

# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 985004	NANOCOLOR Ammonium 10	Page: 1/11
Printing date: 15.05.2024	Date of issue: 01.02.2024	Version: 2.2.3.5

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

### 1.1 Product identifier

REF 985004  
 Product name NANOCOLOR Ammonium 10

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.

20 x 7 mL Ammonium 10-200 (R0)  
 1 x 20x 14 mg NANOFIX Ammonium (R2) UFI: 41HU-03AU-H20P-9Q9R

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

**Relevant identified uses**  
 Product for analytical use.  
 Exposure Scenario Classification according REACH, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0  
 The exposure scenario is integrated into sections 1-16.

**Uses advised against**  
 not described

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

**Manufactured by:**  
 MACHEREY-NAGEL GmbH & Co. KG  
 Valencienner Str. 11, 52355 Düren, Germany  
 Phone: +49 2421 969 0 E-mail: sds@mn-net.com (msds@mn-net.com)

### 1.4 Emergency telephone number

Outside Germany (DE): Call your regional Poisons Information Service or call local Life Saving Service  
 DE: Gemeinsames Gif tinformationszentrum (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>>

*Supplier / Supplier  
 Carl Roth GmbH + Co KG  
 Schoemperlenstr. 3-5  
 76185 Karlsruhe, Germany  
 +49 721 5606 0  
 sicherheit@carlroth.de*

## SECTION 2: Hazard identification

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



GHS07

Signal word	WARNING
<b>Hazard identification</b>	<b>Hazard classes/categories</b>
H302	Acute Tox. 4 oral

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

**7 mL Ammonium 10-200 (R0)**

Signal word Do not need labelling as hazardous  
 -

No hazard class

**20x 14 mg NANOFIX Ammonium (R2)**



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: 985004

NANOCOLOR Ammonium 10

Page: 2/11

Printing date: 15.05.2024

Date of issue: 01.02.2024

Version: 2.2.3.5



GHS07

Signal word

WARNING

**Hazard identification**

**Hazard classes/categories**

H302

Acute Tox. 4 oral

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). Inner packages up to 10 mL need max. 2 symbols (Annex I - 1.5.2.4.1 / 2). 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).

### 7 mL Ammonium 10-200 (R0)

Do not need labelling as hazardous

Signal word: -

### 20x 14 mg NANOFIX Ammonium (R2)



GHS07

Signal word: WARNING

## Label elements of the complete product



GHS07

Signal word: WARNING

## 2.3 Other hazards

### Possible hazards from physicochemical properties

no data available

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

Cause after oral intake, impairments of health when ingested in small quantities.

### 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

#### 7 mL Ammonium 10-200 (R0)



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: 985004	NANOCOLOR Ammonium 10	Page: 3/11
Printing date: 15.05.2024	Date of issue: 01.02.2024	Version: 2.2.3.5

Substance name: *sodium hydroxide solution*  
 CAS No.: 1310-73-2

Substance rating: H314, Skin Corr. 1 A  
 Formula: NaOH·H<sub>2</sub>O  
 Pseudonym (de): verdünnte Natronlauge  
 REACH Reg. No.: 01-2119457892-27-xxxx  
 EC No.: 215-185-5

Specific concentration limit: Eye Irrit. 2; H319: 0,5 % ≤ C < 2 % - Skin Corr. 1A; H314: C ≥ 5 % - Skin Corr. 1B;  
 H314: 2 % ≤ C < 5 % - Skin Irrit. 2; H315: 0,5 % ≤ C < 2 %  
 Concentration: 0,1 - <0,5 %  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

Indice No.: 011-002-00-6

Substance name: *sodium salicylate*  
 CAS No.: 54-21-7

Substance rating: H302, Acute Tox. 4 oral, H319, Eye Irrit. 2, H361, Repr. 2, H361d, Repr. 2  
 Formula: C<sub>7</sub>H<sub>5</sub>NaO<sub>3</sub>  
 REACH Reg. No.: 01-2119918289-28-xxxx  
 EC No.: 200-198-0  
 Concentration: 0,1 - <0,3 %  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

