

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 934116	Photometer PF-3 Pool	Page: 1/12
Printing Date: 01.10.2019	Date of Issue: 17.04.2019	

### Section 1: Identification

#### 1.1 Product Identifier / Product Name

REF	934116
Product Name	Photometer PF-3 Pool
-	1 x Calibration tube (5 mL) 3 x Alkaline Manganese Batteries Type AA 1 x Button cell CR2032, built-in 3 x 50 capsules NANOFIX pH 6.5-8.2 1 x 25 mL Cl <sub>2</sub> -2 1 x 20 mL Cl <sub>2</sub> -3 1 x 18 mL Cl <sub>2</sub> -1

#### 1.2 Relevant identified Uses of the Substance or Mixture and Uses advised against

**Relevant identified uses**  
 Product for Analytical Use.  
 The Exposure scenario is integrated into sections 1-16.

**Uses advised against**  
 not described

#### 1.3 Details of the Supplier and of the Safety Data Sheet

**Manufactured by:**  
 MACHEREY-NAGEL GmbH & Co. KG  
 Neumann-Neander-Str. 6-8, 52355 Dueren, GERMANY  
 Tel.: +49 2421 969 0

E-mail: [sds@mn-net.com](mailto:sds@mn-net.com) ([msds@mn-net.com](mailto:msds@mn-net.com))

#### 1.4 Emergency Telephone Number

For Chemical Emergency  
 Spill, Leak, Fire, Exposure, or Accident  
 Call CHEMTREC Day or Night (CCN685047)  
 Within USA and Canada: **1-800-424-9300**  
 Outside USA and Canada: **+1 703-527-3887** (collect calls accepted)

You find our current versions of SDS (22 languages) in Internet: <http://www.mn-net.com/SDS>

### Section 2: Hazard(s) Identification

#### 2.0 Classification of the complete Product



GHS07

Signal Word: WARNING

Hazard Identification	Hazard Classes/Categories
H315	Skin Irrit. 2
H319	Eye Irrit. 2

#### 2.1 Classification of the Substance(s) or Mixture(s)

Calibration tube (5 mL)

Signal Word: Do not need labelling as hazardous

No Hazard Class

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 934116

Photometer PF-3 Pool

Page: 2/12

Printing Date: 01.10.2019

Date of Issue: 17.04.2019

### Alkaline Manganese Batteries Type AA

Signal Word Do not need labelling as hazardous  
-  
No Hazard Class

### Button cell CR2032, built-in

Signal Word Do not need labelling as hazardous  
-  
No Hazard Class

### 50 capsules NANOFIX pH 6.5-8.2

Signal Word Do not need labelling as hazardous  
-  
No Hazard Class

### 25 mL Cl<sub>2</sub> -2



Signal Word GHS07  
WARNING

Hazard Identification	Hazard Classes/Categories
H315	Skin Irrit. 2
H319	Eye Irrit. 2

### 20 mL Cl<sub>2</sub> -3

Signal Word Do not need labelling as hazardous  
-  
No Hazard Class

### 18 mL Cl<sub>2</sub> -1

Signal Word Do not need labelling as hazardous  
-  
No Hazard Class

## 2.2 Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

According to the implementation of GHS immediate packages only must be labelled with product identifier(s), GHS symbol(s), signal word, manufacturer name and phone number (OSHA's interpretation of HCS 2012).

Harmful chemicals/mixtures with signal word: **WARNING** must not be labelled with H and P phrases **until 125 mL** (EU 1272/2008 Annex I - 1.5.2) / **until 100 mL** (Canada WHMIS 2015). This labelling exemption does not apply to U.S.A.

