

# Safety Data Sheet

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

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Printing date: 02.06.2020	Date of issue: 30.07.2018	

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

### 1.1 Product identifier

REF 985068  
 Product name NANOCOLOR Nitrite 2

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 5 mL Nitrite (R2)  
 20 x 12 mg Nitrite 2, lyophilized (R0)

### 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 (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 Giftinformationszentrum (GGIZ) 99089 Erfurt tel. +49 361 730 730

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



GHS07

Signal word WARNING

Hazard identification	Hazard classes/categories
H303	Acute Tox. 5 oral (non EU)
H319	Eye Irrit. 2

### 2.1 Classification of the substance or mixture

5 mL Nitrite (R2)



GHS07

Signal word WARNING

Hazard identification	Hazard classes/categories
H319	Eye Irrit. 2

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**12 mg Nitrite 2, lyophilized (R0)**

Signal word Do not need labelling as hazardous  
-

Hazard identification	Hazard classes/categories
H303	Acute Tox. 5 oral (non EU)

**2.2 Label elements**

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).

**5 mL Nitrite (R2)**



GHS07

Signal word: WARNING

**12 mg Nitrite 2, lyophilized (R0)**

Do not need labelling as hazardous  
Signal word: -

**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. ---

**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**

**5 mL Nitrite (R2)**

Chemical:	<i>citric acid</i>	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:	20 - <40 %	
acc. CLP (GHS):	H319, Eye Irrit. 2	

**12 mg Nitrite 2, lyophilized (R0)**

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Chemical: *N-(1-naphthyl)-ethylendiamine 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: *sulfanilamide* 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 MFCID: 00007939  
 KE No.: KE-01188  
 Concentration: 10 - <30 %  
 acc. CLP (GHS): H303, Acute Tox. 5 oral

### 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 16.1

## 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

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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

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

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## 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

not necessary

### 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

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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): 12

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

#### 5 mL Nitrite (R2)

Chemical: *citric acid*

CAS No.: 77-92-9

PNEC<sub>(fresh water)</sub>: 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 sorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

#### 12 mg Nitrite 2, lyophilized (R0)

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

CAS No.: 1465-25-4

Chemical: *sulfanilamide*

CAS No.: 63-74-1

### 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 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 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

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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.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### 5 mL Nitrite (R2)

Appearance: liquid

Colour: colourless

Odor: odorless

pH: 2-3

Solubility in water:

0-100 %

#### 12 mg Nitrite 2, lyophilized (R0)

Appearance: solid

Colour: colourless

Odor: odorless

pH: 5-7

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

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## 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

Observe labeled storage temperature. ---

### 10.5 Incompatible materials

Avoid contact with strong acids or alkalines.

### 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.

#### 5 mL Nitrite (R2)

Chemical: *citric acid*

CAS No.: 77-92-9

TSCA Inventory: listed

Korea Exist.Chem.Inventory: KE-20831

LD50<sub>orl rat</sub>: >3000 mg/kgLC50<sub>ihl rat</sub>: 5800 mg/m<sup>3</sup>LD50<sub>drm rat</sub>: >2000 mg/kgLD50<sub>orl mus</sub>: 5400 mg/kgLD50<sub>scu rat</sub>: 5500 mg/kg

#### 12 mg Nitrite 2, lyophilized (R0)

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

CAS No.: 1465-25-4

TSCA Inventory: listed

Korea Exist.Chem.Inventory: not listed

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

CAS No.: 63-74-1

## SECTION 12: Ecological information

### 12.1 Toxicity

Following information is valid for pure substances.

#### 5 mL Nitrite (R2)

Chemical: *citric acid*  
 PNEC<sub>(fresh water)</sub>: 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 putida/16h</sub>: EC0: >10 g/L  
 Water hazard class (DE): 1 WGK No.: 0057  
 Dispersion coefficient<sub>(octanol-water)</sub>: -1.72  
 Storage class (VCI): 12-13

CAS No.: 77-92-9

#### 12 mg Nitrite 2, lyophilized (R0)

Chemical: *N-(1-naphthyl)-ethylenediamine dihydrochloride*  
 Water hazard class (DE): 3  
 Storage class (VCI): 13

CAS No.: 1465-25-4

Chemical: *sulfanilamide*  
 Water hazard class (DE): 1 WGK No.: n.n.  
 Storage class (VCI): 12-13

CAS No.: 63-74-1

### 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

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 - 14.4: No dangerous goods according to the transport regulations

### 14.5 Environmental hazards

none, contains only small quantities of hazardous substances

### 14.6 Special precautions for user

not necessary

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## 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

TRGS 200, German engineering rules governing the classification and labelling of hazardous substances, preparations and products, updated October 2011

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

not necessary for these small amounts ---

## SECTION 16: Other information

### 16.1 List of H and P phrases

#### 16.1.1 List of relevant H phrases

H303 May be harmful if swallowed. (not regulated in EU-CLP)  
H319 Causes serious eye irritation.

#### 16.1.2 List of relevant P phrases

P280sh Wear protective gloves/eye protection.

### 16.2 Training advice

Regular safety training.

### 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 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