## 20x 14 mg NANOFIX Ammonium (R2)

Substance name: *sodium nitroprusside*  
 CAS No.: 13755-38-9

Substance rating: H301, Acute Tox. 3 oral  
 Formula: Na<sub>2</sub>[Fe(CN)<sub>5</sub>NO]<sub>2</sub>·2H<sub>2</sub>O  
 Pseudonym (de): Natriumpentacyanonitrosylferrat(II)  
 EC No.: 238-373-9  
 Concentration: 15 - <33 %  
 acc. CLP (GHS): H302, Acute Tox. 4 oral

Substance name: *sodium nitroprusside*  
 CAS No.: 13755-38-9

Substance rating: H301, Acute Tox. 3 oral  
 Formula: Na<sub>2</sub>[Fe(CN)<sub>5</sub>NO]<sub>2</sub>·2H<sub>2</sub>O  
 Pseudonym (de): Natriumpentacyanonitrosylferrat(II)  
 EC No.: 238-373-9  
 Concentration: 5 - <15 %  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

Substance name: *dichloroisocyanuric acid, Na salt*  
 CAS No.: 2893-78-9

Substance rating: H272, Ox. Liq. 2, H302, Acute Tox. 4 oral, H319, Eye Irrit. 2, H335, resp. irrit. STOT SE 3, H410, Aquatic Chronic 1, EUH031, not defined  
 Formula: C<sub>3</sub>Cl<sub>2</sub>N<sub>3</sub>NaO<sub>3</sub>  
 Pseudonym (de): 1,3-Dichlor-5H-(1,3,5)-triazin-2,4,6-trion  
 REACH Reg. No.: 01-2119489371-33-xxxx  
 EC No.: 220-767-7

Concentration: 3 - <10 %  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

Indice No.: 613-030-01-7

### 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.



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: 985004	NANOCOLOR Ammonium 10	Page: 4/11
Printing date: 15.05.2024	Date of issue: 01.02.2024	Version: 2.2.3.5

## 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 vapours**  
After inhalation of foam or vapour 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

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

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

no data available

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapours. Regular staff training is necessary.

### 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.  
Collect small amounts of leaked liquid and flush with water into drains.

### 6.4 Reference to other sections

no data available



# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 985004

NANOCOLOR Ammonium 10

Page: 5/11

Printing date: 15.05.2024

Date of issue: 01.02.2024

Version: 2.2.3.5

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product. Use a safety bottle when shaking test tubes.

### 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): 6.1B

Water hazard class (DE): 3

### 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

#### 20x 14 mg NANOFIX Ammonium (R2)

Chemical: *sodium nitroprusside*

CAS No.: 13755-38-9

Chemical: *dichloroisocyanuric acid, Na salt*

CAS No.: 2893-78-9

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

#### 7 mL Ammonium 10-200 (R0)

Chemical: *sodium hydroxide solution*

CAS No.: 1310-73-2

Chemical: *sodium salicylate*

CAS No.: 54-21-7

DNEL: 1,32 mg/m<sup>3</sup>

DNEL = Derived No-Effect Level (for workers)

PNEC (fresh water): 0,0413 mg/L

PNEC = Predicted No Effect Concentration

### 8.2 Exposure controls

Good ventilation and extraction system in the room, floor resistant to chemicals with floor drainage and washing facilities. The highest level of cleanliness must be maintained at the workplace.

#### 8.2.1 Respiratory protection

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

Not necessary.

#### 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.

# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 985004

NANOCOLOR Ammonium 10

Page: 6/11

Printing date: 15.05.2024

Date of issue: 01.02.2024

Version: 2.2.3.5

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### 20x 14 mg NANOFIX Ammonium (R2)

a) State of aggregation:	powder (solid)
b) Colour:	rose
c) Odor:	chloric
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:	5-7
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

#### 7 mL Ammonium 10-200 (R0)

a) State of aggregation:	liquid
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:	12-13
l) Kinematic viscosity:	no data available
m) Solubility in water:	0-100 %
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

#### 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.

□ □

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

no further data available.

### 10.2 Chemical stability

no known instability.



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: 985004	NANOCOLOR Ammonium 10	Page: 7/11
Printing date: 15.05.2024	Date of issue: 01.02.2024	Version: 2.2.3.5

## 10.3 Possibility of hazardous reactions

No further data available.

## 10.4 Conditions to avoid

Observe the storage temperature printed on it.

