### 10.4. Conditions to avoid

Temperatures below freezing point, high temperatures

### 10.5. Incompatible materials to avoid

alkalis

### 10.6. Hazardous decomposition products

Hydrogen chloride gas, Hydrocarbons

## 11. TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Acute oral toxicity : LD50 rat  
Dose: > 2.000 mg/kg  
Test substance: (Ethephon)

Acute dermal toxicity : LD50 rat  
Dose: > 2.000 mg/kg  
Test substance: (Ethephon)

Acute inhalation toxicity : LC50 rat  
Exposure time: 4 h  
Dose: 6,26 mg/l  
Test substance: (Ethephon)



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Skin irritation	: Result: Corrosive Test substance: (Ethephon)
Eye irritation	: Result: Corrosive Test substance: (Ethephon)
Sensitisation	: Result: Did not cause sensitization. Test substance: (Ethephon)
Carcinogenicity	: Did not show carcinogenic or mutagenic effects in animal experiments.

## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

Toxicity to fish	: LC0 Danio rerio (zebra fish) Dose: 90,4 mg/l Test substance: (Ethephon)
	LC0 Cyprinus carpio (Carp) Dose: 96,5 mg/l Test substance: (Ethephon)
	LC0 Salmo salar (Atlantic salmon) Dose: 43,7 mg/l Test substance: (Ethephon)
	LC0 Leuciscus idus (Golden orfe) Dose: 90,1 mg/l Test substance: (Ethephon)
	LC0 Lebistes reticulatus (Guppy) Dose: 153,8 mg/l Test substance: (Ethephon)
	LC50 Danio rerio (zebra fish) Dose: > 90,4 mg/l Test substance: (Ethephon)





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LC50 *Cyprinus carpio* (Carp)

Dose: 213,1 mg/l

Test substance: (Ethephon)

LC50 *Salmo salar* (Atlantic salmon)

Dose: 123,6 mg/l

Test substance: (Ethephon)

LC50 *Leuciscus idus* (Golden orfe)

Dose: > 90,1 mg/l

Test substance: (Ethephon)

LC50 *Lebistes reticulatus* (Guppy)

Dose: 167,6 mg/l

Test substance: (Ethephon)

Toxicity to daphnia : EC0 *Daphnia magna* (Water flea)  
Dose: 50,8 mg/l  
Test substance: (Ethephon)

EC50 *Daphnia magna* (Water flea)

Dose: 71,1 mg/l

Test substance: (Ethephon)

Toxicity to algae : EC0 *Scenedesmus subspicatus*  
Dose: < 0,01 mg/l  
Test substance: (Ethephon)

EC50 *Chlorella vulgaris* (Fresh water algae)

Dose: > 24,3 mg/l

Test substance: (Ethephon)

EC50 *Scenedesmus subspicatus*

Dose: > 15 mg/l

Test substance: (Ethephon)

### 12.2. Persistence and degradability

Biodegradability : Totally biodegradable  
Test substance: (Ethephon)

### 12.3. Potential bioaccumulation

Bioaccumulation : no data available



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**12.4. Mobility in soil**

no data available

**12.5. Results of PBT and vPvB assessment**

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

**12.6. Other adverse effects**

Harmful to aquatic organisms.

**13. DISPOSAL CONSIDERATIONS**

According to European Directive 2000/532/EC as amended :

Waste Code : 02 01 08 (agrochemical waste containing dangerous substances)

**13.1. Waste treatment methods**

Product : In accordance with local and national regulations.

Contaminated packaging : Do not re-use empty containers.

Dispose empty and triple rinsed container within a local disposing system according to EC directive 94/62/EC

**14. TRANSPORT INFORMATION**

**14.1. UN number**

UN3265

**14.2. Proper shipping name**

UN3265 Corrosive liquid, acidic, organic, n.o.s.(Ethephon)

**14.3. Transport hazard class(es)**

ADR/RID :  
Class : 8



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IMDG :  
Class : 8

IATA-DGR :  
Class : 8

**14.4. Packaging group**

ADR/RID : III

IMDG : III

IATA-DGR : III

**14.5. Environmental hazards**

**14.6. Special precautions for user**

none

**15. REGULATORY INFORMATION**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Other regulations : The product is classified and labelled in accordance with EC directives or respective national laws.

**15.2. Chemical Safety Assessment**

none

**16. OTHER INFORMATION**

Print Date : 2013/07/15

The date format YYYY/MM/DD is used according to ISO 8601.  
(Alterations are indicated in the left hand margin by: || )



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This MSDS was prepared by copying the supplier MSDS data into the SAP-EHS module. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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The information contained herein is based on the present state of our knowledge and does therefore not guarantee certain properties.