

# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 91337	QUANTOFIX QUAT	Page: 1/9
Printing date: 19.08.2024	Date of issue: 06.11.2023	Version: 2.3.2.4

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

### 1.1 Product identifier

REF 91337  
 Product name QUANTOFIX QUAT

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

### 1.2 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  
 Valencienner 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

Information not necessary.

You find our current versions of SDS in Internet:

<<http://www.mn-net.com/SDS>>

Lieferant / Supplier  
 Carl Roth GmbH + Co KG  
 Schöbemperlenstr. 3-5  
 76185 Karlsruhe, Germany  
 +49 721 5606 0  
[sicherheit@carlroth.de](mailto:sicherheit@carlroth.de)

## SECTION 2: Hazard identification

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

Hazard identification	Hazard classes/categories
-----------------------	---------------------------

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

100 test strips

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

100 test strips  
 Do not need labelling as hazardous  
 Signal word: -

#### Label elements of the complete product

Signal word: -



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: 91337

QUANTOFIX QUAT

Page: 2/9

Printing date: 19.08.2024

Date of issue: 06.11.2023

Version: 2.3.2.4

## 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.

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

### Information pertaining to particular risks to the environment

PBT: not applicable

vPvB: not applicable

### Possible endocrine disrupting effects

no data available

## SECTION 3: Composition / information on ingredients

### 3.1 Substances or 3.2 Mixtures

#### 100 test strips

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.

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.

### 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. Not necessary.

#### 4.1.2 After EYE Contact

Rub dust with teardrops from eyes Not necessary.

#### 4.1.3 After INHALATION of vapours

Not necessary. After inhalation of dust fresh air should be inhaled. ---



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: 91337	QUANTOFIX QUAT	Page: 3/9
Printing date: 19.08.2024	Date of issue: 06.11.2023	Version: 2.3.2.4

- 4.1.4 **After ORAL Intake**  
Not necessary.
- 4.2 **Most important symptoms and effects, both acute and delayed**  
There are no known delayed symptoms or effects for this product.
- 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.
  - 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**  
no data available

## SECTION 6: Accidental release measures

- 6.1 **Personal precautions, protective equipment and emergency procedures**  
Not necessary.
- 6.2 **Environmental precautions**  
PBT: not applicable  
vPvB: not applicable
- 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**  
no data available

## 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 from MACHEREY-NAGEL. Storage class (German chemical industry): see chapter 12.1  
Storage class (VCI): 11  
Water hazard class (DE): 1
- 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



# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 91337

QUANTOFIX QUAT

Page: 4/9

Printing date: 19.08.2024

Date of issue: 06.11.2023

Version: 2.3.2.4

## SECTION 8: Exposure controls /personal protection

### 8.1 Control parameters

**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.: -

### 8.2 Exposure controls

Not necessary.

#### 8.2.1 Respiratory protection

Not necessary.

#### 8.2.2 Skin protection / Hand protection

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

**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 (K <sub>o/w</sub> ):	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



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: 91337

QUANTOFIX QUAT

Page: 5/9

Printing date: 19.08.2024

Date of issue: 06.11.2023

Version: 2.3.2.4

## 9.2.1 Information on physical hazard classes

no data available

## 9.2.2 Other safety-related parameters

No data is available for the other parameters for the mixtures, since no registration and no chemical safety report is required.

no data available

## 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

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.

#### 100 test strips

Chemical: PVC foil (CAS 9002-86-2)  
TSCA Inventory: listed

CAS No.: -

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

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%

CAS No.: -

TSCA Inventory: all listed, <1%

Korea Exist.Chem.Inventory: listed

### 11.2 Other hazards

#### Possible endocrine disrupting effects

no data available

#### Other information



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: 91337

QUANTOFIX QUAT

Page: 6/9

Printing date: 19.08.2024

Date of issue: 06.11.2023

Version: 2.3.2.4

no additional data available

## SECTION 12: Ecological information

### 12.1 Toxicity

Following information is valid for pure substances.

#### 100 test strips

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

CAS-Nr.: -

Substance name: *cellulose paper*

CAS-Nr.: 9004-34-6

Water hazard class (DE): nwg

Storage class (VCI): 11

Substance name: *chemicals/mixture until 1%*

CAS-Nr.: -

Water hazard class (DE): 1

Storage class (VCI): 12-13

### 12.2 Persistence and degradability

### 12.3 Bioaccumulative potential

### 12.4 Mobility in soil

### 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

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 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

MN leaflet/instructions for use, also at [www.mn-net.com](http://www.mn-net.com)

If necessary, observe other country-specific regulations.



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: 91337	QUANTOFIX QUAT	Page: 7/9
Printing date: 19.08.2024	Date of issue: 06.11.2023	Version: 2.3.2.4

## 15.2 Chemical safety assessment

no data available

## SECTION 16: Other information

### 16.1 Changes compared to the last version

Between versions 2.3.2.4 and 2.2.2.2 following changes were applied: - 1 product component data corrected - 2 substance data corrected

### 16.2 List of H and P phrases

#### 16.2.1 List of relevant H phrases

H Between versions 2.3.2.4 and 2.2.2.2 following changes were applied: - 1 product component data corrected - 2 substance data corrected

#### 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)

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



MACHEREY-NAGEL GmbH & Co. KG  
 Valenciennes 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: 91337	QUANTOFIX QUAT	Page: 8/9
Printing date: 19.08.2024	Date of issue: 06.11.2023	Version: 2.3.2.4

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:	fish, 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:	fish, 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
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





# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 91337

QUANTOFIX QUAT

Page: 9/9

Printing date: 19.08.2024

Date of issue: 06.11.2023

Version: 2.3.2.4

## 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