

# Safety Data Sheet

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

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

### 1.1 Product identifier

REF 931044  
 Product name VISOCOLOR ECO Nitrite

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 30 mL NO<sub>2</sub> -1  
 1 x 5 g NO<sub>2</sub> -2

### 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  
 Neumann-Neander-Str. 6-8, 52355 Dueren, GERMANY  
 Tel.: +49 2421 969 0

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

### 1.4 Emergency telephone number

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

Hazard identification	Hazard classes/categories
H290	Met. Corr. 1

### 2.1 Classification of the substance or mixture

**30 mL NO<sub>2</sub> -1**

Signal word	Do not need labelling as hazardous
	-

Hazard identification	Hazard classes/categories
H290	Met. Corr. 1

**5 g NO<sub>2</sub> -2**

Signal word	Do not need labelling as hazardous
	-

No hazard class

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## 2.2 Label elements

Metal corrosive solutions **do not have to** be labelled with GHS symbol, signal word, H and P phrases **until 125 mL** (EU 1272/2008 Annex I - 1.5.2.1.3).

### 30 mL NO<sub>2</sub> -1

Do not need labelling as hazardous  
Signal word: -

### 5 g NO<sub>2</sub> -2

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. The sentence H290 "May be corrosive to metals." has only relevance for longer transportation time of larger amounts. The labelling GHS05 would be creating an "OVERLABELLING" (see GHS Directive 1272/2008/EC Annex I, chapter 1.5.2.1.3.). ---

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

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### Information pertaining to particular risks to the environment

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### Other hazards

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## SECTION 3: Composition/information on ingredients

### 3.1 Substances or 3.2 Mixtures

#### 30 mL NO<sub>2</sub> -1

Chemical:	<i>sulfanilamide</i>	CAS No.:	63-74-1
Classification:	H303, Acute Tox. 5 oral		
Formula:	C <sub>6</sub> H <sub>8</sub> N <sub>2</sub> O <sub>2</sub> S		
Pseudonym:	4-aminobenzene sulfonamide		
TSCA Inventory:	listed		
EC No.:	200-563-4		
RTECS:	WO8400000	MFCD:	00007939
KE No.:	KE-01188		
Concentration:	1 - <10 %		
acc. CLP (GHS):	The criteria for classification are not fulfilled.		

Chemical:	<i>o-phosphoric acid</i>	CAS No.:	7664-38-2
Classification:	H290, Met. Corr. 1, H302, Acute Tox. 4 oral, H314, Skin Corr. 1B		
Formula:	H <sub>3</sub> PO <sub>4</sub> •H <sub>2</sub> O		
Pseudonym:	orthophosphoric acid		
TSCA Inventory:	listed		
REACH Reg. No.:	01-2119485924-24-xxxx	Indice No.:	015-011-00-6
EC No.:	231-633-2		
RTECS:	TB6300000		
KE No.:	KE-27427		
Concentration:	1 - <10 %		
acc. CLP (GHS):	H290, Met. Corr. 1		

#### 5 g NO<sub>2</sub> -2

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Chemical: *N-(1-naphthyl)-ethylenediamine dihydrochloride* CAS No.: 1465-25-4  
 Classification: H315, Skin Irrit. 2, H319, Eye Irrit. 2  
 Formula: C<sub>12</sub> H<sub>16</sub> Cl<sub>2</sub> N<sub>2</sub>  
 Pseudonym: N1-1-naphthalenyl-1,2-ethanediamine, dihydrochloride  
 TSCA Inventory: listed  
 EC No.: 215-981-2  
 RTECS: KV5330000 MFCID: 00012556  
 KE No.: not listed  
 Concentration: 1 - <10 %  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

Chemical: *citric acid* CAS No.: 77-92-9  
 Classification: H303, Acute Tox. 5 oral, H316, Skin Irrit. 3, H319, Eye Irrit. 2  
 Formula: C<sub>6</sub> H<sub>8</sub> O<sub>7</sub>  
 Pseudonym: 2-hydroxy-1,2,3-propanetricarboxylic acid  
 TSCA Inventory: listed  
 REACH Reg. No.: 01-2119457026-42-xxxx  
 EC No.: 201-069-1  
 RTECS: GE7350000/GE7810000  
 KE No.: KE-20831  
 Concentration: 1 - <10 %  
 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%.

