

Safety Data Sheet

according to Regulations 1907/2006/EC (REACh) and 2015/830/EU

PEHANON pH 2,8 - 4,6 Page: 1/8 Printing date: 12.01.2023 Date of issue: 18.07.2022 Version: 2.2.2.2

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

1.1 **Product identifier**

REF 90414

Product name PEHANON pH 2,8 - 4,6

REACH Registration number(s): see SECTION 3.1/3.2 or

A registration number for the substance(s) does not exist because the annual tonnage does not require registration or

the substance or its use is excluded from registration.

1 x 200 strips PEHANON®

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

Relevant identified uses

Product for analytical use.

Exposure Scenario Classification according REACh, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0

The exposure scenario is integrated into sections 1-16.

Uses advised against

not described

1.3 Details of the supplier of the safety data sheet

Manufactured by:

MACHEREY-NAGEL GmbH & Co. KG Valencienner Str. 11, 52355 Düren, Germany

Phone: +49 2421 969 0 E-mail: sds@mn-net.com (msds@mn-net.com)

1.4 **Emergency telephone number**

Information not necessary.

You find our current versions of SDS in Internet: http://www.mn-net.com/SDS

SECTION 2: Hazard identification

2.0 Classification of the complete product according to Regulation (EC) 1272/2008

Classification of the substance or mixture according to Regulation (EC) 1272/2008 2.1

200 strips PEHANON®

Do not need labelling as hazardous

Signal word

No hazard class

List of H phrases: see section 16.2

2.2 Label elements according regulation (EC) 1272/2008

200 strips PEHANON®

Do not need labelling as hazardous Signal word: -

Label elements of the complete product

2.3 Other hazards

Possible hazards from physicochemical properties

According to our current status of knowledge and experience we state, that this product does not contain any substances, which in accordance with EC regulations 1272/2008/EC, 1907/2006/EC and German Regulations for Hazardous goods - have to be declared as dangerous goods, either because of their applied concentration or because of their total amount in anyone kit. An individual package has considerably less hazardous potential.



Software: M2 V 6.0.28.156

MACHEREY-NAGEL GmbH & Co. KG Valencienner Str. 11

52355 Düren · Germany www.mn-net.com

DE Tel.: +49 24 21 969-0 info@mn-net.com

CH Tel.: +41 62 388 55 00 sales-ch@mn-net.com FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com



Safety Data Sheet

according to Regulations 1907/2006/EC (REACh) and 2015/830/EU

 REF: 90414
 PEHANON pH 2,8 - 4,6
 Page: 2/8

 Printing date: 12.01.2023
 Date of issue: 18.07.2022
 Version: 2.2.2.2

Information pertaining to particular risks to human and possible symptoms

Information pertaining to particular risks to the environment

Possible endocrine disrupting effects

no data available

SECTION 3: Composition / information on ingredients

3.1 Substances or 3.2 Mixtures

200 strips PEHANON®

Substance name: cellulose paper CAS No.: cellulose paper

Substance rating: No criteria for classification or naming of chemical not required.

Formula: $(C_6 H_{10} O_5)_n$ REACH Reg. No.: exempt, Annex IV EC No.: 232-674-9 Concentration: 90 - <100 %

acc. CLP (GHS): The criteria for classification are not fulfilled.

Substance name: indicator dye(s)

CAS No.:

Substance rating: No criteria for classification or naming of chemical not required.

Concentration: 0,1 - <1 %

acc. CLP (GHS): The criteria for classification are not fulfilled.

3.3 Remarks

When not listed, mixtures are added with water [CAS No. 7732-18-5] to 100%.List of H and P phrases: see section 16.2.

SECTION 4: First aid measures

4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately.

4.1.1 After SKIN Contact

Remove dust with wetted tissue.

4.1.2 After EYE Contact

Rub dust with teardrops from eyes

4.1.3 After INHALATION of vapours

After inhalation of dust fresh air should be inhaled. ---

4.1.4 After ORAL Intake

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

No additionally recommendations. ---

SECTION 5: Firefighting measures

5.1 Extinguishing media

5.1.1 Suitable extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used. Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.



Software: M2 V 6.0.28.156

MACHEREY-NAGEL GmbH & Co. KG Valencienner Str. 11

52355 Düren · Germany

DE Tel.: +49 24 21 969-0 info@mn-net.com
CH Tel.: +41 62 388 55 00 sales-ch@mn-net.com

FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com
US Tel.: +1 888 321 62 24 sales-us@mn-net.com

www.mn-net.com



Safety Data Sheet

according to Regulations 1907/2006/EC (REACh) and 2015/830/EU

 REF: 90414
 PEHANON pH 2,8 - 4,6
 Page: 3/8

 Printing date: 12.01.2023
 Date of issue: 18.07.2022
 Version: 2.2.2.2

5.1.2 Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for firefighters

No, for listed product. Product package burns like paper or plastic.

