

# 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 918163  
 Product name NANOCOLOR Chlorine dioxide

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 mL Chlorine R1
- 1 x 20 g Chlorine R2
- 1 x 25 g Chlorine R3
- 1 x 50 mL Chlorine R4
- 1 x 50 mL Chlorine R5
- 1 x 50 mL Chlorine R6

### 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
H290	Met. Corr. 1
H319	Eye Irrit. 2

### 2.1 Classification of the substance or mixture

100 mL Chlorine R1

Signal word Do not need labelling as hazardous  
 -  
 No hazard class

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### 20 g Chlorine R2

Signal word Do not need labelling as hazardous  
-  
No hazard class

### 25 g Chlorine R3



Signal word GHS07  
WARNING

Hazard identification	Hazard classes/categories
H319	Eye Irrit. 2

### 50 mL Chlorine R4

Signal word Do not need labelling as hazardous  
-  
No hazard class

### 50 mL Chlorine R5

Signal word Do not need labelling as hazardous  
-

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

### 50 mL Chlorine R6

Signal word Do not need labelling as hazardous  
-  
No hazard class

## 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).

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).

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).

### 100 mL Chlorine R1

Do not need labelling as hazardous  
Signal word: -

### 20 g Chlorine R2

Do not need labelling as hazardous  
Signal word: -

### 25 g Chlorine R3

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GHS07

Signal word: WARNING

### 50 mL Chlorine R4

Do not need labelling as hazardous

Signal word: -

### 50 mL Chlorine R5

Do not need labelling as hazardous

Signal word: -

### 50 mL Chlorine R6

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

---

### Information pertaining to particular risks to the environment

---

### Other hazards

---

## SECTION 3: Composition/information on ingredients

### 3.1 Substances or 3.2 Mixtures

#### 100 mL Chlorine R1

Chemical: *phosphate buffer solution*

CAS No.: -

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

Formula:  $K/Na_{1-3} H_{2-0} PO_4 \cdot x H_2 O$

TSCA Inventory: all listed

KE No.: listed

Concentration: 1 - <5 %

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

#### 20 g Chlorine R2

Chemical: *boric acid*

CAS No.: 10043-35-3

Classification: H360FD, Repr. 1B

Formula:  $H_3 BO_3$

TSCA Inventory: listed

REACH Reg. No.: 01-2119486683-25-0024

**SVHC listed: listed (18/06/2010)**

EC No.: 233-139-2

Indice No.: 005-007-00-2

RTECS: ED4550000

MFCD: 00011337

KE No.: KE-03499

Concentration: 0,5 - <5,5 %

Correlation factor:  $x 0.17 (= \%B)$

The classification refers to weight percent of the metal (according to CLP Regulation 2008/1272/EC Annex VI, 1.1.3.2 Note 1)

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

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Chemical: *tri-sodium citrate* CAS No.: 6132-04-3  
 Classification: No criteria for classification or naming of chemical not required.  
 Formula:  $C_6H_5Na_3O_7 \cdot 2H_2O$   
 TSCA Inventory: listed (CAS 68-04-2)  
 REACH Reg. No.: 01-2119457027-40-xxxx  
 EC No.: 200-675-3  
 RTECS: GE8300000  
 KE No.: KE-20843  
 Concentration: 40 - <60 %  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

Chemical: *N,N-Diethyl-1,4-phenylene diammonium sulfate* CAS No.: 6283-63-2  
 Classification: H302, Acute Tox. 4 oral, H312, Acute Tox. 4 derm.  
 Formula:  $C_{10}H_{16}N_2 \cdot H_2O$   
 Pseudonym: N,N-diethylbenzene-1,4-diammonium sulfate  
 TSCA Inventory: listed (CAS 6065-27-6)  
 EC No.: 228-500-6 Indice No.: 612-080-00-X  
 RTECS: SS9625000 MFCD: 00012993  
 Concentration: 1 - <5 %  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