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## 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

Not necessary.

#### 4.1.2 After EYE Contact

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

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### 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

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## 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.

### 6.4 Reference to other sections

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product.

### 7.2 Conditions for safe storage, including any incompatibilities

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

Storage class (VCI): 8B

Water hazard class (DE): 3

#### 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

#### 30 mL NO<sub>2</sub> -1

Chemical: *sulfanilamide*

CAS No.: 63-74-1

Chemical: *o-phosphoric acid*

CAS No.: 7664-38-2

DNEL: 2.92 mg/m<sup>3</sup>

DNEL = Derived No-Effect Level (for workers)

EU value: [TWA] 1 / [STEL] 2 mg/m<sup>3</sup>

TRGS 900 (DE): [8h] 1 / [15min] 2 mg/m<sup>3</sup>  
E/e respirable

Short-term exposure factor: 2 (I), Y

skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

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

NIOSH: TWA 1 / ST 3 mg/m<sup>3</sup>

NIOSH STEL: 3 mg/m<sup>3</sup>

[TWA] Time-weighted average to a reference period of 8 hours, [STEL] Short-term exposure limit related to a 15-minute period

OSHA: TWA 1 mg/m<sup>3</sup>

#### 5 g NO<sub>2</sub> -2

Chemical: *N-(1-naphthyl)-ethylenediamine dihydrochloride*

CAS No.: 1465-25-4

Chemical: *citric acid*

CAS No.: 77-92-9

PNEC<sup>(fresh water)</sup>: 440 mg/L

PNEC = Predicted No Effect Concentration

TRGS 900 (DE): 2 E mg/m<sup>3</sup>  
E/e respirable

Short-term exposure factor: 2 (I) Y

skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

### 8.2 Exposure controls

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

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- 8.2.1 Respiratory protection**  
Not necessary.
- 8.2.2 Hand protection**  
Not necessary.
- 8.2.3 Eye protection**  
Not necessary.
- 8.2.4 Skin protection**  
Not necessary.
- 8.2.5 Personal hygiene**  
Information not necessary.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### 30 mL NO<sub>2</sub> -1

Appearance: liquid

Colour: colourless

Odor: odorless

pH:

2-3

Specific gravity:

1,04 g/cm<sup>3</sup>

#### 5 g NO<sub>2</sub> -2

Appearance: powder (solid)

Colour: colourless

Odor: odorless

pH:

2-3

### 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**

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## 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 toxicological effects

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

#### 30 mL NO<sub>2</sub> -1

Chemical: *sulfanilamide*  
 TSCA Inventory: listed  
 Korea Exist.Chem.Inventory: KE-01188  
 LD50<sub>orl rat</sub>: 3900 mg/kg

CAS No.: 63-74-1

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Chemical:	<i>o</i> -phosphoric acid	CAS No.: 7664-38-2
TSCA Inventory:	listed	California Proposition 65 List: not listed
ACGIH:	1 ppm	
Exposure Routes:	inhalation, ingestion, skin and/or eye contact	
Target Organs:	Eyes, skin, respiratory system	
Symptoms:	irritation eyes, skin, upper respiratory system; eye, skin, burns; dermatitis	
Australia NICNAS:	not listed	Canada CEPA 1999: DSL Yes
Japan CSCL/PRTR:	not listed, Japan PDSCL: not listed	
Japan ISHL:	listed $\geq 1,0\%$ / $\geq 1,0\%$ , Article 57-2 (SDS required)	
South Korea TCCA:	not listed	
Korea Exist.Chem.Inventory:	KE-27427	
LD50 <sub>orl rat</sub> :	1530 mg/kg	
LC50 <sub>ihl rbt</sub> :	1.689 mg/L	
LD50 <sub>drm rbt</sub> :	2750 mg/kg	
TRGS 905 (DE):	R <sub>F</sub> C	

