

# Safety Data Sheet

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

NANOCOLOR org. Complexing agents 10 Page: 1/7

Date of issue: 26.07.2019 Printing date: 02.06.2020

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

#### 1.1 **Product identifier**

REF 985052

Product name NANOCOLOR org. Complexing agents 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.

1 x 20x 27 mg NANOFIX org. Complexing Agents 10 (R2)

20 x 1 mL org. Complexing Agents 10 (R0)

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

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

Neumann-Neander-Str. 6-8, 52355 Dueren, GERMANY

E-mail: sds@mn-net.com (msds@mn-net.com) Tel.: +49 2421 969 0

#### 1.4 Emergency telephone number

Information not necessary.

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

### **SECTION 2: Hazard identification**

#### 2.0 Classification of the complete product

#### 2.1 Classification of the substance or mixture

20x 27 mg NANOFIX org. Complexing Agents 10 (R2)

Do not need labelling as hazardous

Signal word

No hazard class

### 1 mL org. Complexing Agents 10 (R0)

Do not need labelling as hazardous

Signal word

No hazard class

#### 2.2 Label elements

### 20x 27 mg NANOFIX org. Complexing Agents 10 (R2)

Do not need labelling as hazardous

Signal word: -

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### 1 mL org. Complexing Agents 10 (R0)

Do not need labelling as hazardous Signal word: -

#### 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

Other hazards

### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances or 3.2 Mixtures

20x 27 mg NANOFIX org. Complexing Agents 10 (R2)

CAS No.: 50-81-7 Chemical: L(+)-ascorbic acid

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

Formula: C<sub>6</sub> H<sub>8</sub> O<sub>6</sub> vitamin C Pseudonym: TSCA Inventory: listed

REACH Reg. No.: exempt, Annex IV

EC No.: 200-066-2

RTECS: CI7650000 MFCD: 00064328

KE No .: KE-01947 Concentration: 90 - <100 %

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

1 mL org. Complexing Agents 10 (R0)

CAS No : 10361-46-3 Chemical: bismuth(III) nitrate, basic

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

Formula: Bi<sub>5</sub> H<sub>9</sub> N<sub>4</sub> O<sub>22</sub>

Pseudonym: (nitrooxy)oxobismuthine, bismuth hydroxide nitrate oxide

TSCA Inventory: listed (CAS 1304-85-4)

REACH Reg. No.: None 2017 215-136-8 EC No.: RTECS: EB2984460 Concentration: < 0.10 %

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

Chemical: CAS No.: 3618-43-7 xylenol orange tetrasodium salt (pH indicator)

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

Formula: C<sub>31</sub> H<sub>28</sub> N<sub>2</sub> Na<sub>4</sub> O<sub>13</sub> S

N,N'-[(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[(6-hydroxy-5-methyl-3,1-phenylene)methylene]]bis[N-(carboxymethyl)-glycir tetrasodium salt

Pseudonym:

TSCA Inventory: listed

EC No.: 222-805-8 MFCD: 0044293

Concentration: < 1.00 %

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

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## **MACHEREY-NAGE**



CAS No.: 7664-93-9d

016-020-00-8

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> Chemical: sulfuric acid (diluted < 5 %)

H315, Skin Irrit. 2, H319, Eye Irrit. 2 Classification:

Formula: H<sub>2</sub> SO<sub>4</sub> •H<sub>2</sub> O TSCA Inventory: listed

REACH Reg. No.: 01-2119458838-20-xxxx

EC No.: 231-639-5 Indice No.:

WS5600000 RTFCS KE No .: KE-32570 Concentration: 1 - <5 %

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%.

### SECTION 4: First aid measures

4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately.

**After SKIN Contact** 4.1.1

Not necessary

**After EYE Contact** 4.1.2

Not necessary

4.1.3 After INHALATION of vapours

Not necessary.

4.1.4 After ORAL Intake

Not necessary.

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

No additionally recommendations. ---

## **SECTION 5: Firefighting measures**

5.1 Extinguishing media

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.

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for firefighters

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

5.4 Additional information

### SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapours. Not necessary.

6.2 **Environmental precautions** 

not necessary

6.3 Methods and material for containment and cleaning up

Clean working area with water. Flush used water into drains.

Reference to other sections 6.4

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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. Use a safety bottle when shaking test tubes.

#### 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):

#### 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 27 mg NANOFIX org. Complexing Agents 10 (R2)

Chemical: L(+)-ascorbic acid CAS No.: 50-81-7

1 mL org. Complexing Agents 10 (R0)

bismuth(III) nitrate, basic CAS No.: 10361-46-3 Chemical:

Chemical: xylenol orange tetrasodium salt (pH indicator) CAS No.: 3618-43-7

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

 $50~\mu g/m^3 \\ \text{DNEL} = \text{Derived No-Effect Level (for workers)}$ DNEL:

PNEC (fresh water): 2.5 µg/Lno na.
PNEC = Predicted No Effected Concentration 2.5 µg/Lno hazard identified

0.1 E mg/m<sup>3</sup> TRGS 900 (DE):

Short-term exposure factor: 1 (I) skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

SUVA(CH) MAK value: 0,1 e mg/m<sup>3</sup>

NTP Report on Carcinogens (RoC) List Yes (Known to be a human carcinogen); TWA 1 mg/m³

[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>

#### 8.2 **Exposure controls**

Not necessary. Good ventilation and extraction system in the room, floor resistant to chemicals with floor drainage and washing facilities.

