

## ! SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Name of product** Calcinex  
410383

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

#### Recommended intended purpose(s)

Hardness stabilizer and complexing agents for treatment of pool water.

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

**Manufacturer/distributor** BAYROL Deutschland GmbH  
Robert-Koch-Str. 4, D-82152 Planegg  
Phone +49 (0) 89 85701-0, Fax +49 (0) 89 85701-276  
E-Mail bayrol@bayrol.de  
Internet www.bayrol.de

### Advice

E-mail (competent person):  
ASchwarzenboeck@bayrol.de

### 1.4. Emergency telephone number

**Emergency advice** Giftnotruf München (oder jedes andere Giftinformationszentrum)  
Phone +49 (0) 89 19240

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to 67/548/EEC or 1999/45/EC

#### Additional hints

The preparation is not classified as hazardous according to Directive 1999/45/EC.

#### Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
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<b>Met. Corr. 1</b>	<b>H290</b>
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#### Hazard Statements

H290	May be corrosive to metals.
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### 2.2. Label elements

#### Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]

#### Signal word

Warning

#### Hazard Statements

H290	May be corrosive to metals.
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#### Precautionary Statements

P102	Keep out of reach of children.
P262	Do not get in eyes, on skin, or on clothing.
P501	Dispose of contents/ container to an approved waste disposal plant.

**2.3. Other hazards****Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**SECTION 3: Composition/ information on ingredients****3.1. Substances**

not applicable

**3.2. Mixtures****Hazardous ingredients**

CAS No	EC No	Name	Concent ration	Classification according to 67/548/EEC
37971-36-1	253-733-5	2-Phosphonbutan-1,2,4-Tricarboxylsäure	< 50	

CAS No	EC No	Name	Concent ration	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
37971-36-1	253-733-5	2-Phosphonbutan-1,2,4-Tricarboxylsäure	< 50	Met. korr. 1, H290

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Remove contaminated soaked clothing immediately.

**In case of inhalation**

Remove the casualty into fresh air and keep him immobile.

In the event of symptoms refer for medical treatment.

**In case of skin contact**

In case of contact with skin wash off immediately with plenty of water.

Consult a doctor if skin irritation persists.

**In case of eye contact**

Eye rinsing with water carefully while protecting unhurt eye.

Refer to medical treatment.

**In case of ingestion**

Seek medical advice immediately.

Rinse out mouth and give plenty of water to drink.

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

No information available.

**4.3. Indication of any immediate medical attention and special treatment needed****Treatment (Advice to doctor)**

Treat symptoms.

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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Product does not burn, fire-extinguishing activities according to surrounding.

Dry powder

Carbon dioxide

Water spray jet

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

In the event of fire the following can be released:

Carbon monoxide (CO)

Carbon dioxide (CO<sub>2</sub>)

### 5.3. Advice for firefighters

#### Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply.

Wear full protective clothing.

#### Additional information

Cool endangered containers with water spray jet.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

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## SECTION 6: Accidental release measures

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

No information available.

#### For non-emergency personnel

Use personal protective clothing.

Use breathing apparatus if exposed to vapours/dust/aerosol.

### 6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

### 6.3. Methods and material for containment and cleaning up

Take up with absorbent material (e.g. acid binder).

Flush away residues with water.

### 6.4. Reference to other sections

Safe handling: see section 7

Disposal: see section 13

Personal protection equipment: see section 8

Emergency telephone number: see section 1

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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

No special measures necessary if used correctly.

Take the usual precautions when handling with chemicals.

#### General protective measures

Avoid contact with eyes and skin

#### Hygiene measures

Do not eat or drink when working.

Keep away from food and drink.

Wash hands before breaks and after work.

**Advice on protection against fire and explosion**

The product is not combustible.

No special measures necessary.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep only in original container.

**Advice on storage compatibility**

Do not store with alkalis.

Do not store together with animal feedstuffs.

Do not store together with food.

**Further information on storage conditions**

Store at cool and aired place.

**Information on storage stability**

Storage time: 5 years.

**7.3. Specific end use(s)****Recommendation(s) for intended use**

See section 1.2

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**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

No information available.

**8.2. Exposure controls****Respiratory protection**

Breathing apparatus in the event of aerosol or mist formation.

**Hand protection**

chemical-resistant gloves

Suitable materials (recommended: protection index 6, >480 minutes permeation time according to EN 374)

Nitrile-butadiene rubber (NBR) - 0.4 mm layer thickness

Butyl rubber (butyl) - 0.7mm layer thickness

In view of the many different types, the manufacturers' directions for use must be followed

**Eye protection**

tightly fitting goggles

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**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties****Appearance**

liquid

**Colour**

light yellow

**Odour**

odourless

**Odour threshold**

No information available.

#### Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
<b>pH value</b>	2,5	20 °C		potentiometric	determined undiluted
<b>Boiling temperature / boiling range</b>	No information available.				
<b>Melting point / Freezing point</b>	No information available.				
<b>Flash point</b>	> 100 °C			DIN 51758	
<b>Vapourisation rate</b>	No information available.				
<b>Flammable (solid)</b>	No information available.				
<b>Flammability (gas)</b>	No information available.				
<b>Ignition temperature</b>	No information available.				
<b>Self ignition temperature</b>	No information available.				
<b>Lower explosion limit</b>	No information available.				
<b>Upper explosion limit</b>	No information available.				
<b>Vapour pressure</b>	No information available.				
<b>Relative density</b>	1,13 g/cm3	20 °C		aerometric	
<b>Vapour density</b>	No information available.				
<b>Solubility in water</b>					multimiscible
<b>Solubility/other</b>	No information available.				
<b>Partition coefficient n-octanol/water (log P O/W)</b>	No information available.				
<b>Decomposition temperature</b>	No information available.				
<b>Viscosity</b>	No information available.				

#### Oxidising properties

No information available.

#### Explosive properties

No information available.

#### 9.2. Other information

No information available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No information available.

### 10.2. Chemical stability

No information available.

### 10.3. Possibility of hazardous reactions

Reactions with metals, with evolution of hydrogen.

Reactions with strong alkalies.

### 10.4. Conditions to avoid

No information available.

### 10.5. Incompatible materials

#### Materials to avoid

Alkali (lye)

### 10.6. Hazardous decomposition products

No hazardous decomposition products known.

### Thermal decomposition

Remark No decomposition if used as directed.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity/Irritability/Sensitization

	Value/Validation	Species	Method	Remark
<b>LD50 acute oral</b>	> 6500 mg/kg	rat (male)		
<b>LD50 acute dermal</b>	> 4000 mg/kg	rat	92/69/EEC , B.3	
<b>Irritability eye</b>	low irritant - no labeling duty			

#### Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
<b>Mutagenicity</b>	No data available			
<b>Reproduction-Toxicity</b>	No data available			
<b>Carcinogenicity</b>	No data available			

#### Additional information

Toxical dates refer to base substance.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Ecotoxicological effects

	Value	Species	Method	Validation
<b>Daphnia</b>	EC50 > 1071 g/m3	Daphnia magna		

### 12.2. Persistence and degradability

#### Biological degradability

Slightly biodegradable

### 12.3. Bioaccumulative potential

No information available.

### 12.4. Mobility in soil

No information available.

### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### 12.6. Other adverse effects

#### Behaviour in sewage plant

The product is an acid. Neutralization is normally necessary before a waste water is discharged into sewage treatment plants.

#### General regulation

The ecological figures refer to undiluted 100% pure substance.

The information to ecology refers to main component.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Recommendations for the product

Remove in accordance with local official regulations.

There are no harmonised regulations on the disposal of chemicals in the member states of the EU. In Germany the Recycling and Waste Management Act (KrWG) stipulates recycling as a requirement.

#### Recommendations for packaging

Uncontaminated packaging may be taken for recycling.

#### Recommended cleansing agent

Water

## SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
<b>14.1. UN number</b>	3265	3265	3265
<b>14.2. UN proper shipping name</b>	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2-Phosphonbutan-1,2,4-Tricarboxylsäure)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2-Phosphonbutan-1,2,4-Tricarboxylsäure)	Corrosive liquid, acidic, organic, n.o.s. (2-Phosphonbutan-1,2,4-Tricarboxylsäure)

	ADR/RID	IMDG	IATA-DGR
<b>14.3. Transport hazard class(es)</b>	8	8	8
<b>14.4. Packing group</b>	III	III	III
<b>14.5. Environmental hazards</b>	No	No	No

**14.6. Special precautions for user**

No information available.

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No information available.

**Land and inland navigation transport ADR/RID**

Hazard label(s) 8

tunnel restriction code E

Classification code C3

## SECTION 15: Regulatory information

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

Please note:

Observe regulation 98/24/EC for employee health protection against the threat of chemical substances in the workplace.

**15.2. Chemical Safety Assessment**

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

**Recommended uses and restrictions**

National and local regulations concerning chemicals shall be observed.

**Further information**

Emergency numbers:

IT CENTRO ANTIVELENI C/O OSPEDALI RIUNITI DI BERGAMO Telefono 800 883300

PT Centro de Informação Antivenenos Número de telefone 808 250 143

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Indication of changes: "!" = Data changed compared with the previous version. Previous version: 2.9

**Sources of key data used**

Results of own researches and examinations

Literature informations

Toxicity studies, NIOSH-Tox-Data

National legislation and regulation

H290 May be corrosive to metals.