Chemical: *potassium dihydrogen phosphate* CAS No.: 7778-77-0  
 Classification: No criteria for classification or naming of chemical not required.  
 Formula:  $KH_2PO_4$   
 TSCA Inventory: listed  
 REACH Reg. No.: 01-2119490224-41-XXXX  
 EC No.: 231-913-4  
 RTECS: TC6615500 MFCD: 00011401  
 KE No.: KE-28622  
 Concentration: 5 - <25 %  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

**25 g Chlorine R3**

Chemical: *potassium iodide* CAS No.: 7681-11-0  
 Classification: H319, Eye Irrit. 2  
 Formula: KI  
 TSCA Inventory: listed  
 REACH Reg. No.: YES, confidential  
 EC No.: 231-659-4  
 RTECS: TT29750000 MFCD: 00011405  
 KE No.: not listed  
 Concentration: 70 - <100 %  
 acc. CLP (GHS): H319, Eye Irrit. 2

**50 mL Chlorine R4**

Chemical: *N-cyclohexylsulfamic acid, sodium salt* CAS No.: 139-05-9  
 Classification: No criteria for classification or naming of chemical not required.  
 Formula:  $C_6H_{12}NNaO_3S$   
 Pseudonym: sodium cyclamate, N-cyclohexyl-sulfamic acid, sodium salt  
 TSCA Inventory: listed  
 EC No.: 205-348-9  
 RTECS: GV7350000  
 KE No.: not listed  
 Concentration: 10 - <25 %  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

**50 mL Chlorine R5**



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Chemical:	<i>o</i> -phosphoric acid	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		
EC No.:	231-633-2	Indice No.:	015-011-00-6
RTECS:	TB6300000		
KE No.:	KE-27427		
Concentration:	1 - <10 %		
acc. CLP (GHS):	H290, Met. Corr. 1		

## 50 mL Chlorine R6

Chemical:	<i>phosphate buffer solution</i>	CAS No.:	-
Classification:	No criteria for classification or naming of chemical not required.		
Formula:	K/Na <sub>1-3</sub> H <sub>2-0</sub> PO <sub>4</sub> • x H <sub>2</sub> O		
TSCA Inventory:	all listed		
KE No.:	listed		
Concentration:	5 - <20 %		
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 16.1

## 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

---

### 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.

### 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

#### 100 mL Chlorine R1

Chemical: *phosphate buffer solution*

CAS No.: -

#### 20 g Chlorine R2

Chemical: *boric acid*

CAS No.: 10043-35-3

DNEL: [derm] 392 mg/kg bw/day; [inh] 8.3 mg/m<sup>3</sup>  
DNEL = Derived No-Effect Level (for workers)

PNEC<sub>(fresh water)</sub>: 2.9 mg/L  
PNEC = Predicted No Effect Concentration

TRGS 900 (DE): 0.5 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

SUVA(CH) MAK value: [Bor][MAK] 1,8e/[STEL] 1,8e mg/m<sup>3</sup>

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

Chemical: *tri-sodium citrate*

CAS No.: 6132-04-3

Chemical: *N,N-Diethyl-1,4-phenylene diammonium sulfate*

CAS No.: 6283-63-2

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

Chemical: *potassium dihydrogen phosphate*

CAS No.: 7778-77-0

#### 25 g Chlorine R3

Chemical: *potassium iodide*

CAS No.: 7681-11-0

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**50 mL Chlorine R4**

Chemical: *N-cyclohexylsulfaminic acid, sodium salt* CAS No.: 139-05-9

**50 mL Chlorine R5**

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>

**50 mL Chlorine R6**

Chemical: *phosphate buffer solution* CAS No.: -

## 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

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

**100 mL Chlorine R1**

Appearance: liquid	Colour: colourless	Odor: odorless
pH:	6-7	
Specific gravity:	1,02 g/cm <sup>3</sup>	
Solubility in water:	0-100 %	

