



according to Regulation (EC) No 1907/2006

2975149 Acid Electrode Cleaning Solution

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

1.1. Product identifier

2975149 Acid Electrode Cleaning Solution

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

Use of the substance/mixture

Water analysis

1.3. Details of the supplier of the safety data sheet

Company name: HACH LANGE GmbH
Street: Willstätterstr. 11
Place: D-40549 Düsseldorf
Telephone: +49 (0)211 5288-383
e-mail: SDS@hach.com
Internet: www.de.hach.com
Responsible Department: HACH LANGE Ltd.

5, Pacific Way

Salford Manchester M50 1DL - United Kingdom Tel. +44 (0) 161 872 1487 * Fax +44 (0) 161 848 7324

e-Mail: info-uk@hach.com

HACH LANGE Ltd.

Unit 1, Chestnut Road Western Industrial Estate

IRL-Dublin 12

Tel. +353 (0)1 4602522 e-Mail: info-ie@hach.com

1.4. Emergency telephone Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency

number: service -

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Substance or mixture corrosive to metals: Met. Corr. 1

Skin corrosion/irritation: Skin Corr. 1B

Hazard Statements:

May be corrosive to metals.

Causes severe skin burns and eye damage.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

phosphoric acid; orthophosphoric acid \dots %

Signal word: Danger

Pictograms:



Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.





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Safety Data Sheet

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Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P332+P313 If skin irritation occurs: Get medical advice/attention.

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

present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P390 Absorb spillage to prevent material damage.

Additional advice on labelling

Classification according to EU Directives 67/548/EEC or 1999/45/EC

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

2.3. Other hazards

no data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity	
	EC No	Index No	REACH No		
	Classification according to Regulation (EC) No. 1272/2008 [CLP]				
7732-18-5	Water			85-95 %	
	231-791-2				
7664-38-2	phosphoric acid; orthophosphoric acid %				
	231-633-2	015-011-00-6			
	Skin Corr. 1B; H314				

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off all contaminated clothing immediately.

Consult a physician. Show this safety data sheet to the doctor in attendance.

After inhalation

Move to fresh air.

After contact with skin

Wash off immediately with plenty of water for at least 15 minutes.

After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Show this safety data sheet to the doctor in attendance.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting.

Consult a physician. Show this safety data sheet to the doctor in attendance.

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

In case of skin contact: Irritation and corrosion

If inhaled: Cough, Shortness of breath

If swallowed: Nausea, Vomiting, Stomach/intestinal disorders





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4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

Unsuitable extinguishing media

No Limit

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.

5.3. Advice for firefighters

In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Additional information

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Only qualified personnel equipped with suitable protective equipment may intervene. Immediately evacuate personnel to safe areas.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local/national regulations (see section 13).

6.4. Reference to other sections

13. Disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas.

Avoid contact with skin and eyes.

Advice on protection against fire and explosion

None known.

See also section 5

Further information on handling

Observe label precautions.

Avoid contact with skin, eyes and clothing.

Avoid contact with eyes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep containers tightly closed in a cool, well-ventilated place.

7.3. Specific end use(s)

Laboratory chemicals



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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
7664-38-2	Orthophosphoric acid	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

Additional advice on limit values

None known.

8.2. Exposure controls

Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Protective and hygiene measures

Wash hands before breaks and after work.

General industrial hygiene practice.

Eye/face protection

Safety glasses with side-shields

Hand protection

Use barrier skin cream.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. In full contact: Gloves material: Viton, Layer thickness: 0.70 mm, Breakthrough time: >480 min. In splash contact: Glove material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: > 30 min

Consult your supplier if the material is to be used for special applications such as in the food industry or for hygiene, medical or surgical end-use.

Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Skin protection

Avoid contact with skin, eyes and clothing.

Remove and wash contaminated clothing before re-use.

Respiratory protection

Breathing apparatus only if aerosol or dust is formed.