5.4 Additional information

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.2 Environmental precautions

not necessary

6.3 Methods and material for containment and cleaning up

Clean working area with water. Flush used water into drains.

6.4 Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product.

7.2 Conditions for safe storage, including any incompatibilities

Safe storage is guaranteed in the original packaging . Storage class (German chemical industry): see chapter 12.1 Storage class (VCI):

11
Water hazard class (DE):

nwg

7.2.1 Requirements for stock rooms and containers

Keep original product packages tightly closed during handling and storage.

7.3 Specific end use(s)

Product for analytical use.

SECTION 8: Exposure controls /personal protection

8.1 Control parameters

200 strips PEHANON®

Chemical: cellulose paper CAS No.: 9004-34-6

TRGS 900 (DE): Staub 1.25 A / 4 E mg/m³ E/e respirable

SUVA(CH) MAK value: 3 a ppm

NIOSH: TWA 10 (total) / 5 (resp) mg/m³

[TWA] Time-weighted average to a reference period of 8 hours, [STEL] Short-term exposure limit related to a 15-minute period

OSHA: TWA 15 (total) / 5 (resp) mg/m³

Chemical: indicator dye(s) CAS No.: -

8.2 Exposure controls

Not necessary.

8.2.1 Respiratory protection

Not necessary.

8.2.2 Skin protection / Hand protection



MACHEREY-NAGEL GmbH & Co. KG Valencienner Str. 11

52355 Düren · Germany

DE Tel.: +49 24 21 969-0 info@mn-net.com

CH Tel.: +41 62 388 55 00 sales-ch@mn-net.com
FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com

US Tel.: +1 888 321 62 24 sales-us@mn-net.com

Software: M2 V 6.0.28.156



Safety Data Sheet

according to Regulations 1907/2006/EC (REACh) and 2015/830/EU

 REF: 90414
 PEHANON pH 2,8 - 4,6
 Page: 4/8

 Printing date: 12.01.2023
 Date of issue: 18.07.2022
 Version: 2.2.2.2

Not necessary.

8.2.3 Eye / Face Protection

Not necessary.

8.2.4 Skin protection

Not necessary.

8.2.5 Personal hygiene

Information not necessary.

8.2.6 Thermal hazards

no data available

8.3 Limitation and monitoring of environmental exposure

Information not necessary.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

200 strips PEHANON®

a) State of aggregation: solid b) Colour: colored c) Odor: odorless d) Melting point: no data available e) Boiling point: no data available f) Flammability: no data available g) Explosive limits (lower / upper): h) Flash point: no data available no data available i) Flashing temperature: no data available j) Decomposition temperature: no data available k) pH value: no data available I) Kinematic viscosity: no data available m) Solubility in water: no data available n) Dispersion coefficient (o/w): no data available o) Vapour pressure (20°C): no data available p) Specific gravity: no data available q) Relative vapour density (air=1): no data available r) Particle size: no data available

9.2 Other information

Properties relevant to substance groups

SECTION 10: Stability and reactivity

10.1 Reactivity

None

10.2 Chemical stability

no known instability.

10.3 Possibility of hazardous reactions

None.

10.4 Conditions to avoid

Not known.

10.5 Incompatible materials

Not known.

10.6 Hazardous decomposition products



Software: M2 V 6.0.28.156

MACHEREY-NAGEL GmbH & Co. KG Valencienner Str. 11

52355 Düren · Germany www.mn-net.com

DE Tel.: +49 24 21 969-0 info@mn-net.com

CH Tel.: +41 62 388 55 00 sales-ch@mn-net.com FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com



Safety Data Sheet

according to Regulations 1907/2006/EC (REACh) and 2015/830/EU

REF: 90414 PEHANON pH 2,8 - 4,6 Page: 5/8 Date of issue: 18.07.2022 Printing date: 12.01.2023 Version: 2.2.2.2

In the original package all parts/all reagents are safety and separated stored. Decompositions are not observed during the expiration period under recommended conditions.

SECTION 11: Toxicological information

11.1 Information on the hazard classes according regulation (EC) 1272/2008

Following information is valid for pure substances. Quantitative data on the toxicity of this product are not available.

