

Printing date 27.01.2025 Version number 3 (replaces version 2) Revision: 27.01.2025

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

- · 1.1 Product identifier
- · Trade name: pH Minus Liquid 25%
- · Registration number Mixture
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Product category

PC20 Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents

PC37 Water treatment chemicals

- · Application of the substance / the mixture The product has many industrial and professional applications.
- · Uses advised against

Any use involving aerosol formation or vapour release in excess of the assigned Workplace Exposure Limit where workers are exposed without suitable Respiratory Protective Equipiment.

Any use carrying a risk of direct contact with eyes/skin where workers are exposed without adequate personal protective equipment (PPE).

Processes involving the use of incompatible substances - refer to section 10.

Processes involving extreme heat use advised against.

The product is intended exclusively for industrial and professional use.

- · 1.3 Details of the supplier of the safety data sheet
- · Supplier:

Complete Pool Controls Ltd

Unit 2, The Park

Stoke Orchard

Bishops Cleeve

Gloucestershire

**GL52 7RS** 

UK

Tel: +44 (0)1242 662700 (office hours) email: sales@cpc-chemicals.co.uk

- · Further information obtainable from: Product safety department.
- · 1.4 Emergency telephone number:

OHES Environmental

Tel: 01242 300271

Members of the public seeking specific information on poisons should contact:

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

#### **SECTION 2: Hazards identification**

- · 2.1 Classification of the substance or mixture
- · Classification according to GB-CLP

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- · 2.2 Label elements
- · Labelling according to GB-CLP The product is classified and labelled according to the GB CLP regulation.

(Contd. on page 2)



Printing date 27.01.2025 Version number 3 (replaces version 2) Revision: 27.01.2025

Trade name: pH Minus Liquid 25%

(Contd. of page 1)

## · Hazard pictograms



### · Signal word Danger

### · Hazard-determining components of labelling:

Sulphuric acid

### · Hazard statements

H314 Causes severe skin burns and eye damage.

#### · Precautionary statements

P260 Do not breathe dusts or mists.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or

shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

## · Additional information:

Product contains: Regulated explosives precursors. Acquisition, possession or use by the general public is restricted.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

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

### · 3.2 Mixtures

· Description: An aqueous solution of sulphuric acid.

· Dangerous components:	Dangerous components:		
CAS: 7664-93-9	Sulphuric acid	15 – 25%	
EINECS: 231-639-5	♦ Skin Corr. 1A, H314		
Index number: 016-020-00-8	Note: B		
Reg.nr.: 01-2119458838-20-XXXX	Specific concentration limits: Skin Corr. 1A; H314: C ≥ 15 %		
	Skin Irrit. 2; H315: 5 % ≤ C < 15 %		
	Eye Irrit. 2; H319: 5 % ≤ C < 15 %		

· Additional information: For the wording of the listed hazard phrases refer to section 16.

## **SECTION 4: First aid measures**

### · 4.1 Description of first aid measures

### · General information:

Corrosive to all bodily tissues - the severity of injury depends on the concentration of the solution and the duration of exposure.

SWIFT ACTION IS ESSENTIAL!

(Contd. on page 3)



Printing date 27.01.2025 Version number 3 (replaces version 2) Revision: 27.01.2025

Trade name: pH Minus Liquid 25%

(Contd. of page 2)

Immediately remove any clothing soiled by the product.

### · After inhalation:

In case of inhalation:

- Provide fresh air.
- In case of breathing difficulties administer oxygen.
- No mouth-to-mouth or mouth-to-nose resuscitation. Use respiratory bag or oxygen resuscitation apparatus.
- Do not leave patient unattended.

In case of unconsciousness place patient stably in side position for transportation.

#### · After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Immediate medical treatment necessary. Failure to treat burns can prevent wounds from healing.

Chemical burns must be treated promptly by a physician.

### · After eye contact:

Check for and remove any contact lenses.

Rinse opened eye for several minutes under running water. Then consult a doctor.

### · After swallowing:

Do not induce vomiting; call for medical help immediately.