8.2.1 Respiratory protection

Not necessary

8.2.2 Hand protection Not necessary

Eye protection

8.2.3 Not necessary.

8.2.4

Skin protection Not necessary.

8.2.5 Personal hygiene

Information not necessary.

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## IACHEREY-NAGEI



# **Safety Data Sheet**

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## **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

20x 27 mg NANOFIX org. Complexing Agents 10 (R2)

Appearance: solid (lyoph.) Colour: white Odor: odorless

pH: Solubility in water: 0-25 %

1 mL org. Complexing Agents 10 (R0)

Appearance: liquid Odor: odorless Colour: yellow

0-1 Solubility in water: 0-100 %

#### 9.2 Other information

Data for the other parameters of the mixtures are not available, because no registration and no chemical safety report is required.

**Relevant Properties of Substance Group** 

## **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. Observe labeled storage temperature. ---

#### 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 toxicological effects

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

### 20x 27 mg NANOFIX org. Complexing Agents 10 (R2)

Chemical: L(+)-ascorbic acid CAS No.: 50-81-7

TSCA Inventory: listed Korea Exist.Chem.Inventory: KE-01947 LD50<sub>orl rat</sub>: 11900 mg/kg LD50<sub>ivn mus</sub>: 518 mg/kg

### 1 mL org. Complexing Agents 10 (R0)

bismuth(III) nitrate, basic Chemical: CAS No.: 10361-46-3

listed (CAS 1304-85-4) TSCA Inventory:

LC50<sub>fish</sub>: >500 mg/L

Chemical: xylenol orange tetrasodium salt (pH indicator) CAS No.: 3618-43-7

TSCA Inventory: listed

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## MACHEREY-NAGEI



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> Chemical: sulfuric acid CAS No.: 7664-93-9d

TSCA Inventory: California Proposition 65 List: not listed listed

ACGIH:

Exposure Routes: inhalation, ingestion, skin and/or eye contact

Target Organs: Eyes, skin, respiratory system, teeth

Symptoms: irritation eyes, skin, nose Australia NICNAS: not listed Canada CEPA 1999: DSL Yes

not listed, Japan PDSCL: Deleterious Substance Japan CSCL/PRTR: Japan ISHL: listed ≥1,0%/≥1,0%, Article 57-2 (SDS required)

South Korea TCCA: Accident Precaution Chemical Yes

Korea Exist.Chem.Inventory: KE-32570 LD50<sub>orl rat</sub>: 2140 ma/ka

[8h] 600/ [4h] 850 mg/m<sup>3</sup> LC50<sub>ihl rat</sub>:

TRGS 905 (DE): R<sub>F</sub> C

## **SECTION 12: Ecological information**

#### 12.1 **Toxicity**

Following information is valid for pure substances.

20x 27 mg NANOFIX org. Complexing Agents 10 (R2)

Chemical: L(+)-ascorbic acid CAS No.: 50-81-7 Water hazard class (DE): WGK No.: 0737

Storage class (VCI): 13

1 mL org. Complexing Agents 10 (R0)

Chemical: bismuth(III) nitrate, basic CAS No.: 10361-46-3

Water hazard class (DE): 2 Storage class (VCI): 12-13

Chemical: xylenol orange tetrasodium salt (pH indicator) CAS No.: 3618-43-7

Water hazard class (DÉ): Storage class (VCI): 12-13

Chemical: sulfuric acid CAS No.: 7664-93-9d 2.5 µg/Lno hazard identified

[NOEC, 65d] 25 µg/L

PNEC (fresh water):
PNEC = Predicted No Effected Concentration

LC50<sub>fish/96h</sub>:  $EC50_{daphnia/48h}$ : 100 mg/L EC10<sub>pseudomonas putita/16h</sub>: [72h] 100 mg/L

Water hazard class (DE): WGK No.: 0182

Storage class (VCI): 8 B

#### 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

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### **SECTION 13: Disposal considerations**

Not necessary.

#### 13.1 Waste treatment methods

GENERAL: Empty solids into municipal waste, empty liquids diluted into drains.

### **SECTION 14: Transport information**

14.1 - 14.4 Not necessary

#### 14.5 **Environmental hazards**

#### 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

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013 German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung -GefStoffV), revised on November 2010, according to Directive 98/24/EC

MN Leaflet/User manual, also see www.mn-net.com

Look for your country-specific regulations.

#### 15.2 Chemical safety assessment

### **SECTION 16: Other information**

#### 16.1 List of H and P phrases

- 16.1.1 List of relevant H phrases
- 16.1.2 List of relevant P phrases

#### 16.2 Training advice

Regular safety training.

#### 16.3 Recommended restriction on use

#### 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

Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS

Regulation 487/2013/EU, 4th adaptation of CLP regulation to technical and scientific progress Regulation 669/2018/EU, 4<sup>th</sup> adaptation of CLP regulation to technical and scientific progress Regulation 1480/2018/EU, 4<sup>th</sup> adaptation of CLP regulation to technical and scientific progress

TRGS 900, German engineering rules governing limits in air at work, updated 03/2019

SUVA .CH, Limits in air at work 2009, revised on 01.2009

KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

Revisions/Updates

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

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