**20 g Chlorine R2**

Appearance: powder (solid)	Colour: colourless	Odor: odorless
pH:	6	
Solubility in water:	0-5 %	

**25 g Chlorine R3**

Appearance: solid	Colour: colourless	Odor: odorless
pH:	6,9	
Melting point:	686 °C	
Boiling point:	1330 °C	
Specific gravity:	3,13 sol. g/cm <sup>3</sup>	
Solubility in water:	0-58 %	

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## 50 mL Chlorine R4

Appearance: liquid  
pH:Colour: rose  
5-7

Odor: odorless

## 50 mL Chlorine R5

Appearance: liquid  
pH:  
Specific gravity:  
Solubility in water:Colour: colourless  
1-2  
1,01 g/cm<sup>3</sup>  
0-100 %

Odor: odorless

## 50 mL Chlorine R6

Appearance: liquid  
pH:  
Specific gravity:Colour: colourless  
9  
1,02 g/cm<sup>3</sup>

Odor: odorless

## 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.

#### 100 mL Chlorine R1

Chemical: *phosphate buffer solution*  
TSCA Inventory: all listed  
Korea Exist.Chem.Inventory: listed

CAS No.: -

#### 20 g Chlorine R2

Chemical: *boric acid*  
TSCA Inventory: listed  
Australia NICNAS: not listed  
Japan CSCL/PRTR: PRTR: ≥1,0%B class I, Japan PDSCL: not listed  
Japan ISHL: not listed  
South Korea TCCA: not listed  
Korea Exist.Chem.Inventory: KE-03499  
LD50<sub>orl rat</sub>: >3765 mg/kg  
LC50<sub>ihl rat</sub>: > 2 mg/m<sup>3</sup>  
LD50<sub>drm rat</sub>: >2000 mg/kg

CAS No.: 10043-35-3

EU carcinogen: R<sub>D</sub> 1B, R<sub>F</sub> 1B  
TRGS 905 (DE): R<sub>E</sub> 2, R<sub>F</sub> 2

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Chemical: *tri-sodium citrate* CAS No.: 6132-04-3  
 TSCA Inventory: listed (CAS 68-04-2)  
 Korea Exist.Chem.Inventory: KE-20843  
 LD50<sub>orl rat</sub>: >8000 mg/kg

Chemical: *N,N-Diethyl-1,4-phenylene diammonium sulfate* CAS No.: 6283-63-2  
 TSCA Inventory: listed (CAS 6065-27-6) California Proposition 65 List: not listed  
 Australia NICNAS: not listed Canada CEPA 1999: not listed  
 Japan CSCL/PRTR: not listed, Japan PDSCL: not listed  
 Japan ISHL: not listed  
 South Korea TCCA: not listed  
 LD50<sub>orl rat</sub>: 497 mg/kg

Chemical: *potassium dihydrogen phosphate* CAS No.: 7778-77-0  
 TSCA Inventory: listed  
 Korea Exist.Chem.Inventory: KE-28622  
 LD50<sub>orl rat</sub>: 4640 mg/kg  
 LD50<sub>drm rbt</sub>: >4640 mg/kg

## 25 g Chlorine R3

Chemical: *potassium iodide* CAS No.: 7681-11-0  
 TSCA Inventory: listed  
 Korea Exist.Chem.Inventory: not listed  
 LD50<sub>orl rat</sub>: 2779 mg/kg

## 50 mL Chlorine R4

Chemical: *N-cyclohexylsulfaminic acid, sodium salt* CAS No.: 139-05-9  
 TSCA Inventory: listed  
 Korea Exist.Chem.Inventory: not listed

## 50 mL Chlorine R5

Chemical: *o-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 ≥1,0%/≥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

## 50 mL Chlorine R6

Chemical: *phosphate buffer solution* CAS No.: -  
 TSCA Inventory: all listed  
 Korea Exist.Chem.Inventory: listed

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## SECTION 12: Ecological information

### 12.1 Toxicity

Following information is valid for pure substances.

