format according to Regulation (EC) No.1907/2006 (REACH)

Trade name: Calibration liquid pH4

Revision:19.02.2024Date of compilation:20.09.2022Version:2 enReplaces version of:20.09.2022

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

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Identification of the substance: Calibration liquid pH4.

Registration number (REACH): This substance is exempted under Article 2(7) and Annex V of

REACH.

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

Relevant identified uses: Calibration of pH electrodes.

1.3 Details of the supplier of the safety data sheet

Supplier:TriOS Mess- und Datentechnik GmbHAddress:Bürgermeister-Brötje-Straße 25, 26180 Rastede, GermanyTelephone:+49 (0) 4402 69670-0Fax:+49 (0)4402 69670-20E-Mail:safety@trios.deWebsite:www.trios.de

Competent person responsible for the safety data sheet:

E-Mail: safety@trios.de

1.4 Emergency telephone number

Telephone number: Giftinformationszentrum Nord (Germany)

+49 551-19240

Section 2: Hazards identification

2.1 Classification of the substance or mixture

This substance does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

2.2 Label elements

Hazard pictograms:None.Signal word:None.Hazard statements:None.Safety instructions:None.

2.3 Other hazards

This substance/mixture does not contain components classified as either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Endocrine disrupting or endocrine disrupting properties are not known.



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Section 3: Composition/information on ingredients

3.2 Mixtures

In accordance with the provisions of Regulation (EU) 1272/2008 (CLP), the product does not contain substances hazardous to health or the environment in quantities that would require declaration of their presence.

Section 4: First aid measures

4.1 Description of first aid measures			
General notes:	No special measures are necessary.		
Following inhalation:	Provide fresh air.		
Following skin contact:	Clear with water.		
Following eye contact:	Rinse cautiously with water for several minutes.		
Following ingestion:	Rinse mouth. Call a doctor if you feel unwell.		

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

None.

Section 5: Firefighting measures

5.1 Extinguishing media:			
Suitable extinguishing media:	Match the extinguishing measures to the surrounding area. Standard extinguishing agents such as carbon dioxide, foam, powder and water mist can be used.		
unsuitable extinguishing media:	None.		

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released: Carbon monoxide, Carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

Section 6: Accidental release measure

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6.1 Personal precautions, protective equipment and emergency procedures			
For non-emergency personnel:	Use appropriate protective equipment in accordance with Section 8 to prevent contamination of skin, eyes, and personal clothing.		
Operational forces:	Protective equipment see section 8.		



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6.2 Environmental precautions

Keep away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid binders, universal binders, sawdust) and place in suitable container for disposal.

Rinse residues with water.

6.4 Reference to other sections

For information on safe handling, see section 7.

For information on personal protective equipment, see section 8.

For information on disposal, see section 13.

Section 7: Handling and storage

7.1 Precautions for safe handling

Read the safety data sheet, before handling the product.

Avoid releasing the mixture into the environment.

Keep the product away from food.

7.2 Conditions for safe storage, including any incompatibilities

Information on the storage condition:

Keep container tightly closed. Observe hints for combined storage

Special designs for storage rooms and containers:

Recommended storage temperature 15-25 °C

7.3 Specific end use(s)

No information available.

Section 8: Exposure controls/personal protection

8.1 Control parameters

No information available.

8.2 Exposure controls

Suitable technical control device

Not required

Individual protection measures (personal protective equipment)

Eye/face protection: Use safety goggle with side protection.

Hand protection: Hand protection is not required under normal circumstances.

Respiratory protection: not required

Limitation and monitoring of environmental exposure:

Keep away from drains, surface and ground water.