If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

- · Information for doctor: Inhalation of an aerosol of this substance may cause lung oedema.
- · 4.2 Most important symptoms and effects, both acute and delayed Corrosive damage to gastro-intestinal tract.
- · Hazards Danger of gastric perforation.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

### · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray.

Use fire extinguishing methods suitable to surrounding conditions.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture

Corrosive liquid.

In case of fire, the following can be released:

Sulphur Oxides (SOx)

In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Reacts with most metals to produce hydrogen gas, which can form explosive mixtures with air.

Product is not classified as oxidizing. However, it enhances combustion of other substances.

## · 5.3 Advice for firefighters

## · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Do not inhale explosion gases or combustion gases.

#### · Additional information

Cool endangered receptacles with water spray.

Absorb gas/vapours with water spray.

(Contd. on page 4)



Printing date 27.01.2025 Version number 3 (replaces version 2) Revision: 27.01.2025

Trade name: pH Minus Liquid 25%

(Contd. of page 3)

Collect contaminated fire fighting water separately. It must not enter the sewage system.

### **SECTION 6: Accidental release measures**

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

Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

Particular danger of slipping on leaked/spilled product.

For significant release, wear full chemical suit.

Remove persons from danger area.

### · 6.2 Environmental precautions:

Do not allow to penetrate the ground/soil.

Do not allow product to reach sewage system or any water course in the undiluted form.

Dilute with plenty of water.

## · 6.3 Methods and material for containment and cleaning up:

Contain and collect spillage with non-combustible, absorbent material e.g.sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Contaminated absorbent material may pose the same hazard as the spilt product.

Lime slurry can be used to neutralize material (e.g. 10 - 50% potassium carbonate solution or 10 - 30% sodium carbonate solution).

Wash the area with plenty of water.

#### · 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## **SECTION 7: Handling and storage**

## · 7.1 Precautions for safe handling

Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.

The product must only be handled by authorised, trained and experienced professionals under strictly controlled conditions.

Conduct maintenance and other work on or in storage/reactor/mixing vessels or closed spaces ONLY under strict Permit to Work conditions.

Inspect the electrical fittings regularly against the risk of corrosion.

Ensure good ventilation/exhaustion at the workplace.

Safety showers and eye wash facilities should be available at the work area.

Prevent formation of aerosols.

When diluting always pour product into water and not vice versa.

- · Information about fire and explosion protection: Keep respiratory protective device available.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Prevent any seepage into the ground.
- · Information about storage in one common storage facility:

Do not store together with alkalis (caustic solutions).

Store away from water.

Store away from foodstuffs.

(Contd. on page 5)



Printing date 27.01.2025 Version number 3 (replaces version 2) Revision: 27.01.2025

Trade name: pH Minus Liquid 25%

(Contd. of page 4)

Store away from combustible materials.

· Further information about storage conditions:

Protect from humidity and water.

Store in a bunded area.

Keep container tightly sealed.

- · Storage class: 8 B
- · 7.3 Specific end use(s) No further relevant information available.

## **SECTION 8: Exposure controls/personal protection**

### · 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:				
CAS: 7664-93-9 Sulphuric acid				
	WEL Long-term value: 0.05* mg/m <sup>3</sup>			
*	*mist: defined as thoracic fraction			
· DNELs				
CAS: 7664-93-9 Sulphuric acid				
Inhalati	ve Long-term local effects 50 μg/m³ (worker)			

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see section 7.

Short-term local effects 100 µg/m³ (worker)

- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures:

Do not eat, drink, smoke or sniff while working.

Storing food in the working area is prohibited.

A safe system of work must be formulated and followed to ensure safe working with this product. Relevant workers must receive suitable and sufficient training and supervision.

Ensure that eyewash stations and safety showers are close to the workstation location.

Take note of assigned Workplace Exposure Limits.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

### · Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

## · Hand protection



Protective gloves

Use gloves tested and approved under appropriate government standards such as NIOSH (US) or EN374 (EU).

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

(Contd. on page 6)



Printing date 27.01.2025 Version number 3 (replaces version 2) Revision: 27.01.2025

Trade name: pH Minus Liquid 25%

(Contd. of page 5)

### · Material of gloves

Fluorocarbon rubber (Viton)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection



Face shield/visor.