**5 g NO<sub>2</sub>-2**

Chemical:	<i>N</i> -(1-naphthyl)-ethylenediamine dihydrochloride	CAS No.: 1465-25-4
TSCA Inventory:	listed	
Korea Exist.Chem.Inventory:	not listed	

Chemical:	<i>citric acid</i>	CAS No.: 77-92-9
TSCA Inventory:	listed	
Korea Exist.Chem.Inventory:	KE-20831	
LD50 <sub>orl rat</sub> :	>3000 mg/kg	
LC50 <sub>ihl rat</sub> :	5800 mg/m <sup>3</sup>	
LD50 <sub>drm rat</sub> :	>2000 mg/kg	
LD50 <sub>orl mus</sub> :	5400 mg/kg	
LD50 <sub>scu rat</sub> :	5500 mg/kg	

**SECTION 12: Ecological information**

**12.1 Toxicity**

Following information is valid for pure substances.

<b>30 mL NO<sub>2</sub>-1</b>		
Chemical:	<i>sulfanilamide</i>	CAS No.: 63-74-1
Water hazard class (DE):	1	WGK No.: n.n.
Storage class (VCI):	12-13	
Chemical:	<i>o</i> -phosphoric acid	CAS No.: 7664-38-2
LC50 <sub>fish/96h</sub> :	3-3.5 mg/L	
Water hazard class (DE):	1	WGK No.: 0392
Storage class (VCI):	8 B	
<b>5 g NO<sub>2</sub>-2</b>		
Chemical:	<i>N</i> -(1-naphthyl)-ethylenediamine dihydrochloride	CAS No.: 1465-25-4
Water hazard class (DE):	3	
Storage class (VCI):	13	
Chemical:	<i>citric acid</i>	CAS No.: 77-92-9
PNEC(fresh water):	440 mg/L	
PNEC = Predicted No Effect Concentration		
LC50 <sub>leuciscus idus/96h</sub> :	440-760 mg/L	
EC50 <sub>daphnia/48h</sub> :	1535 <sub>24h</sub> mg/L	
IC50 <sub>scenedesmus quadricauda/72h</sub> :	7d: 425-640 mg/L	
EC10 <sub>pseudomonas putita/16h</sub> :	EC0: >10 g/L	
Water hazard class (DE):	1	WGK No.: 0057
Dispersion coefficient(octanol-water):	-1.72	
Storage class (VCI):	12-13	

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- 12.2 Persistence and degradability**  
not necessary
- 12.3 Bioaccumulative potential**  
not necessary
- 12.4 Mobility in soil**  
not necessary
- 12.5 Results of PBT and vPvB assessment**  
no data available
- 12.6 Other adverse effects**  
no additional data available

## SECTION 13: Disposal considerations

Not necessary.

- 13.1 Waste treatment methods**  
GENERAL: Empty solids into municipal waste, empty liquids diluted into drains. Normally it is possible to empty small amounts (diluted!) into drains.

## SECTION 14: Transport information

14.1 - 14.4: No dangerous goods according the transport regulations

- 14.5 Environmental hazards**  
none
- 14.6 Special precautions for user**  
not necessary
- 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code**  
not applicable

## SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
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](http://www.mn-net.com)  
Look for your country-specific regulations.
- 15.2 Chemical safety assessment**  
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## SECTION 16: Other information

- 16.1 List of H and P phrases**
- 16.1.1 List of relevant H phrases**  
H290 May be corrosive to metals.
- 16.1.2 List of relevant P phrases**  
P390 Absorb spillage to prevent material damage.
- 16.2 Training advice**  
Regular safety training.
- 16.3 Recommended restriction on use**  
None
- 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, 4<sup>th</sup> 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