### Calibration tube (5 mL)

Do not need labelling as hazardous  
Signal Word: -

### Alkaline Manganese Batteries Type AA

Do not need labelling as hazardous

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 934116

Photometer PF-3 Pool

Page: 3/12

Printing Date: 01.10.2019

Date of Issue: 17.04.2019

Signal Word: -

### Button cell CR2032, built-in

Do not need labelling as hazardous

Signal Word: -

### 50 capsules NANOFIX pH 6.5-8.2

Do not need labelling as hazardous

Signal Word: -

### 25 mL Cl<sub>2</sub> -2



GHS07

Signal Word: WARNING

### 20 mL Cl<sub>2</sub> -3

Do not need labelling as hazardous

Signal Word: -

### 18 mL Cl<sub>2</sub> -1

Do not need labelling as hazardous

Signal Word: -

## 2.3 Other Hazards

### Possible Hazards from physicochemical Properties

In the case of pH values are less than 5 or higher than 9 then it is irritant. ---

### Information pertaining to particular Risks to Human and possible Symptoms

---

### Information pertaining to particular Risks to the Environment

---

### Other Hazards

This SDS contains information on shipping and transport safety. ---

## Section 3: Composition/Information on Ingredients

### 3.1 Substances or 3.2 Mixtures

#### Calibration tube (5 mL)

Chemical: *water*

Classification:

No criteria for classification or naming of chemical is not required.

Chemical Formula: H<sub>2</sub>O

TSCA Inventory: listed

RTECS: ZC0110000

EC No.: 231-791-2

Weight Percent: 90 - &lt;100 %

acc. GHS: The criteria for classification are not fulfilled.

CAS No.: 7732-18-5

#### Alkaline Manganese Batteries Type AA

Chemical: *alkaline manganese battery*

Classification:

No criteria for classification or naming of chemical is not required.

Weight Percent: 99 - &lt;100 %

acc. GHS: The criteria for classification are not fulfilled.

CAS No.: -

#### Button cell CR2032, built-in

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 934116

Photometer PF-3 Pool

Page: 4/12

Printing Date: 01.10.2019

Date of Issue: 17.04.2019

Chemical: *Button cell on circuit board (lithium metal battery)* CAS No.: -  
 Classification: No criteria for classification or naming of chemical is not required.  
 Weight Percent: 99 - <100 %  
 acc. GHS: The criteria for classification are not fulfilled.

### 50 capsules NANOFIX pH 6.5-8.2

Chemical: *phenolred, sodium salt (pH indicator)* CAS No.: 34487-61-1  
 Classification: H315, Skin Irrit. 2, H319, Eye Irrit. 2  
 Chemical Formula: C<sub>19</sub>H<sub>13</sub>NaO<sub>5</sub>S  
 Synonyms: 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis-phenol, sodium salt  
 TSCA Inventory: listed MFCD: 00066901  
 EC No.: 252-057-8  
 Weight Percent: 1 - <10 %  
 acc. GHS: The criteria for classification are not fulfilled.

### 25 mL Cl<sub>2</sub> -2

Chemical: *N,N-Diethyl-1,4-phenylene diammonium sulfate* CAS No.: 6283-63-2  
 Classification: H302, Acute Tox. 4 oral, H312, Acute Tox. 4 derm.  
 Chemical Formula: C<sub>10</sub>H<sub>16</sub>N<sub>2</sub>•H<sub>2</sub>O  
 Synonyms: N,N-diethylbenzene-1,4-diammonium sulfate  
 TSCA Inventory: listed (CAS 6065-27-6)  
 RTECS: SS9625000 MFCD: 00012993  
 EC No.: 228-500-6 Indice No.: 612-080-00-X  
 Weight Percent: 0,1 - <1 %  
 acc. GHS: The criteria for classification are not fulfilled.

Chemical: *sulfuric acid* CAS No.: 7664-93-9  
 Classification: H314, Skin Corr. 1B  
 Chemical Formula: H<sub>2</sub>SO<sub>4</sub> (•H<sub>2</sub>O)  
 TSCA Inventory: listed  
 RTECS: WS5600000  
 EC No.: 231-639-5 Indice No.: 016-020-00-8  
 Weight Percent: 5 - <15 %  
 acc. GHS: H315, Skin Irrit. 2, H319, Eye Irrit. 2

### 20 mL Cl<sub>2</sub> -3

Chemical: *potassium iodide* CAS No.: 7681-11-0  
 Classification: H319, Eye Irrit. 2  
 Chemical Formula: KI  
 TSCA Inventory: listed  
 RTECS: TT29750000 MFCD: 00011405  
 EC No.: 231-659-4  
 Weight Percent: 1 - <10 %  
 acc. GHS: The criteria for classification are not fulfilled.

