

# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 91318

QUANTOFIX Cyanide

Page: 1/13

Printing date: 20.07.2023

Date of issue: 24.10.2022

Version: 2.2.2.4

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

### 1.1 Product identifier

REF 91318  
Product name QUANTOFIX Cyanide

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 100 test strips

1 x 7 g CN - -1

1 x 25 mL CN - -2

UFI: AYAV-U3SR-1204-1T97

### 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.

If CE labelling: Product for in-vitro-diagnostic use (IVD) or Accessory for medical use

#### Uses advised against

not described

### 1.3 Details of the supplier of the safety data sheet

#### Manufactured by:

MACHEREY-NAGEL GmbH & Co. KG  
Valenciener Str. 11, 52355 Düren, Germany  
Phone: +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

Outside Germany (DE): Call your regional Poisons Information Service or call local Life Saving Service.

DE: Gemeinsames Gif tinformat ionszentrum (GGIZ)

99089 Erfurt tel. +49 361 730 730, <<https://www.ggiz-erfurt.de>>

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



GHS02

GHS07

GHS08

Signal word DANGER

**Hazard identification** **Hazard classes/categories**

H226	Flam. Liq. 3
H315	Skin Irrit. 2
H319	Eye Irrit. 2
H332	Acute Tox. 4 inh.
H334	Resp. Sens. 1

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

25 mL CN - -2



MACHEREY-NAGEL GmbH & Co. KG  
Valenciener Str. 11  
52355 Düren · Germany  
[www.mn-net.com](http://www.mn-net.com)

DE Tel.: +49 24 21 969-0 [info@mn-net.com](mailto:info@mn-net.com)  
CH Tel.: +41 62 388 55 00 [sales-ch@mn-net.com](mailto:sales-ch@mn-net.com)  
FR Tel.: +33 388 68 22 68 [sales-fr@mn-net.com](mailto:sales-fr@mn-net.com)  
US Tel.: +1 888 321 62 24 [sales-us@mn-net.com](mailto:sales-us@mn-net.com)

# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 91318

QUANTOFIX Cyanide

Page: 2/13

Printing date: 20.07.2023

Date of issue: 24.10.2022

Version: 2.2.2.4



GHS02 GHS07 GHS08

Signal word DANGER

Hazard identification	Hazard classes/categories
H226	Flam. Liq. 3
H315	Skin Irrit. 2
H319	Eye Irrit. 2
H332	Acute Tox. 4 inh.
H334	Resp. Sens. 1

### 100 test strips

Signal word Do not need labelling as hazardous  
-

No hazard class

### 7 g CN - -1

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

According **CLP directive** inner packages must be only labelled with GHS symbol(s) and product identifier(s) (EU 1272/2008 Annex I - 1.5.1.2). Harmful chemicals/mixtures with signal word: **WARNING** and highly flammable chemicals/mixtures must not be labelled with H and P phrases **until 125 mL** (EU 1272/2008 Annex I - 1.5.2). This labelling exemption is NOT valid for sensibilizing substances.

### 25 mL CN - -2



GHS02 GHS07 GHS08

Signal word: DANGER  
H334

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

P261sh, P284, P342+311, P501

Avoid breathing dust/vapours. [In case of inadequate ventilation] wear respiratory protection. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. Dispose of contents/container to regulated waste treatment.

### 100 test strips

Do not need labelling as hazardous  
Signal word: -

### 7 g CN - -1

Do not need labelling as hazardous  
Signal word: -

## Label elements of the complete product



GHS02 GHS07 GHS08



MACHEREY-NAGEL GmbH & Co. KG  
Valenciener Str. 11  
52355 Düren · Germany  
[www.mn-net.com](http://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

# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 91318

QUANTOFIX Cyanide

Page: 3/13

Printing date: 20.07.2023

Date of issue: 24.10.2022

Version: 2.2.2.4

Signal word: DANGER

H334

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

P261sh, P284, P342+311, P501

Avoid breathing dust/vapours.[In case of inadequate ventilation] wear respiratory protection.If experiencing respiratory symptoms: Call a POISON CENTER/doctor.Dispose of contents/container to regulated waste treatment.

## 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. Flammable properties.

### Information pertaining to particular risks to human and possible symptoms

Cause after impairments of health when ingested in small quantities. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

### Information pertaining to particular risks to the environment

PBT: not applicable

vPvB: not applicable

### Possible endocrine disrupting effects

no data available

### Other hazards

Contains an odor intensive reagent.

