

# Safety Data Sheet

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

REF: 90415  
Printing date: 12.01.2023

PEHANON pH 3,8 - 5,5  
Date of issue: 18.07.2022

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Version: 2.2.2.2

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

### 1.1 Product identifier

REF 90415  
Product name PEHANON pH 3,8 - 5,5

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  
Valenciennner 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

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

200 strips PEHANON®

Signal word

Do not need labelling as hazardous  
-

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.



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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.: 9004-34-6

Substance rating: No criteria for classification or naming of chemical not required.  
Formula:  $(C_6H_{10}O_5)_n$   
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.



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- 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/m<sup>3</sup>  
E/e respirable  
SUVA(CH) MAK value: 3 a ppm  
NIOSH: TWA 10 (total) / 5 (resp) mg/m<sup>3</sup>  
[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/m<sup>3</sup>
- 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**



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- 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):           | no data available |
| h) Flash point:                                | no data available |
| i) Flashing temperature:                       | no data available |
| j) Decomposition temperature:                  | no data available |
| k) pH value:                                   | no data available |
| l) Kinematic viscosity:                        | no data available |
| m) Solubility in water:                        | no data available |
| n) Dispersion coefficient ( $\sigma_w$ ):      | no data available |
| o) Vapour pressure (20°C):                     | no data available |
| p) Specific gravity:                           | no data available |
| q) Relative vapour density ( $\rho_{air=1}$ ): | no data available |
| r) Particle size:                              | no data available |

### 9.2 Other information

Properties relevant to substance groups

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## 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



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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
Exposure Routes:	inhalation, skin and/or eye contact	
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 PDSCCL: 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):	11	

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

### 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

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## 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](http://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



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*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.  
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## 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  
Carc: carcinogen  
CAS: Chemical Abstracts Service  
CLP: Classification, Labelling and Packaging regulation  
CMR: carcinogen, mutagen, reproduction toxic  
Corr: corrosive  
COD: chemical oxygen 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  
EC: European Community  
EC-Nr: Substance number of the EC substance inventory  
EmS: Guide to accident management measures on ships  
EU: European Union  
fish: fish (not specified)  
GHS: Global Harmonized System of Classification and Labeling of Chemicals  
gpg: guinea pig  
ICAO: International Civil Aviation Organization  
ihl: inhaled  
IMDG: International Maritime Dangerous Goods Code  
intrav: intravenous  
ipt: intraperitoneal  
ISHL: Industrial Safety and Health Law (Jp)  
LC50: letale concentration 50%  
LD50: letale dosis 50%  
leuciscus idus: fisch, ide, orfe  
MAK: maximum workplace concentration  
Met: Metall  
mus: mouse  
Muta: mutagen  
NIOSH: National Institute for Occupational Safety and Health (US)  
NRD: Non-rapidly degradable  
onchorhynchus mykiss: fisch, rainbow trout  
orl: oral  
OSHA: Occupational Safety and Health Administration  
PAX: transport on passenger planes allowed  
PBT: persistent, bioaccumulating, toxic substance  
pH: pH value  
pimephales promelas: fisch, fathead minnow  
PNEC: Predicted No Effect Concentration  
PROC 15: Process category 'for laboratory use'  
PRTR: Law for PRTR and Promotion of Chemical Management (Jp)  
PVC: polyvinyl chloride



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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.