### 18 mL Cl<sub>2</sub> -1

Chemical: *phosphate buffer solution* CAS No.: -  
 Classification: No criteria for classification or naming of chemical is not required.  
 Chemical Formula: K/Na<sub>1-3</sub>H<sub>2-0</sub>PO<sub>4</sub>•xH<sub>2</sub>O  
 TSCA Inventory: all listed  
 Weight Percent: 50 - <75 %  
 acc. 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 Hazard and Precaution phrases: see section 16.1

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 934116

Photometer PF-3 Pool

Page: 5/12

Printing Date: 01.10.2019

Date of Issue: 17.04.2019

### Section 4: First-Aid Measures

#### 4.1 Description of First-Aid Measures

Place insured person out of danger zone to fresh air immediately. Ensure quiet, warmth, and provide resuscitation if necessary. If necessary contact medical advice.

##### 4.1.1 After SKIN Contact

Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water. (If possible) use soap.

##### 4.1.2 After EYE Contact

After contact with the eyes rinse thoroughly under running water with the eyelid wide open with eye washing bottle, eye douche or running water (protect intact eye).

##### 4.1.3 After INHALATION of Vapors

After inhalation of foam or vapor fresh air should be inhaled. Keep airways free.

##### 4.1.4 After ORAL Intake

After oral intake lots of water should be drunk after it has been ingested.

#### 4.2 Most important Symptoms and Effects, both acute and delayed

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#### 4.3 Indication of any immediate Medical Attention and Special Treatment needed

No additionally recommendations. ---

### Section 5: Fire-Fighting Measures

#### 5.1 Extinguishable 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 WATER FOG, WATER SPRAY, alcohol-resistant FOAM, DRY CHEMICAL, CARBON DIOXIDE can be used.

#### 5.2 Special Hazards arising from the Substance or Mixture

Formation of hazardous and caustic vapor-air mixtures possible. ---

#### 5.3 Advice for Firefighters

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

#### 5.4 Additional Information

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### Section 6: Accidental Release Measures

#### 6.1 Personal Precautions, Protective Equipment and Emergency Procedure

Regular staff training is necessary.

#### 6.2 Environmental Precautions

not necessary

#### 6.3 Methods and Material for Containment and Cleaning up

Bind any escaping liquid with inert absorbent.  
Collect small amounts of leaked liquid and flush with water into sewer.

#### 6.4 Reference to other Sections

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### 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

The original product package of MACHEREY-NAGEL allows a safe storage.

Storage class (VCI): 8B

Water hazard class (DE): 3

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 934116 Photometer PF-3 Pool Page: 6/12  
 Printing Date: 01.10.2019 Date of Issue: 17.04.2019

**7.2.1 Conditions for Safe Storage, including any Incompatibilities**  
 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

**Calibration tube (5 mL)**  
 Chemical: *water* CAS No.: 7732-18-5

**Alkaline Manganese Batteries Type AA**  
 Chemical: *alkaline manganese battery* CAS No.: -

**Button cell CR2032, built-in**  
 Chemical: *Button cell on circuit board (lithium metal battery)* CAS No.: -

**50 capsules NANOFIX pH 6.5-8.2**  
 Chemical: *phenolred, sodium salt (pH indicator)* CAS No.: 34487-61-1

**25 mL Cl<sub>2</sub> -2**  
 Chemical: *N,N-Diethyl-1,4-phenylene diammonium sulfate* CAS No.: 6283-63-2  
 NIOSH: not listed  
 [TWA] Time-weighted average to a reference period of 8 hours, [STEL] Short-term exposure limit related to a 15-minute period  
 OSHA: not listed

Chemical: *sulfuric acid* CAS No.: 7664-93-9  
 DNEL: [inh] 50 µg/m<sup>3</sup>  
 DNEL = Derived No-Effect Level (for workers)  
 PNEC (fresh water): 2.5 µg/L  
 PNEC = Predicted No Effect Concentration  
 NIOSH: NTP Report on Carcinogens (RoC) List Yes (Known to be a human carcinogen); [TWA] 1 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] 1 mg/m<sup>3</sup>  
 EU value: 0.1 e mg/m<sup>3</sup>

**20 mL Cl<sub>2</sub> -3**  
 Chemical: *potassium iodide* CAS No.: 7681-11-0

**18 mL Cl<sub>2</sub> -1**  
 Chemical: *phosphate buffer solution* CAS No.: -

### 8.2 Exposure Controls

The highest level of cleanliness must be maintained at the workplace.