## SECTION 3: Composition / information on ingredients

### 3.1 Substances or 3.2 Mixtures

#### 25 mL CN - -2

Substance name: *chloramine T*

CAS No.: 127-65-1

Substance rating: H302, Acute Tox. 4 oral, H314, Skin Corr. 1 B, H334, Resp. Sens. 1, EUH031, not defined

Formula:  $C_7H_7ClNNaO_2S$

Pseudonym (de): Tosylchloramid-Na

EC No.: 204-854-7

Indice No.: 616-010-00-9

Concentration: 1 - <3 %

acc. CLP (GHS): H315, Skin Irrit. 2, H319, Eye Irrit. 2, H334, Resp. Sens. 1

Substance name: *pyridine*

CAS No.: 110-86-1

Substance rating: H225, Flam. Liq. 2, H302, Acute Tox. 4 oral, H312, Acute Tox. 4 derm., H332, Acute Tox. 4 inh.

Formula:  $C_5H_5N$

Pseudonym (de): Azin, Azabenzol

REACH Reg. No.: 01-2119493105-40-xxxx

EC No.: 203-809-9

Indice No.: 613-002-00-7

Concentration: 32 - <44 %

acc. CLP (GHS): H226, Flam. Liq. 3, H332, Acute Tox. 4 inh.

#### 100 test strips

Substance name: *PVC foil (CAS 9002-86-2)*

CAS No.: -

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

Concentration: 95 - <100 %

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



# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 91318

QUANTOFIX Cyanide

Page: 4/13

Printing date: 20.07.2023

Date of issue: 24.10.2022

Version: 2.2.2.4

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: 1 - <10 %  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

Substance name: *chemicals/mixture until 1%*  
 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.

### 7 g CN -1

Substance name: *phosphates (buffer salts)*  
 CAS No.: -

Substance rating: No criteria for classification or naming of chemical not required.  
 Formula:  $K/Na_{1-3}H_{2-0}PO_4$   
 Concentration: 75 - <100 %  
 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. Ensure quiet, warmth, and provide resuscitation if necessary. If necessary contact medical advice. Take to a doctor, in a raised position if there are breathing difficulties.

#### 4.1.1 After SKIN Contact

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

#### 4.1.2 After EYE Contact

Rub dust with teardrops from eyes or: 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 vapours

After inhalation of foam or vapour fresh air should be inhaled. Keep airways free. Administer a Dexamethasone spray as soon as possible. Ensure quiet, warmth, and provide resuscitation if necessary. In the event of respiratory distress ensure that the patient inhales oxygen. Secure the breathing, heart and circulatory function. After inhalation of dust fresh air should be inhaled. ---

#### 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

May cause allergy or asthma symptoms or breathing difficulties if inhaled. Chronic effects: Repeated contact, even in small amounts, can lead to sensitization.

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

Inform patient respectively further measures and the possibility of long-term damages. ---



MACHEREY-NAGEL GmbH & Co. KG  
 Valencienner Str. 11  
 52355 Düren · Germany  
[www.mn-net.com](http://www.mn-net.com)

DE Tel.: +49 24 21 969-0 [info@mn-net.com](mailto:info@mn-net.com)  
 CH Tel.: +41 62 388 55 00 [sales-ch@mn-net.com](mailto:sales-ch@mn-net.com)  
 FR Tel.: +33 388 68 22 68 [sales-fr@mn-net.com](mailto:sales-fr@mn-net.com)  
 US Tel.: +1 888 321 62 24 [sales-us@mn-net.com](mailto:sales-us@mn-net.com)

# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 91318

QUANTOFIX Cyanide

Page: 5/13

Printing date: 20.07.2023

Date of issue: 24.10.2022

Version: 2.2.2.4

## 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.

#### 5.1.2 Unsuitable extinguishing media

no data available

### 5.2 Special hazards arising from the substance or mixture

WARNING: Flammable (GHS regulation). May form explosive vapour-air mixtures. Formation of hazardous and caustic vapour-air mixtures possible.

### 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

Regular staff training is necessary, indicating hazards and precautions on the basis of operating instructions. Restrictions on activity must be observed.

### 6.2 Environmental precautions

PBT: not applicable

vPvB: not applicable

### 6.3 Methods and material for containment and cleaning up

Bind any escaping liquid with inert absorbent. And dispose in accordance to local regulations for the disposal of hazardous chemicals.

Clean any contaminated equipment and floors with plenty of water.

Collect small amounts of leaked liquid and flush with 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. Use only in well-ventilated working areas.