## 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.

#### 20x 14 mg NANOFIX Ammonium (R2)

Chemical: *sodium nitroprusside* CAS No.: 13755-38-9  
 TSCA Inventory: listed (CAS 14402-89-2)  
 Korea Exist.Chem.Inventory: not listed  
 LD50 orl rat : 99 mg/kg  
 LC\_Low orl rat : 20 mg/kg  
 Acute Effects: Cause after oral intake, impairments of health when ingested in small quantities.

Chemical: *dichloroisocyanuric acid, Na salt* CAS No.: 2893-78-9  
 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: KE-10215, >25% Toxic 2014-1-688  
 LD50 orl rat : 550-1600 mg/kg  
 LC\_Low orl hmn : 3570 mg/kg

#### 7 mL Ammonium 10-200 (R0)

Chemical: *sodium hydroxide solution* CAS No.: 1310-73-2  
 TSCA Inventory: listed California Proposition 65 List: not listed  
 Exposure Routes: inhalation, ingestion, skin and/or eye contact  
 Target Organs: Eyes, skin, respiratory system  
 Symptoms: -  
 Japan CSCL/PRTR: not listed, Japan PDSCL: not listed  
 Japan ISHL: listed ≥1,0%/≥1,0% SDS required  
 Korea Exist.Chem.Inventory: KE-31487  
 LD50 orl rat : [< 1%] > 50000 mg/kg  
 LD50 orl mus : [< 1%] > 4000 mg/kg

Chemical: *sodium salicylate* CAS No.: 54-21-7  
 TSCA Inventory: listed  
 Korea Exist.Chem.Inventory: KE-20384  
 LD50 orl rat : 1000 mg/kg  
 LC\_Low orl hmn : 700 mg/kg

### 11.2 Other hazards

#### Possible endocrine disrupting effects

no data available

#### Other information

no additional data available



# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 985004

NANOCOLOR Ammonium 10

Page: 8/11

Printing date: 15.05.2024

Date of issue: 01.02.2024

Version: 2.2.3.5

## SECTION 12: Ecological information

### 12.1 Toxicity

Following information is valid for pure substances.

#### 20x 14 mg NANOFIX Ammonium (R2)

Substance name: *sodium nitroprusside*

CAS-Nr.: 13755-38-9

Water hazard class (DE): 3

Storage class (VCI): 6.1 B

Substance name: *dichloroisocyanuric acid, Na salt*

CAS-Nr.: 2893-78-9

Water hazard class (DE): 3

Storage class (VCI): 13

#### 7 mL Ammonium 10-200 (R0)

Substance name: *sodium hydroxide solution*

CAS-Nr.: 1310-73-2

LC50 *leuciscus idus*/96h : 35-189 mg/L

LC50 *fish*/96h : 45.4 mg/L

EC50 *daphnia*/48h : >100 mg/L

Water hazard class (DE): nwg WGK No.: 0142

Storage class (VCI): 12-13

Substance name: *sodium salicylate*

CAS-Nr.: 54-21-7

PNEC (fresh water): 0,0413 mg/L

PNEC = Predicted No Effect Concentration = concentration at which no effect on the environment is expected

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

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

Not necessary, see above.

## SECTION 14: Transport information

14.1 - 14.4: No dangerous goods according the transport regulations

### 14.5 Environmental hazards

none, contains only small quantities of hazardous substances

### 14.6 Special precautions for user

not necessary



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: 985004

NANOCOLOR Ammonium 10

Page: 9/11

Printing date: 15.05.2024

Date of issue: 01.02.2024

Version: 2.2.3.5

## 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  
 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 2.2.3.5 and 2.2.2.2 following changes were applied: - 1 composition data corrected - 3 substance data corrected

### 16.2 List of H and P phrases

#### 16.2.1 List of relevant H phrases

H Between versions 2.2.3.5 and 2.2.2.2 following changes were applied: - 1 composition data corrected - 3 substance data corrected  
 H302 Harmful if swallowed.

#### 16.2.2 List of relevant P phrases

### 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 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



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: 985004

NANOCOLOR Ammonium 10

Page: 10/11

Printing date: 15.05.2024

Date of issue: 01.02.2024

Version: 2.2.3.5

## 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 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  
 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



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: 985004	NANOCOLOR Ammonium 10	Page: 11/11
Printing date: 15.05.2024	Date of issue: 01.02.2024	Version: 2.2.3.5

- 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