200 strips PEHANON®

Chemical: cellulose paper CAS No.: 9004-34-6

TSCA Inventory: listed California Proposition 65 List: not listed

inhalation, skin and/or eye contact Exposure Routes: Target Organs: Eyes, skin, respiratory system Symptoms: irritation eyes, skin, mucous membrane

Australia NICNAS: not listed Canada CEPA 1999: DSL yes

Japan CSCL/PRTR: not listed, Japan PDSCL: not listed

Japan ISHL: not listed South Korea TCCA: not listed Korea Exist.Chem.Inventory: KE-05339 LD50 orl rat: > 5000 mg/kg LC50 ihl rat: > 5,800 mg/L/4H

Chemical: indicator dye(s) CAS No.: -

TSCA Inventory: all listed, <1%

11.2 Other hazards

Possible endocrine disrupting effects

no data available

Other information

no additional data available

SECTION 12: Ecological information

12.1 **Toxicity**

Following information is valid for pure substances.

200 strips PEHANON®

Chemical: cellulose paper CAS No.: 9004-34-6

Water hazard class (DE): nwg Storage class (VCI):

indicator dye(s) 12-13 CAS No .: -Chemical:

Storage class (VCI):

12.2 Persistence and degradability

not necessary

12.3 Bioaccumulative potential

not necessary

12.4 Mobility in soil

not necessary

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

12.6 **Endocrine disrupting properties**

no data available

12.7 Other adverse effects

no additional data available



Software: M2 V 6.0.28.156

MACHEREY-NAGEL GmbH & Co. KG Valencienner Str. 11

52355 Düren · Germany www.mn-net.com

DE Tel.: +49 24 21 969-0 info@mn-net.com

CH Tel.: +41 62 388 55 00 sales-ch@mn-net.com FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com



Safety Data Sheet

according to Regulations 1907/2006/EC (REACh) and 2015/830/EU

 REF: 90414
 PEHANON pH 2,8 - 4,6
 Page: 6/8

 Printing date: 12.01.2023
 Date of issue: 18.07.2022
 Version: 2.2.2.2

SECTION 13: Disposal considerations

Not necessary.

13.1 Waste treatment methods

GENERAL: Empty solids into municipal waste, empty liquids diluted into drains.

SECTION 14: Transport information

14.1 - 14.4 Not necessary

14.5 Environmental hazards

none

14.6 Special precautions for user

not necessary

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

Not applicable.

SECTION 15: Regulatory information

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

Dangerous Substances Protection Act (DE: Chemikaliengesetz - ChemG), Aug 2013, Stand: Okt 2020 Ordinance on protection against dangerous substances (E: Gefahrstoffverordnung - GefStoffV), Nov 2010, Stand: Mrz 2017 MN leaflet/instructions for use, also at www.mn-net.com If necessary, observe other country-specific regulations.

15.2 Chemical safety assessment

SECTION 16: Other information

16.1 Changes compared to the last version

in preparation

16.2 List of H and P phrases

- 16.2.1 List of relevant H phrases
- 16.2.2 List of relevant P phrases

16.3 Recommended restriction on use

None

16.4 Sources of key data

KÜHN, BIRETT, Leaflets on hazardous materials, 2021

Directive 1999/92/EG Minimum requirements to improve the safety and health protection of workers at risk from potentially explosive atmospheres

SUVA .CH, limit values in the air at work 2009, revised on 01/2009

Regulation 790/2009/EU, adaptation of Regulation 1272/2008/EU to technical and scientific progress (1st ATP)

Regulation 453/2010/EU, adaptation of the REACH regulation 1907/2006/EG

Regulation 487/2013/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (4th ATP)

Regulation 1221/2015/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (7th ATP)

Regulation 776/2017/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (10th ATP)

Regulation 669/2018/EU, adaptation of Regulation 1272/2008/EC to technical and scientific progressText (11th ATP)

Regulation 1480/2018/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (13th ATP) Regulation 521/2019/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (12th ATP)

TRGS 900, German rules of technology on limit values in the air at work, as of 03/2019

Regulation 217/2020/EU, adaptation of Annex VI, Part 3, of Regulation 1272/2008/EC to technical and scientific progress (14th ATP)

Regulation 878/2020/EU, adaptation of Annex II of the REACH regulation 1907/2006/EG

Regulation 1182/2020/EU, adaptation of Annex VI, Part 3, of Regulation 1272/2008/EC to technical and scientific progress (15th ATP) Regulation 643/2021/EU, adaptation of Annex VI, Part 1, of Regulation 1272/2008/EC to technical and scientific progress (16th ATP)

Regulation 849/2021/EU, adaptation of Annex VI, Part 3, of Regulation 1272/2008/EC to technical and scientific progress (17th ATP)

revisions/updates



MACHEREY-NAGEL GmbH & Co. KG Valencienner Str. 11

52355 Düren · Germany www.mn-net.com

DE Tel.: +49 24 21 969-0 info@mn-net.com

CH Tel.: +41 62 388 55 00 sales-ch@mn-net.com

FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com



Safety Data Sheet

according to Regulations 1907/2006/EC (REACh) and 2015/830/EU

REF: 90414 PEHANON pH 2,8 - 4,6 Page: 7/8 Printing date: 12.01.2023 Date of issue: 18.07.2022 Version: 2.2.2.2