### 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): 3

Water hazard class (DE): 2

#### 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.

If CE labelling: Product for in-vitro-diagnostic use (IVD) or Accessory for medical use

## SECTION 8: Exposure controls /personal protection

### 8.1 Control parameters

25 mL CN - -2

Chemical: chloramine T

CAS No.: 127-65-1

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



MACHEREY-NAGEL GmbH & Co. KG  
Valenciener Str. 11  
52355 Düren · Germany  
[www.mn-net.com](http://www.mn-net.com)

DE Tel.: +49 24 21 969-0 [info@mn-net.com](mailto:info@mn-net.com)  
CH Tel.: +41 62 388 55 00 [sales-ch@mn-net.com](mailto:sales-ch@mn-net.com)  
FR Tel.: +33 388 68 22 68 [sales-fr@mn-net.com](mailto:sales-fr@mn-net.com)  
US Tel.: +1 888 321 62 24 [sales-us@mn-net.com](mailto:sales-us@mn-net.com)

# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 91318

QUANTOFIX Cyanide

Page: 6/13

Printing date: 20.07.2023

Date of issue: 24.10.2022

Version: 2.2.2.4

Chemical: *pyridine* CAS No.: 110-86-1  
 PNEC (fresh water): 300 µg/L  
PNEC = Predicted No Effected Concentration  
 EU value: [TWA] 5 ppm / 15 mg/m<sup>3</sup>  
 TRGS 900 (DE): [8h] 5 ppm / 15 mg/m<sup>3</sup>  
E/e respirable  
 Short-term exposure factor: 2 (II)  
skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded  
 SUVA(CH) MAK value: 5 ppm / 15 mg/m<sup>3</sup>  
 NIOSH: [TWA] 5 ppm / 15 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] 5 ppm / 15 mg/m<sup>3</sup>

**100 test strips**

Chemical: *PVC foil (CAS 9002-86-2)* CAS No.: -  
 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: *chemicals/mixture until 1%* CAS No.: -

**7 g CN - -1**

Chemical: *phosphates (buffer salts)* CAS No.: -

## 8.2 Exposure controls

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

### 8.2.1 Respiratory protection

Use for open access of these substances for example a protection filter, class A/AX. No additional recommendations.

### 8.2.2 Skin protection / Hand protection

Yes, gloves according EN 374 (permeation time >30 min - level 2), consist of PVC, natural latex, Neopren, or Nitril (f.ex. from Ansell or KCL). Use for short times chemical resistant latex gloves with code EN 374-3 level 1.

### 8.2.3 Eye / Face Protection

Yes, safety glasses according EN 166 with integrated side shields or wrap-around protection.

### 8.2.4 Skin protection

Recommended to avoid contamination with these hazards.

### 8.2.5 Personal hygiene

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.

### 8.2.6 Thermal hazards

no data available

## 8.3 Limitation and monitoring of environmental exposure

Do not release product into environment.

# SECTION 9: Physical and chemical properties

## 9.1 Information on basic physical and chemical properties

**25 mL CN - -2**

a) State of aggregation:	liquid
b) Colour:	colourless
c) Odor:	like pyridine
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:	27 °C
i) Flashing temperature:	no data available



MACHEREY-NAGEL GmbH & Co. KG  
 Valenciener Str. 11  
 52355 Düren · Germany  
[www.mn-net.com](http://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

# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 91318

QUANTOFIX Cyanide

Page: 7/13

Printing date: 20.07.2023

Date of issue: 24.10.2022

Version: 2.2.2.4

j) Decomposition temperature:	no data available
k) pH value:	8-9
l) Kinematic viscosity:	no data available
m) Solubility in water:	0-100 %
n) Dispersion coefficient (o/w) :	no data available
o) Vapour pressure (20°C):	no data available
p) Specific gravity:	0,99 g/cm <sup>3</sup>
q) Relative vapour density (air=1) :	no data available
r) Particle size:	no data available

**100 test strips**

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 (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

**7 g CN - -1**

a) State of aggregation:	powder (solid)
b) Colour:	colourless
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:	8-9
l) Kinematic viscosity:	no data available
m) Solubility in water:	0-40 %
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



MACHEREY-NAGEL GmbH & Co. KG  
 Valencienner Str. 11  
 52355 Düren · Germany  
[www.mn-net.com](http://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

# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 91318	QUANTOFIX Cyanide	Page: 8/13
Printing date: 20.07.2023	Date of issue: 24.10.2022	Version: 2.2.2.4

## 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

No more required.

### 10.5 Incompatible materials

no additional data available

### 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 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.

#### 25 mL CN - -2

Chemical: *chloramine T* CAS No.: 127-65-1  
 TSCA Inventory: listed California Proposition 65 List: not listed  
 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: 2000-3-1539  
 LD50 orl rat : 1000 mg/kg

Acute Effects: Cause after impairments of health when ingested in small quantities.