**8.2.1 Respiratory Protection**  
 No additional recommendations.

**8.2.2 Hand Protection**  
 Yes, gloves (permeation time >30 min - level 2), consist of PVC, Natural latex, Neopren, or Nitril. Use for short times chemical resistant Latex gloves f.ex. with code EN 374-3 level 1.

**8.2.3 Eye/Face Protection**  
 Yes, Splash Goggles.

**8.2.4 Skin Protection**  
 Not necessary.

**8.2.5 Hygiene Measures**  
 Eating, drinking, smoking, taking snuff and storage of food in work areas and at outdoor workplaces is prohibited. Avoid contact with the skin, eyes and clothing. Rinse any clothing on which the substance has been spilled, and soak it in water. Wash hands thoroughly with soap and water when stopping work and before eating, and then apply protective skin cream.

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 934116

Photometer PF-3 Pool

Page: 7/12

Printing Date: 01.10.2019

Date of Issue: 17.04.2019

### Section 9: Physical and Chemical Properties

#### 9.1 Information on Basic Physical and Chemical Properties

**Calibration tube (5 mL)**

a)	Appearance: liquid	Color: colorless	b) Odor: odorless
c)	Odor Threshold:	data not available	
d)	pH:	6-8	
e)	Melting Point:	data not available	
f)	Boiling Point:	data not available	
g)	Flash Point:	data not available	
h)	Evaporation Rate <sub>(ether=1)</sub> :	data not available	
i)	Flammability (solid, gas):	data not available	
j)	Explosive Limits:	data not available	
k)	Vapor Pressure (68°F):	data not available	
l)	Vapor Density <sub>(air=1)</sub> :	data not available	
m)	Specific Gravity:	1,00 g/cm <sup>3</sup>	
n)	Soluble in Water:	data not available	
o)	Partition Coefficient (o-w):	data not available	
p)	Autoignition Temperature:	data not available	
q)	Decomposition temperature:	data not available	
r)	Viscosity:	data not available	
s)	Explosive properties:	data not available	
t)	Oxidizing properties:	---	

**Alkaline Manganese Batteries Type AA**

a)	Appearance: solid	Color: black	b) Odor: odorless
c)	Odor Threshold:	data not available	
d)	pH:	data not available	
e)	Melting Point:	data not available	
f)	Boiling Point:	data not available	
g)	Flash Point:	data not available	
h)	Evaporation Rate <sub>(ether=1)</sub> :	data not available	
i)	Flammability (solid, gas):	data not available	
j)	Explosive Limits:	data not available	
k)	Vapor Pressure (68°F):	data not available	
l)	Vapor Density <sub>(air=1)</sub> :	data not available	
m)	Specific Gravity:	data not available	
n)	Soluble in Water:	data not available	
o)	Partition Coefficient (o-w):	data not available	
p)	Autoignition Temperature:	data not available	
q)	Decomposition temperature:	data not available	
r)	Viscosity:	data not available	
s)	Explosive properties:	data not available	
t)	Oxidizing properties:	---	

**Button cell CR2032, built-in**

a)	Appearance: solid	Color: colored	b) Odor: odorless
c)	Odor Threshold:	data not available	
d)	pH:	data not available	
e)	Melting Point:	data not available	
f)	Boiling Point:	data not available	
g)	Flash Point:	data not available	
h)	Evaporation Rate <sub>(ether=1)</sub> :	data not available	
i)	Flammability (solid, gas):	Do not transport damaged batteries. Special instruction necessary	
j)	Explosive Limits:	data not available	
k)	Vapor Pressure (68°F):	data not available	
l)	Vapor Density <sub>(air=1)</sub> :	data not available	
m)	Specific Gravity:	data not available	
n)	Soluble in Water:	data not available	
o)	Partition Coefficient (o-w):	data not available	
p)	Autoignition Temperature:	data not available	
q)	Decomposition temperature:	data not available	
r)	Viscosity:	data not available	
s)	Explosive properties:	data not available	
t)	Oxidizing properties:	---	





# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 934116

Photometer PF-3 Pool

Page: 8/12

Printing Date: 01.10.2019

Date of Issue: 17.04.2019

### 50 capsules NANOFIX pH 6.5-8.2

a)	Appearance: solid (lyoph.)	Color: red	b) Odor: odorless
c)	Odor Threshold:	data not available	
d)	pH:	7,0	
e)	Melting Point:	data not available	
f)	Boiling Point:	data not available	
g)	Flash Point:	data not available	
h)	Evaporation Rate <sub>(ether=1)</sub> :	data not available	
i)	Flammability (solid, gas):	data not available	
j)	Explosive Limits:	data not available	
k)	Vapor Pressure (68°F):	data not available	
l)	Vapor Density <sub>(air=1)</sub> :	data not available	
m)	Specific Gravity:	data not available	
n)	Soluble in Water:	0-100 %	
o)	Partition Coefficient (o-w):	data not available	
p)	Autoignition Temperature:	data not available	
q)	Decomposition temperature:	data not available	
r)	Viscosity:	data not available	
s)	Explosive properties:	data not available	
t)	Oxidizing properties:	---	

### 25 mL Cl<sub>2</sub> -2

a)	Appearance: liquid	Color: rose	b) Odor: odorless
c)	Odor Threshold:	data not available	
d)	pH:	0-1	
e)	Melting Point:	data not available	
f)	Boiling Point:	data not available	
g)	Flash Point:	data not available	
h)	Evaporation Rate <sub>(ether=1)</sub> :	data not available	
i)	Flammability (solid, gas):	data not available	
j)	Explosive Limits:	data not available	
k)	Vapor Pressure (68°F):	data not available	
l)	Vapor Density <sub>(air=1)</sub> :	data not available	
m)	Specific Gravity:	1,1 g/cm <sup>3</sup>	
n)	Soluble in Water:	data not available	
o)	Partition Coefficient (o-w):	data not available	
p)	Autoignition Temperature:	data not available	
q)	Decomposition temperature:	data not available	
r)	Viscosity:	data not available	
s)	Explosive properties:	data not available	
t)	Oxidizing properties:	---	

### 20 mL Cl<sub>2</sub> -3

a)	Appearance: liquid	Color: colorless	b) Odor: alcoholic
c)	Odor Threshold:	data not available	
d)	pH:	9	
e)	Melting Point:	data not available	
f)	Boiling Point:	data not available	
g)	Flash Point:	24 °C	
h)	Evaporation Rate <sub>(ether=1)</sub> :	data not available	
i)	Flammability (solid, gas):	data not available	
j)	Explosive Limits:	data not available	
k)	Vapor Pressure (68°F):	data not available	
l)	Vapor Density <sub>(air=1)</sub> :	data not available	
m)	Specific Gravity:	0,93 g/cm <sup>3</sup>	
n)	Soluble in Water:	0-100 %	
o)	Partition Coefficient (o-w):	data not available	
p)	Autoignition Temperature:	data not available	
q)	Decomposition temperature:	data not available	
r)	Viscosity:	data not available	
s)	Explosive properties:	data not available	
t)	Oxidizing properties:	---	

### 18 mL Cl<sub>2</sub> -1

a)	Appearance: liquid	Color: colorless	b) Odor: odorless
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# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 934116	Photometer PF-3 Pool	Page: 9/12
Printing Date: 01.10.2019	Date of Issue: 17.04.2019	

c)	Odor Threshold:	data not available
d)	pH:	9
e)	Melting Point:	data not available
f)	Boiling Point:	data not available
g)	Flash Point:	data not available
h)	Evaporation Rate <sub>(ether=1)</sub> :	data not available
i)	Flammability (solid, gas):	data not available
j)	Explosive Limits:	data not available
k)	Vapor Pressure (68°F):	data not available
l)	Vapor Density <sub>(air=1)</sub> :	data not available
m)	Specific Gravity:	1,2 g/cm <sup>3</sup>
n)	Soluble in Water:	0-100 %
o)	Partition Coefficient (o-w):	data not available
p)	Autoignition Temperature:	data not available
q)	Decomposition temperature:	data not available
r)	Viscosity:	data not available
s)	Explosive properties:	data not available
t)	Oxidizing properties:	---

### 9.2 Other Information

Relevant Properties of Substance Group  
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## Section 10: Stability and Reactivity

### 10.1 Reactivity

No further data available.