Reason for revision: 2014-02 Corrected structure of the sections according to Regulation 453/2010/EU, if necessary

2014-04 adjustment according Regulation 487/2013/EU 2016-03 adjustment according Regulation 1221/2015/EU

2017-11 adjustment according the ECHA registration dossier 2022-11 adjustment according Regulation 878/2020/EU

16.5 **Further information**

MACHEREY-NAGEL GmbH & Co. KG provides the information contained herein in good faith being up-to-date of own realizations at revision time. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.

MACHEREY-NAGEL GmbH & Co. KG makes NO REPRESENTATIONS or WARRANTIES, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly MACHEREY-NAGEL GmbH & Co. KG will not be responsible for damages resulting from use of or reliance upon this information. See terms and conditions at the end of our price lists for additional information.

16.6 Legend / Abbreviations

acc: according

ADR: Convention concerning the International Carriage of Dangerous Goods by Road

Act: acute

BAT: biological workplace tolerance value

CAO: Cargo Aircraft Only

carcinogen Carc:

CAS: Chemical Abstracts Service

Classification, Labelling and Packaging regulation CLP:

CMR: carcinogen, mutagen, reproduction toxic

Corr: corrosive

COD: chemical oxigen demand

CSCL: Chemical Substance Control Law (Jp)

Dam: damage

DNEL: Derived No-Effect Level (for workers)

derm: dermal dog: dog

EC10: Concentration causing a toxic effect in 10% of the test organisms

European Community FC:

EC-Nr Substance number of the EC substance inventory EmS: Guide to accident management measures on ships

EU: **European Union** fish: fish (not spezified)

GHS: Global Harmonized System of Classification and Labeling of Chemicals

gpg: ICAO:

International Civil Aviation Organization

ihl: inhaled

IMDG: International Maritime Dangerous Goods Code

intrav: intravenous intraperitonaeal int.

ishi · Industrial Safety and Health Law (Jp)

LC50: letale concentration 50% LD50: letale dosis 50% leuciscus idus: fisch, ide, orfe MAK: maximum workplace concentration

Metall Met: mus: mouse mutagen Muta:

NIOSH: National Institute for Occupational Safety and Health (US)

NRD:

Non-rapidly degradable s mykiss: fish, rainbow trout onchorhynchus mykiss:

orl: oral OSHA: Occupational Safety and Health Administration PAX: transport on passenger planes allowed persistent, bioaccumulating, toxic substance PBT:

pH value :Ha

pimephales promelas: fish fathead minnow Predicted No Effected Concentration PNEC: PROC 15: Process category 'for laboratory use'

Law for PRTR and Promotion of Chemical Management (Jp) PRTR:

PVC: polyvinyl chloride



MACHEREY-NAGEL GmbH & Co. KG

Valencienner Str. 11 52355 Düren · Germany www.mn-net.com

DE Tel.: +49 24 21 969-0 info@mn-net.com CH Tel.: +41 62 388 55 00 sales-ch@mn-net.com FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com

US Tel.: +1 888 321 62 24 sales-us@mn-net.com

Software: M2 V 6.0.28.156



Safety Data Sheet

according to Regulations 1907/2006/EC (REACh) and 2015/830/EU

 REF: 90414
 PEHANON pH 2,8 - 4,6
 Page: 8/8

 Printing date: 12.01.2023
 Date of issue: 18.07.2022
 Version: 2.2.2.2

quail: bird, quail rat: rat rbt: rabbit

RD: rapidly degradable

RE: repeated

REACh: Registration, Evaluation, Authorisation and Restriction of Chemicals

REF: item number, reference number

Reg.No.: rRegistration number Repr: harmful to reproduction

Resp: respiratory

RIP: REACH Implementations Projects

scu: sub cutan
SDS: safety data sheet
Sens: sensitisation

STEL: short term exposure limit
STOT: Specific Target Organ Toxicity
SVHC: Substance of Very High Concern

t/a: tons per year

TCCA: Toxic Chemicals Control Act (S. Korea)
Tox: toxic
TSCA: The Toxic Substances Control Act (US)
TWA: time weighted average

TRGS: technical regulations (DE)

vPvB: very persistent, very bioaccumulating substance

16.7 Training advice

Regular safety training. Multiple safety training of staffs about danger and protection by using hazards in working area. Additionally training and introduction of staffs for using these products.

Software: M2 V 6.0.28.156