

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

### 1.1. Product identifier

Name of product pH-MINUS LIQUID DOMESTIC  
414948

### 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

### Advice

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

### 1.4. Emergency telephone number

NCEC, Phone (+44)(0)1865407333

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
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Met. Corr. 1	H290	
Skin Irrit. 2	H315	
Eye Irrit. 2	H319	

#### Hazard Statements

H290	May be corrosive to metals.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

### 2.2. Label elements

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



GHS05

#### Signal word

Warning

#### Hazard Statements

H290	May be corrosive to metals.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

**Precautionary Statements**

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P280	Wear protective gloves/eye protection.
P302 + P352	IF ON SKIN: Wash with plenty of 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.
P308 + P311	IF exposed or concerned: Call a POISON CENTER/doctor.
P501	Dispose of contents/ container to an approved waste disposal plant.

**Hazardous ingredients for labeling**

sulphuric acid ... %

**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 Regulation (EC) No 1272/2008 [CLP/GHS]
7664-93-9	231-639-5	sulphuric acid ... %	14,9	Skin Corr. 1A, H314

**REACH**

CAS No	Name	REACH registration number
7664-93-9	sulphuric acid ... %	01-2119458838-20-XXXX

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

Remove contaminated soaked clothing immediately and dispose it safely.  
Adhere to personal protective measures when giving first aid.

**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**

Rinse immediately with plenty of water for at least 15 minutes.  
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.

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

**Physician's information / possible dangers**

risk of strong eye injuries

**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.

Foam

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:

Sulfur oxide

**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**

**For non-emergency personnel**

Use personal protective clothing.

**6.2. Environmental precautions**

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

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

Dilute with plenty of water.

Neutralize with sodium carbonate or slaked lime.

Flush away residues with water.

Do not take up with sawdust or other combustible materials.

**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

## 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.

Protect from heat and direct solar radiation.

#### Information on storage stability

Storage time: 5 years.

### 7.3. Specific end use(s)

#### Recommendation(s) for intended use

See section 1.2

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Indicative occupational exposure limit values (91/322/EEC, 2000/39/EC, 2004/37/EC, 2006/15/EC or 2009/161/EU)

CAS No	Name	Code	[mg/m <sup>3</sup> ]	[ppm]	Remark
7664-93-9	Sulphuric acid (mist)	8 hours	0,05		

### 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

safety goggles with side protection

## SECTION 9: Physical and chemical properties

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

**Appearance**

liquid

**Colour**

colourless

**Odour**

odourless

**Odour threshold**

not determined

### Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
<b>pH value</b>	< 1	20 °C	200 g/l		
<b>Boiling temperature / boiling range</b>	not determined				
<b>Melting point / Freezing point</b>	not determined				
<b>Flash point</b>					No flash point below 100°C.
<b>Vapourisation rate</b>	not determined				
<b>Flammable (solid)</b>	not determined				
<b>Flammability (gas)</b>	not determined				
<b>Ignition temperature</b>	not determined				
<b>Self ignition temperature</b>	not determined				
<b>Lower explosion limit</b>	not determined				
<b>Upper explosion limit</b>	not determined				
<b>Vapour pressure</b>	not determined				
<b>Relative density</b>	1,1 g/cm <sup>3</sup>	20 °C			
<b>Vapour density</b>	not determined				
<b>Solubility in water</b>					multimiscible
<b>Solubility/other</b>	not determined				
<b>Partition coefficient n-octanol/water (log P O/W)</b>	not determined				
<b>Decomposition temperature</b>	not determined				
<b>Viscosity</b>	not determined				

**Oxidising properties**

No information available.

**Explosive properties**

No information available.

**9.2. Other information**

No information available.

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**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Corrosive to metals.

**10.2. Chemical stability**

No information available.

**10.3. Possibility of hazardous reactions**

Reactions with organic substances.

Reactions with metals, with evolution of hydrogen.

Reactions with alkalies.

**10.4. Conditions to avoid**

If diluting put acid in water, not reverse.

**10.5. Incompatible materials**

**Substances to avoid**

Alkali (lye)

**10.6. Hazardous decomposition products**

Sulphur trioxide (SO<sub>3</sub>) - mist

**Thermal decomposition**

Remark No decomposition if used as directed.

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**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**Acute toxicity/Irritation/Sensitization**

	Value/Validation	Species	Method	Remark
<b>LD50 acute oral</b>	> 2000 mg/kg	rat		
<b>Skin irritation</b>	Causes skin irritation.			
<b>Eye irritation</b>	Causes serious eye irritation.			

**Subacute Toxicity - Carcinogenicity**

	Value	Species	Method	Validation
<b>Mutagenicity</b>	No data available			

	Value	Species	Method	Validation
<b>Reproduction-Toxicity</b>	No data available			
<b>Carcinogenicity</b>	No data available			
<b>Experiences made from practice</b>				
After swallowing: burns in mouth, throat, oesophagus and gastrointestinal tract. Risk of perforation in the oesophagus and stomach.				

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Ecotoxicological effects

	Value	Species	Method	Validation
<b>Fish</b>	LC50 16 - 28 g/m3 (96 h)	Lepomis macrochirus		
<b>Daphnia</b>	EC50 29 g/m3 (24 h)	Daphnia magna		

### 12.2. Persistence and degradability

	Elimination rate	Method of analysis	Method	Validation
<b>Biological degradability</b>	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 acid. Neutralization is normally necessary before a waste water is discharged into sewage treatment plants.

#### General regulation

Product is not allowed to be discharged into aquatic environment, drains or sewage treatment plants.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Waste code No.

16 05 09

#### Name of waste

discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

#### Recommendations for the product

Remove in accordance with local official regulations.

Dispose of as hazardous waste.

The product should not be allowed to enter drains, water courses or the soil.

**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>	2796	2796	2796
<b>14.2. UN proper shipping name</b>	SULPHURIC ACID	SULPHURIC ACID	Sulphuric acid
<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 C1

**SECTION 15: Regulatory information**
**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
**Other regulations (EU)**

Regulation (EU) 1272/2008 (CLP), Regulation (EU) 1907/2006 (REACH), DECISION 2000/532/EG (list of wastes)

**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**

Refer to product information paper.

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: 1.1

**Sources of key data used**

Results of own researches and examinations

Literature informations

Toxicity studies, NIOSH-Tox-Data

National legislation and regulation



H314 Causes severe skin burns and eye damage.