Use equipment tested and approved under appropriate government stangards such as EN166 (EU) or NIOSH (US)



Tightly sealed goggles conforming to EN166.

Use visor in combination with goggles.

· Body protection:



Acid resistant protective clothing

Do not get on skin or clothing. Wear clothing and footwear that cannot be penetrated by the product. Suitable protective equipment may include: Chemical resistant boots, Chemical resistant apron, Full chemical protective suit with a hood, Chemical protective suit consisting of a jacket and trousers. The jacket should be buttoned up to the neck, sleeves sealed at the gloves, and trouser legs worn outside the boots. These precautions are required to prevent the clothing from accidentally trapping product against the skin.

Undetermined.

- · Environmental exposure controls Do not allow to enter drains, sewers or watercourses.
- · Risk management measures The operators shall be instructed adequately.

## **SECTION 9: Physical and chemical properties**

· 9.1 Information on basic physical and chemical properties

· General Information

Physical state
Colour:
Odour:
Odour threshold:

Liquid
Colourless
Acidic
Not determined.

· Boiling point or initial boiling point and boiling range 100 °C (CAS: 7732-18-5 Water)

· Flammability Not applicable.

· Lower and upper explosion limit

· Melting point/freezing point:

Lower: Not determined.
Upper: Not determined.
Flash point: Not applicable.
Decomposition temperature: Not determined.

 $\cdot$  pH at 20 °C 0-1

(Contd. on page 7)



Printing date 27.01.2025 Version number 3 (replaces version 2) Revision: 27.01.2025

Trade name: pH Minus Liquid 25%

(Contd. of page 6)

	(Cond. or page o
· Viscosity:	
· Kinematic viscosity	Not determined.
Dynamic:	Not determined.
· Solubility	
· water:	Fully miscible.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not determined.
· Density and/or relative density	
· Density at 20 °C:	$1.145 \text{ g/cm}^3$
· Relative density	Not determined.
· Vapour density	Not determined.
· 9.2 Other information	NOTE: The physical data presented above are typical
7 1- 9 1-102	values and should not be construed as a specification.
· Appearance:	and the second s
· Form:	Liquid
· Important information on protection of health a	
environment, and on safety.	
· Ignition temperature:	Product is not self-igniting.
· Explosive properties:	Product does not present an explosion hazard.
· Solvent content:	1 1
· VOC (EC)	0.00 %
· Change in condition	
· Evaporation rate	Not determined.
· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gas	ses
in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

## **SECTION 10: Stability and reactivity**

• 10.1 Reactivity No further relevant information available.



Printing date 27.01.2025 Version number 3 (replaces version 2) Revision: 27.01.2025

Trade name: pH Minus Liquid 25%

(Contd. of page 7)

- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· 10.3 Possibility of hazardous reactions

May produce violent reactions with bases and numerous organic substances including alcohols and amines.

Reacts with cyanides and sulphites to form toxic gases.

Reacts violently with many substances.

Reacts violently with oxidising agents.

Reacts with reducing agents.

- 10.4 Conditions to avoid No further relevant information available.
- $\cdot$  10.5 Incompatible materials:

Cyanides

Sulphides

Chlorates

Oxidising agents

Metals

Reducing agents

Substances specifically listed in section 10.3 as incompatible.

• 10.6 Hazardous decomposition products: Sulphur oxides (SOx)

## **SECTION 11: Toxicological information**

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- · LD/LC50 values relevant for classification:

CAS: 7664-93-9 Sulphuric acid

Oral LD50 2,140 mg/kg (rat)

- · Primary irritant effect:
- · Skin corrosion/irritation Causes severe skin burns and eye damage.
- · Serious eye damage/irritation Causes serious eye damage.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- $\cdot \textbf{STOT-repeated exposure} \text{ Based on available data, the classification criteria are not met.} \\$
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · Subacute to chronic toxicity: May have effects on the teeth, resulting in teeth erosion.
- · Additional toxicological information:

ROUTES OF EXPOSURE: Can be absorbed into the body by inhalation and by ingestion.

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

Inhalation may cause lung oedema, but only after initial corrosive effects on eyes and/or airways have become manifest. The symptoms of lung oedema often do not become manifest until a few hours have passed and they are aggravated by physical effort. Rest and medical observation are therefore essential. Immediate administration of an appropriate inhalation therapy by a doctor or a person authorized by him/her, should be considered.