Recommended Filter type: ABEK-filter

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: colourless
Odour: irritating

pH-Value (at 20 °C): 0,7

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Sublimation point:

not applicable
not applicable
not applicable
no data available



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Pour point:

no data available

no data available

Flash point: not applicable

Flammability

Solid: no data available
Gas: no data available

Explosive properties

no data available

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

not applicable

not applicable

Auto-ignition temperature

Solid: no data available
Gas: no data available
Decomposition temperature: no data available

Oxidizing properties

no data available

Vapour pressure:no data availableVapour pressure:no data availableDensity (at 20 °C):1,073 g/cm³Bulk density:no data availableWater solubility:miscible

Solubility in other solvents

miscible (Acids)

Partition coefficient: no data available Viscosity / dynamic: no data available Viscosity / kinematic: no data available Flow time: no data available Vapour density: no data available Evaporation rate: no data available Solvent separation test: no data available Solvent content: no data available

9.2. Other information

Solid content: no data available

no data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrosive to metals

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Reacts with the following substances: Strong bases, Metals



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10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

10.5. Incompatible materials

woven fabric, Organic materials, Metals,

10.6. Hazardous decomposition products

Oxides of phosphorus

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

No toxicology information is available.

Acute toxicity

No data is available on the product itself.

CAS No	Chemical name							
	Exposure route	Dose	Species	Source	Method			
7664-38-2	phosphoric acid; orthophosphoric acid %							
	dermal	LD50 2740 mg/kg	rabbit	IUCLID				

Irritation and corrosivity

Causes skin and eye burns.

Sensitising effects

No known effect.

Carcinogenic/mutagenic/toxic effects for reproduction

Contains no ingredient listed as a carcinogen

Aspiration hazard

No aspiration toxicity classification

Specific effects in experiment on an animal

phosphoric acid; orthophosphoric acid ... %: rabbit eye 199 mg - Severe eye irritation rabbit skin 595 mg/24H - Severe skin irritation

Further information

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information

12.1. Toxicity

Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name						
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method	
7664-38-2	phosphoric acid; orthophosphoric acid %						
	Acute fish toxicity	LC50 138 mg/l	96 h	Gambusia affinis			

12.2. Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

No data is available on the product itself.



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12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

no data available

12.6. Other adverse effects

no data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

In accordance with local and national regulations.

Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

Waste disposal number of used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

Waste disposal number of contaminated packaging

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

Contaminated packaging

Dispose of as unused product.

The hazard and precautionary statements displayed on the label also apply to any residues left in the container.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1805

14.2. UN proper shipping name: Phosphoric acid, solution

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8



Classification code: C1
Limited quantity: 5 L
Transport category: 3
Hazard No: 80
Tunnel restriction code: E

Other applicable information (land transport)

Excepted Quantities: E1

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not tested

Marine transport (IMDG)





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14.1. UN number: UN 1805

14.2. UN proper shipping name: PHOSPHORIC ACID SOLUTION

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8



Marine pollutant: -Special Provisions: 223
Limited quantity: 5 L

EmS: 5 L F-A, S-B

Other applicable information (marine transport)

Excepted Quantities: E1
Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1805

14.2. UN proper shipping name: PHOSPHORIC ACID SOLUTION

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8



Special Provisions: A3 A803 Limited quantity Passenger: 1 L

IATA-packing instructions - Passenger:852IATA-max. quantity - Passenger:5 LIATA-packing instructions - Cargo:856IATA-max. quantity - Cargo:60 L

Other applicable information (air transport)

Excepted Quantities: E1 Passenger-LQ: Y841

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

no data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

SECTION 15: Regulatory information

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

National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information





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Changes

Revision: 10.03.2015

Safety datasheet sections which have been updated: 2, 4, 11

Revision: 17.07.2014

Safety datasheet sections which have been updated: 1-16

Relevant H and EUH statements (number and full text)

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)