Chronic Effects: May cause sensitization by skin contact, also in repeated contact of small amounts. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Chemical: *pyridine* CAS No.: 110-86-1

TSCA Inventory: listed California Proposition 65 List: listed cancer  
 Exposure Routes: inhalation, skin absorption, ingestion, skin and/or eye contact  
 Target Organs: Eyes, skin, central nervous system, liver, kidneys, gastrointestinal tract,  
 Symptoms: irritation eyes; headache, anxiety, dizziness, insomnia; nausea, anorexia; dermatitis; liver, kidney  
 damage  
 Japan CSCL/PRTR: PRTR: ≥1,0% class I  
 Japan ISHL: listed ≥1,0%/≥0,1%,  
 Korea Exist.Chem.Inventory: KE-29929  
 LD50 orl rat : 800-1600 mg/kg  
 LC\_Low inh rat : 4900 ppm/4H  
 LC\_Low orl gpg : 4000 mg/kg  
 LC\_Low orl hmn : 500 mg/kg  
 LC50 inh rat : 15,852 mg/L/4H

Acute Effects: Cause after skin contact, impairments of health when ingested in small quantities.

TRGS 905 (DE): [DFG] carc. 3B

#### 100 test strips

Chemical: *PVC foil (CAS 9002-86-2)* CAS No.: -  
 TSCA Inventory: listed

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 PDSCL: not listed



# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 91318

QUANTOFIX Cyanide

Page: 9/13

Printing date: 20.07.2023

Date of issue: 24.10.2022

Version: 2.2.2.4

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: *chemicals/mixture until 1%*  
 TSCA Inventory: all listed, <1%  
 Korea Exist.Chem.Inventory: listed

CAS No.: -

### 7 g CN -1

Chemical: *phosphates (buffer salts)*  
 TSCA Inventory: all listed  
 Korea Exist.Chem.Inventory: listed  
 LD50 orl rat : > 2000 mg/kg

CAS No.: -

## 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.

#### 25 mL CN -2

Chemical: *chloramine T*  
 Water hazard class (DE): 2 WGK No.: 0640  
 Storage class (VCI): 8 A

CAS No.: 127-65-1

Chemical: *pyridine*  
 PNEC (fresh water) : 300 µg/L  
 PNEC = Predicted No Effect Concentration  
 LC50 fish/96h : [EC50 4h] 560-1000 mg/L  
 EC50 daphnia/48h : 320 mg/L  
 IC50 scenedesmus quadricauda/72h : IC5/7d: 120 mg/L  
 EC10 pseudomonas putida/16h : [EC50 72h] 320 mg/L mg/L  
 Water hazard class (DE): 2 WGK No.: 0179  
 Dispersion coefficient (o/w) : 0,64  
 Storage class (VCI): 3

CAS No.: 110-86-1

#### 100 test strips

Chemical: *PVC foil (CAS 9002-86-2)*

CAS No.: -

Chemical: *cellulose paper*  
 Water hazard class (DE): nwg  
 Storage class (VCI): 11

CAS No.: 9004-34-6

Chemical: *chemicals/mixture until 1%*  
 Water hazard class (DE): 1  
 Storage class (VCI): 12-13

CAS No.: -

#### 7 g CN -1

Chemical: *phosphates (buffer salts)*  
 Water hazard class (DE): 1  
 Storage class (VCI): 13

CAS No.: -



# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 91318	QUANTOFIX Cyanide	Page: 10/13
Printing date: 20.07.2023	Date of issue: 24.10.2022	Version: 2.2.2.4

**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

## SECTION 13: Disposal considerations

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 (waste code number 16 05 06).

**13.1 Waste treatment methods**

## SECTION 14: Transport information

**14.1. UN number: 3316**

**14.2. UN proper shipping name: Chemical Kit**

**14.3. Class: 9**

**14.4. Packing group: II**

*Road transport ADR*

Classification code: M11 Tunnel restriction code: E  
 Limited Quantity: acc. ADR 3.3.1/251: see LQ in Alternative declaration for transportation

*Air transport IATA DGR*

Limited Quantity: PAX: 960 max. quantity PAX: 10 KG  
 CAO: 960 max. quantity CAO: 10 KG

*Maritime transport IMDG*

EmS: F-A, S-P Staukategorie: A

Or use **Alternative declaration for transportation:**  
 UN 1993 class 3 III, **Excepted Quantities** ( $\leq 30 \text{ mL} / \sum \leq 1 \text{ L}$ ) = ADR/ IATA E1  
 or