### 10.2 Chemical Stability

No known instability.

### 10.3 Possibility of Hazardous Reactions

No further data available.

### 10.4 Conditions to avoid

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### 10.5 Incompatible Materials

Not necessary. Avoid contact with strong acids or alkalines. ---

### 10.6 Hazardous Decomposition Products

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 Toxicological Effects

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

#### Calibration tube (5 mL)

Chemical:	<i>water</i>	CAS No.: 7732-18-5
TSCA Inventory:	listed	

#### Alkaline Manganese Batteries Type AA

Chemical:	<i>alkaline manganese battery</i>	CAS No.: -
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#### Button cell CR2032, built-in

Chemical:	<i>Button cell on circuit board (lithium metal battery)</i>	CAS No.: -
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#### 50 capsules NANOFIX pH 6.5-8.2

Chemical:	<i>phenolred, sodium salt (pH indicator)</i>	CAS No.: 34487-61-1
TSCA Inventory:	listed	

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 934116 Photometer PF-3 Pool Page: 10/12  
 Printing Date: 01.10.2019 Date of Issue: 17.04.2019

### 25 mL Cl<sub>2</sub> -2

Chemical: *N,N-Diethyl-1,4-phenylene diammonium sulfate* CAS No.: 6283-63-2  
 TSCA Inventory: listed (CAS 6065-27-6) California Prop. 65 List: not listed  
 Canada CEPA 1999: not listed  
 LD50<sub>orl rat</sub>: 497 mg/kg

Chemical: *sulfuric acid* CAS No.: 7664-93-9  
 TSCA Inventory: listed California Prop. 65 List: not listed  
 ACGIH: 1 ppm  
 Exposure Routes: inhalation, ingestion, skin and/or eye contact  
 Target Organs: Eyes, skin, respiratory system, teeth  
 Symptoms: irritation eyes, skin, nose, throat; pulmonary edema, bronchitis; emphysema; conjunctivitis; stomatis;  
 dental erosion; eye, skin burns; dermatitis  
 Canada CEPA 1999: DSL Yes  
 LD50<sub>orl rat</sub>: 2140 mg/kg  
 LC50<sub>ihl rat</sub>: [8h] 600/ [4h] 850 mg/m<sup>3</sup>

### 20 mL Cl<sub>2</sub> -3

Chemical: *potassium iodide* CAS No.: 7681-11-0  
 TSCA Inventory: listed  
 LD50<sub>orl rat</sub>: 2779 mg/kg

### 18 mL Cl<sub>2</sub> -1

Chemical: *phosphate buffer solution* CAS No.: -  
 TSCA Inventory: all listed

## Section 12: Ecological Information

### 12.1 Toxicity

Following information is valid for pure chemicals.

#### Calibration tube (5 mL)

Chemical: *water* CAS No.: 7732-18-5

#### Alkaline Manganese Batteries Type AA

Chemical: *alkaline manganese battery* CAS No.: -

#### Button cell CR2032, built-in

Chemical: *Button cell on circuit board (lithium metal battery)* CAS No.: -

#### 50 capsules NANOFIX pH 6.5-8.2

Chemical: *phenolred, sodium salt (pH indicator)* CAS No.: 34487-61-1

#### 25 mL Cl<sub>2</sub> -2

Chemical: *N,N-Diethyl-1,4-phenylene diammonium sulfate* CAS No.: 6283-63-2

Chemical: *sulfuric acid* CAS No.: 7664-93-9

PNEC<sub>(fresh water)</sub>: 2.5 µg/L

PNEC = Predicted No Effect Concentration

LC50<sub>fish/96h</sub>: [NOEC, 65d] 25 µg/L

EC50<sub>daphnia/48h</sub>: 100 mg/L

EC10<sub>pseudomonas putita/16h</sub>: [72h] 100 mg/L

#### 20 mL Cl<sub>2</sub> -3

Chemical: *potassium iodide* CAS No.: 7681-11-0

LC50<sub>fish/96h</sub>: 2190 mg/L

Partition Coefficient (o-w): 0.04

#### 18 mL Cl<sub>2</sub> -1

Chemical: *phosphate buffer solution* CAS No.: -

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 934116

Photometer PF-3 Pool

Page: 11/12

Printing Date: 01.10.2019

Date of Issue: 17.04.2019

- 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**  
no data available
- 12.6 Other Adverse Effects**  
no additional data available

### Section 13: Disposal Considerations

Batteries must be collected separately and disposed acc. law regulations (electronic waste, f. ex. in EU WEEE). Further: Please observe local regulations for collection and disposal of hazardous waste and contact waste disposal company, where you will obtain information on laboratory waste disposal (RCRA Code D002/D003, EU waste code number 16 05 06).