#### 100 mL Chlorine R1

Chemical: *phosphate buffer solution*  
 Water hazard class (DE): 1  
 Storage class (VCI): 12

CAS No.: -

#### 20 g Chlorine R2

Chemical: *boric acid*  
 PNEC(fresh water) : 2.9 mg/L  
 PNEC = Predicted No Effect Concentration  
 LC50<sub>fish/96h</sub> : [4d] 79.7 mg/L  
 EC50<sub>daphnia/48h</sub> : 91-165 mg/L  
 IC50<sub>scenedesmus quadricauda/72h</sub> : [72h] 52.4 mg/L  
 EC10<sub>pseudomonas putita/16h</sub> : [EC10] 10 mg/L  
 Water hazard class (DE): 1 WGK No.: 0315  
 Dispersion coefficient(octanol-water) : -1.09  
 Storage class (VCI): 6.1 D

CAS No.: 10043-35-3

Chemical: *tri-sodium citrate*  
 LC50<sub>fish/96h</sub> : 18-32 g/L  
 EC50<sub>daphnia/48h</sub> : 5.6-10 g/L  
 EC50<sub>chlorella vulgaris/5d</sub> : >18-32 g/L  
 EC10<sub>pseudomonas putita/16h</sub> : EC50<sub>ps. fluorescens/8h</sub> : >1.8-3.2 g/L  
 Water hazard class (DE): 1  
 Storage class (VCI): 12-13

CAS No.: 6132-04-3

Chemical: *N,N-Diethyl-1,4-phenylene diammonium sulfate*  
 Water hazard class (DE): 3  
 Storage class (VCI): 12-13

CAS No.: 6283-63-2

Chemical: *potassium dihydrogen phosphate*  
 LC50<sub>leuciscus idus/96h</sub> : 900<sub>48h</sub> mg/L  
 Water hazard class (DE): 1  
 Storage class (VCI): 12-13

CAS No.: 7778-77-0

#### 25 g Chlorine R3

Chemical: *potassium iodide*  
 LC50<sub>fish/96h</sub> : 2190 mg/L  
 Water hazard class (DE): 1  
 Dispersion coefficient(octanol-water) : 0.04  
 Storage class (VCI): 12-13

CAS No.: 7681-11-0

#### 50 mL Chlorine R4

Chemical: *N-cyclohexylsulfaminic acid, sodium salt*

CAS No.: 139-05-9

#### 50 mL Chlorine R5

Chemical: *o-phosphoric acid*  
 LC50<sub>fish/96h</sub> : 3-3.5 mg/L  
 Water hazard class (DE): 1 WGK No.: 0392  
 Storage class (VCI): 8 B

CAS No.: 7664-38-2

#### 50 mL Chlorine R6

Chemical: *phosphate buffer solution*  
 Water hazard class (DE): 1  
 Storage class (VCI): 12

CAS No.: -

### 12.2 Persistence and degradability

not necessary

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- 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**  
Normally it is possible to empty small amounts (diluted!) into drains. **Not for** mercury containing test solutions, please collect for disposal of hazardous waste.

## 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
- 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**  
H290 May be corrosive to metals.  
H319 Causes serious eye irritation.
- 16.1.2 List of relevant P phrases**  
P280sh Wear protective gloves/eye protection.  
P390 Absorb spillage to prevent material damage.
- 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.

# Safety Data Sheet

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

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NANOCOLOR Chlorine dioxide

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## 16.4 Further information

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## 16.5 Sources of key data

Regulation 790/2009/EU adaptation of CLP regulation 1272/2008/EU to technical and scientific progress  
 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  
 TRGS 900, German engineering rules governing limits in air at work, updated 03/2018  
 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