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Section 9: Physical and chemical properties

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9.1 Information on basic physical and chemical properties				
Physical state:	liquid			
Colour:	Colourless			
Odour:	Odorless			
Melting point/Freezing point:	0 °C			
Boiling point or initial boiling point and boiling range:	100 °C			
Flammability:	Not applicable.			
Lower and upper explosion limits:	No data available.			
Flash point:	Not applicable.			
Auto-ignition temperature	No data available.			
Decomposition temperature	No data available.			
pH value:	4			
Kinematic viscosity:	No data available.			
Solubility:	Completely mixable.			
Partition coefficient: n-octanol/water:	No data available.			
Vapour pressure:	23 hPa at 20 °C			
Density:	1.00014 g/cm³ at 20 °C			
relative vapour density:	No data available.			
Particle characteristics:	Not applicable.			

9.2 Other Information

None.

Section 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

The material is stable under normal ambient conditions of temperature.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

data not available.



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10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

Section 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008			
Acute toxicity:	Shall not be classified as acutely toxic.		
Skin corrosion/irritation:	Shall not be classified as corrosive/irritant to skin.		
Serious eye damage/ Eye irritation:	Shall not be classified as seriously damaging to the eye or eye irritant.		
Respiratory or skin sensitisation:	Shall not be classified as a respiratory or skin sensitiser.		
Germ cell mutagenicity:	Shall not be classified as germ cell mutagenic.		
Carcinogenicity:	Shall not be classified as carcinogenic.		
Reproductive toxicity:	Shall not be classified as a reproductive toxicant.		
Specific target organ toxicity (single exposure):	Shall not be classified as a specific target organ toxicant (single exposure).		
Specific target organ toxicity (repeated exposure):	Shall not be classified as a specific target organ toxicant (repeated exposure).		
Aspiration hazard:	Shall not be classified as presenting an aspiration hazard.		

11.2 Information about other hazards

There is no other information available.

Section 12: Ecological information

12.1 Toxicity

data not available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

This substance/mixture does not contain any components at concentrations of 0.1% or higher that are classified as either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0.1%.



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12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

Data are not available.

Section 13: Disposal considerations

13.1 Waste treatment methods

Consult the appropriate local waste disposal expert about waste disposal. Do not allow to enter drains.

Section 14: Transport information

The product is not dangerous, according to the regulations in force in the field of road transport of dangerous goods (ADR), by rail (RID), by sea (IMDG Code) and by air (IATA).

14.1 UN number or ID number

Not subject to transport regulations.

14.2 UN proper shipping name

Not assigned.

14.3 Transport hazard class(es)

None.

14.4 Packing group

Not assigned.

14.5 Environmental hazards

Non-environmentally hazardous acc. to the dangerous goods regulations.

14.6 Special precautions for user

There is no additional information.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.



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Section 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture			
Relevant provisions of the European Union (EU):	Not listed.		
National inventories	Follow national regulation for work with chemical agents.		
	Germany:		
	Water hazard class (WGK): 1 (slightly hazardous to water)		
	Storage class (LGK) according to TRGS 510: 12 (non-flammable liquids)		

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

Section 16: Other information

Indication of changes (revised safety data sheet):

Section 9: Changes in physical and chemical properties (colour, melting point/freezing point, boiling point or initial boiling point and boiling range, flash point, vapour pressure, density).

Abkürzu	ngen und Akronyme:
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways).
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road).
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances).
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.
DGR	Dangerous Goods Regulations (see IATA/DGR).
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union).
EINECS	European Inventory of Existing Commercial Chemical Substances.
ELINCS	European List of Notified Chemical Substances.
IATA	International Air Transport Association.
IMDG	International Maritime Dangerous Goods Code.
LGK	Lagerklasse gemäß TRGS 510, Germany (Storage class).
PBT	Persistent, Bioaccumulative and Toxic.
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals.
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail).
TRGS	Technische Regeln für GefahrStoffe; Germany (Technical Rules for Hazardous Substances).



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vPvB Very Persistent and very Bioaccumulative.

Key literature references and sources for data:

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations

concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Technical Rules for Hazardous Substances (TRGS)