- 13.1 Waste Treatment Methods**  
Normally it is possible to empty small amounts (diluted!) into drains.

### Section 14: Transport Information

**14.1. UN/NA: 3316**    **14.2. Proper Shipping Name: Chemical Kit**  
**14.3. Hazard Class: 9**    **14.4. Packing Group: II**  
*Transportation by Road*  
 Classification code: M11    Tunnel Restriction Code: E  
 Limited Quantity: acc. ADR 3.3.1/251: see LQ in "Alternative Declaration for Transportation"  
*Air Transportation*  
 PAX: 960    max. weight PAX: 10 KG  
 CAO: 960    max. weight CAO: 10 KG  
*Maritime Transport*  
 EmS: F-A, S-P    Storage Category: A

Or use **the alternative Declaration for Transportation:**  
 UN/NA: (see below) UN/NA 1993 Class 3 III, Class 8 III, **Excepted Quantities** ( $\leq 30 \text{ mL} / \sum \leq 1 \text{ L}$ ) = ADR/ IATA E1  
 or

**14.1. UN/NA: 3264**    **14.2. Proper Shipping Name: Corrosive liquid, acidic, inorganic, n.o.s. (sulfuric acid solution)**  
**14.3. Hazard Class: 8**    **14.4. Packing Group: III**  
*Transportation by Road*  
 Classification code: C1    Tunnel restriction code: E  
 Limited Quantity: 5 L  
 Excepted Quantity: E 1  
*Air Transportation*  
 PAX: 852    max. weight PAX: 5 L  
 CAO: 856    max. weight CAO: 60 L  
*Maritime Transport*  
 EmS: F-A, S-B    Storage Category: A

- 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**  
**U.S. Federal Regulations**  
 OSHA "A Guide to The Globally Harmonized System of Classification and Labelling of Chemicals (GHS)"  
<https://www.osha.gov/dsg/hazcom/ghs.html>  
 29 CFR 1910.1200 Hazard communication.  
 NIOSH Pocket Guide to Chemical Hazards

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 934116

Photometer PF-3 Pool

Page: 12/12

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NIOSH Workplace Safety & Health Topics  
TSCA Inventory

### U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

### Canada

Canada CEPA 1999 - Domestic Substances List (DSL), List of Toxic Substances (Schedule 1)

MN Leaflet/User manual, also see [www.mn-net.com](http://www.mn-net.com)

## 15.2 Chemical Safety Assessment

not necessary for these small amounts ---

## Section 16: Other Information

### 16.1 List of Hazard and Precaution Phrases

#### 16.1.1 List of relevant H Phrases

H315 Causes skin irritation.  
H319 Causes serious eye irritation.

#### 16.1.2 List of relevant P Phrases

P280sh Wear protective gloves/eye protection.

### 16.2 Training Advice

Regular safety training.

### 16.3 Recommended Restriction on Use

Only for Professional User.

An individual package of this product or test kit has a moderate hazardous potential.

### 16.4 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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### 16.5 Sources of Key Data

GHS: EU Regulation 1272/2008/EC on Classification, Labelling and Packaging of Substances and Mixtures, amending and repealing

EU Directives 67/548/EEC and 1999/45/EC, and amending EU Regulation 1907/2006/EC

SDS: EU Regulation 453/2010/EU REACH - Requirements for the Compilation of Safety Data Sheets

KÜHN, BIRETT (German), Data Sheets of Hazardous Substances

### Revisions/Updates

Reason for Revision: 2016-03 Adaptation of European Regulation 1221/2015/EU

You find our current Versions of SDS in Internet:

<http://www.mn-net.com/SDS> [U.S. English]