**14.1 UN number: 1993**

**14.2 UN proper shipping name: Flammable liquid, n.o.s. (pyridine mixture)**

**14.3 Class: 3**

**14.4 Packing group: III**

*Road transport ADR*

Classification code: F1 Tunnel restriction code: D/E  
 Limited Quantity: 5 L  
 Excepted Quantity: E 1 Special instructions: 640E

*Air transport IATA DGR*

Limited Quantity: PAX: 355 max. quantity PAX: 60 L  
 CAO: 366 max. quantity CAO: 220 L

Excepted Quantity: E 1

*Maritime transport IMDG*

EmS: F-E, S-E Staukategorie: A

**14.5 Environmental hazards**

none



# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 91318

QUANTOFIX Cyanide

Page: 11/13

Printing date: 20.07.2023

Date of issue: 24.10.2022

Version: 2.2.2.4

## 14.6 Special precautions for user

not necessary

## 14.7 Carriage in bulk by sea in accordance with IMO instruments

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

TRGS 201, Classification and labeling of activities involving hazardous substances, Feb 2017

TRGS 220, National aspects when preparing safety data sheets, Jan 2017

TRGS 400, Risk assessment for activities involving hazardous substances, Jul 2017

BekGS 408, Application of the GefStoffV and the TRGS with the entry into force of the CLP regulation, December 2009, status: Jan 2012

Wasserhaushaltsgesetz - WHG, Section 3 Handling substances hazardous to water, Jul 2009, status: Aug 2016

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

not necessary for these small amounts

## SECTION 16: Other information

### 16.1 Changes compared to the last version

Between versions 2.2.2.4 and 2.2.2.2 following changes were applied: - 2 substance data corrected

### 16.2 List of H and P phrases

#### 16.2.1 List of relevant H phrases

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

#### 16.2.2 List of relevant P phrases

P261sh	Avoid breathing dust/vapours.
P284	[In case of inadequate ventilation] wear respiratory protection.
P342+311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P501	Dispose of contents/container to regulated waste treatment.

### 16.3 Recommended restriction on use

Only for professional user.

Look about employee restrictions for young people (f. ex. 94/33/EC or DE § 22 JArbSchG)!

Look about employee restrictions for pregnant women and nursing women (f.ex. 92/85/EEC or for DE §§ 11-13 MuSchG 2017)!

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

### 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

TRGS 907, German technical rules for listing substances and causes of sensitization, updated November 2011 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



MACHEREY-NAGEL GmbH & Co. KG  
Valenciener Str. 11  
52355 Düren · Germany  
[www.mn-net.com](http://www.mn-net.com)

DE Tel.: +49 24 21 969-0 [info@mn-net.com](mailto:info@mn-net.com)  
CH Tel.: +41 62 388 55 00 [sales-ch@mn-net.com](mailto:sales-ch@mn-net.com)  
FR Tel.: +33 388 68 22 68 [sales-fr@mn-net.com](mailto:sales-fr@mn-net.com)  
US Tel.: +1 888 321 62 24 [sales-us@mn-net.com](mailto:sales-us@mn-net.com)

# Safety Data Sheet

## according to Regulations REACH 1907/2006/EC

REF: 91318	QUANTOFIX Cyanide	Page: 12/13
Printing date: 20.07.2023	Date of issue: 24.10.2022	Version: 2.2.2.4

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)  
 Regulation 692/2022/EU, adaptation of Annex VI, Part 1, of Regulation 1272/2008/EC to technical and scientific progress (18th ATP)

**revisions/updates**

*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
- Carc: carcinogen
- CAS: Chemical Abstracts Service
- CLP: Classification, Labelling and Packaging regulation
- 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
- 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 spezified)
- 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



MACHEREY-NAGEL GmbH & Co. KG  
 Valenciener Str. 11  
 52355 Düren · Germany  
[www.mn-net.com](http://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

# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 91318

QUANTOFIX Cyanide

Page: 13/13

Printing date: 20.07.2023

Date of issue: 24.10.2022

Version: 2.2.2.4

pH: pH value  
 pimephales promelas: fish, fathead minnow  
 PNEC: Predicted No Effected Concentration  
 PROC 15: Process category 'for laboratory use'  
 PRTR: Law for PRTR and Promotion of Chemical Management (Jp)  
 PVC: polyvinyl chloride  
 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.



MACHEREY-NAGEL GmbH & Co. KG  
 Valencienner Str. 11  
 52355 Düren · Germany  
[www.mn-net.com](http://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