(Contd. on page 9)



Printing date 27.01.2025 Version number 3 (replaces version 2) Revision: 27.01.2025

Trade name: pH Minus Liquid 25%

(Contd. of page 8)

### · 11.2 Information on other hazards

## · Endocrine disrupting properties

None of the ingredients are listed.

## **SECTION 12: Ecological information**

#### · 12.1 Toxicity

	· Aquatic toxicity:		
CAS: 7664-93-9 Sulphuric acid		93-9 Sulphuric acid	
	EC50 (96 h)	16 mg/l (Fish)	
	EC50 (72 h)	> 100 mg/l (Daphnia)	

- · 12.2 Persistence and degradability Inorganic substance: not applicable
- 12.3 Bioaccumulative potential Product is not expected to bioaccumulate.
- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.
- · 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

## **SECTION 13: Disposal considerations**

## · 13.1 Waste treatment methods

## · Recommendation

Recommended Hierarchy of Controls:

- Minimise waste;
- Reuse if not contaminated;
- Recycle, if possible; or
- Safe disposal (if all else fails).

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact waste processors for recycling information.

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

## · Uncleaned packaging:

### · Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

Do not mix with other waste streams.

Container remains hazardous when empty. Continue to observe all precautions.

Containers, even those that are "empty," may contain residues that can develop flammable and/or hazardous vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

(Contd. on page 10)



Printing date 27.01.2025 Version number 3 (replaces version 2) Revision: 27.01.2025

Trade name: pH Minus Liquid 25%

(Contd. of page 9)

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

## **SECTION 14: Transport information**

· 14.1 UN number or ID number UN2796

· ADR/RID/ADN, IMDG, IATA

· 14.2 UN proper shipping name · ADR/RID/ADN **UN2796 SULPHURIC ACID** 

· IMDG, IATA SULPHURIC ACID

· 14.3 Transport hazard class(es)

· ADR/RID/ADN



· Class 8 (C1) Corrosive substances.

· Label

· IMDG, IATA



· Class 8 Corrosive substances.

· Label

· 14.4 Packing group

· ADR/RID/ADN, IMDG, IATA II

· 14.5 Environmental hazards:

· Marine pollutant:

· 14.6 Special precautions for user Warning: Corrosive substances.

· Hazard identification number (Kemler code):

· Hazchem Code: 2R

F-A,S-B · EMS Number: · Segregation groups (SGG1) Acids

· Stowage Category

· Segregation Code SG36 Stow "separated from" SGG18-alkalis. SG49 Stow "separated from" SGG6-cyanides

· 14.7 Maritime transport in bulk according to IMO

instruments Not applicable.

(Contd. on page 11)



Printing date 27.01.2025 Version number 3 (replaces version 2) Revision: 27.01.2025

Trade name: pH Minus Liquid 25%

(Contd. of page 10)

· Transport/Additional information:	
· ADR/RID/ADN	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 2796 SULPHURIC ACID, 8, II

## **SECTION 15: Regulatory information**

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Poisons Act

· Regulated explosives precursors	
CAS: 7664-93-9 Sulphuric acid	15%
· Regulated poisons	
None of the ingredients are listed.	
· Reportable explosives precursors	
None of the ingredients are listed.	
· Reportable poisons	
None of the ingredients are listed.	

- · Control Of Major Accident Hazards Regulations 2015 (COMAH)
- · Named dangerous substances ANNEX I None of the ingredients are listed.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

## · Relevant phrases

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

(Contd. on page 12)



Printing date 27.01.2025 Version number 3 (replaces version 2) Revision: 27.01.2025

Trade name: pH Minus Liquid 25%

(Contd. of page 11)

## · Training hints

This product should only be handled by workers who have received sufficient training in the safe handling and use of chemical products.

· Department issuing SDS: Product safety department.

### · Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (UK REACH) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

ATE: Acute toxicity estimate values

Skin Corr. 1A: Skin corrosion/irritation – Category 1A Eye Dam. 1: Serious eye damage/eye irritation – Category 1

\* \* Data compared to the previous version altered.

GB —