

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

### 1.1. Product identifier

**Name of product** pH-Plus flüssig / pH-Plus liquide  
411312

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

**Recommended intended purpose(s)**

pH regulator for swimming 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**

C; R35

**R-phrases**

35 Causes severe burns.

**Additional hints**

This mixture is classified as hazardous according to Regulation (EC) No 1272/2008 [GHS].

**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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<b>Skin Corr. 1A</b>	<b>H314</b>
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**Hazard Statements**

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

**Additional hints**

This mixture is classified as hazardous according to Regulation (EC) No 1272/2008 [GHS].

### 2.2. Label elements

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



GHS05

**Signal word**  
Danger

**Hazard Statements**

H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.

**Precautionary Statements**

P102 Keep out of reach of children.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P309 + P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.  
P405 Store locked up.  
P501 Dispose of contents/ container to an approved waste disposal plant.

**Hazardous ingredients for labeling**  
sodium-hydroxide

**2.3. Other hazards**

**Results of PBT and vPvB assessment**

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

**SECTION 3: Composition/ information on ingredients**

**3.1. Substances**  
not applicable

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

CAS No	EC No	Name	[% weight]	Classification according to 67/548/EEC
1310-73-2	215-185-5	sodium-hydroxide	30	C R35

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
1310-73-2	215-185-5	sodium-hydroxide	30	Skin Corr. 1A, H314

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## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

Remove contaminated soaked clothing immediately and dispose it safely.  
Symptoms of poisoning may not occur for hours, therefore medical supervision for at least 48 hours necessary.  
Adhere to personal protective measures when giving first aid.

#### In case of inhalation

Remove the casualty into fresh air and keep him immobile.  
Refer for medical treatment.

#### In case of skin contact

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

#### In case of eye contact

Eye rinsing with water carefully while protecting unhurt eye.  
Call for a doctor immediately.

#### In case of ingestion

Do not give neutralising liquids.  
Do not induce vomiting.  
Call for a doctor 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.

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

No information available.

### 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.

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#### 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 residues with absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

Flush away residues with water.

Use chemical neutralizers.

#### 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

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 together with food.

#### Further information on storage conditions

Keep container tightly closed.

Do not keep at temperatures below 20°C.

#### 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

### 8.2. Exposure controls

#### Respiratory protection

Breathing apparatus in the event of aerosol or mist formation.

Short term: filter apparatus, Filter P2

**Hand protection**

chemical-resistant gloves

Suitable materials (recommended: protection index 6, &gt;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**

Safety goggles

**Other protection measures**

Alkali-resistant protective clothing

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

liquid

**Colour**

colourless

**Odour**

odourless

**Odour threshold**

No information available.

**Important health, safety and environmental information**

	Value	Temperature	at	Method	Remark
<b>pH value</b>	14	20 °C			
<b>boiling point</b>	> 100 °C				
<b>Melting point / Freezing point</b>	No information available.				
<b>Flash point</b>					No flash point below 100°C.
<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>	1,32 g/cm <sup>3</sup>	20 °C		aerometric	
<b>Vapour density</b>	No information available.				
<b>Solubility in water</b>					multimiscible

	Value	Temperature	at	Method	Remark
<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.				
<b>Oxidising properties</b>	No information available.				
<b>Explosive properties</b>	No information available.				
<b>9.2. Other information</b>	No information available.				

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Corrosive to metals.  
exothermic reaction

### 10.2. Chemical stability

No information available.

### 10.3. Possibility of hazardous reactions

Reactions with acids.  
In case of addition of water warming up.  
Reactions with metals, with evolution of hydrogen.

### 10.4. Conditions to avoid

No information available.

### 10.5. Incompatible materials

#### Materials to avoid

Aluminium  
Acid  
Oxidising agent  
metal, base

### 10.6. Hazardous decomposition products

Hydrogen

### 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>Irritability skin</b>	strong corrosive			
<b>Irritability eye</b>	risk of strong eye injuries			

#### Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
<b>Mutagenicity</b>				No mutagenity, after different in-vitro studies.
<b>Reproduction-Toxicity</b>				No indications of toxic effects were observed in reproduction studies in animals.
<b>Carcinogenicity</b>	No information available.			

#### Experiences made from practice

Corrosive effect on skin and mucous membrane.

After swallowing: burns in mouth, throat, oesophagus and gastrointestinal tract. Risk of perforation in the oesophagus and stomach.

Product may cause irreversible eye injuries.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Ecotoxicological effects

	Value	Species	Method	Validation
<b>Fish</b>	LC50 35 - 189 g/m <sup>3</sup> (96 h)	diverse Spezies		
<b>Daphnia</b>	EC50 40,4 g/m <sup>3</sup> (48 h)	Ceriodaphnia spec.		

### 12.2. Persistence and degradability

#### Biological degradability

Inorganic product, cannot be eliminated from the water by biological purification processes.

### 12.3. Bioaccumulative potential

No information available.

### 12.4. Mobility in soil

No information available.

### 12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

**12.6. Other adverse effects**
**Behaviour in sewage plant**

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

**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**

Untaminated 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>	1824	1824	1824
<b>14.2. UN proper shipping name</b>	SODIUM HYDROXIDE SOLUTION	SODIUM HYDROXIDE SOLUTION	Sodium hydroxide solution
<b>14.3. Transport hazard class(es)</b>	8	8	8
<b>14.4. Packing group</b>	II	II	II
<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 C5

**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**

For this substance a chemical safety assessment has not been carried out.

## SECTION 16: Other information

### Recommended uses and restrictions

National and local regulations concerning chemicals shall be observed.

### Further information

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: 3.7

### Sources of key data used

Results of own researches and examinations

Literature informations

Toxicity studies, NIOSH-Tox-Data

National legislation and regulation

### Wording of the R/H-phrases specified in chapter 3 (not the classification of the mixture!)

R 35 Causes severe burns.

H314 Causes severe skin burns and eye damage.