

# 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 91888  
 Product name NANOCOLOR Sulfide

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 10 g Sulfide R1  
 1 x 100 mL Sulfide R2  
 1 x 100 mL Sulfide R3

### 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



GHS05 GHS07

Signal word DANGER

Hazard identification	Hazard classes/categories
H314	Skin Corr. 1A
H315	Skin Irrit. 2
H319	Eye Irrit. 2
H412	Aquatic Chronic 3

### 2.1 Classification of the substance or mixture

10 g Sulfide R1



GHS07

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Signal word	WARNING
<b>Hazard identification</b>	<b>Hazard classes/categories</b>
H315	Skin Irrit. 2
H319	Eye Irrit. 2
H412	Aquatic Chronic 3

**100 mL Sulfide R2**



GHS05

Signal word	DANGER
<b>Hazard identification</b>	<b>Hazard classes/categories</b>
H314	Skin Corr. 1A

**100 mL Sulfide R3**

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).

**10 g Sulfide R1**



GHS07

Signal word: WARNING

**100 mL Sulfide R2**



GHS05

Signal word: DANGER

H314  
 Causes severe skin burns and eye damage.

P260sh, P280sh, P303+361+353, P305+351+338, P310  
 Do not breathe dust/vapours. Wear protective gloves/eye protection. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

**100 mL Sulfide R3**

Do not need labelling as hazardous

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Signal word: -

## 2.3 Other hazards

### Possible hazards from physicochemical properties

Generally in the case of pH values are less than 2 or higher than 11.5 then it is corrosive. 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

Causes varying degrees of acid burns on the skin, to the eyes and to the mucous membranes and wounds which do not heal quickly depending on the concentration, temperature and the exposure time. Vapours especially which steam from hot liquids and mist can have a severe irritant effect upon the eyes and the respiratory organs.

-

### Information pertaining to particular risks to the environment

Avoid contact of substance/mixture to environment.

**PBT:** not applicable

**vPvB:** not applicable

### Other hazards

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## SECTION 3: Composition/information on ingredients

### 3.1 Substances or 3.2 Mixtures

#### 10 g Sulfide R1

Chemical:	<i>aminosulfonic acid (sulfamic acid)</i>	CAS No.:	5329-14-6
Classification:	H315, Skin Irrit. 2, H319, Eye Irrit. 2, H412, Aquatic Chronic 3		
Formula:	H <sub>3</sub> NO <sub>3</sub> S; NH <sub>2</sub> -SO <sub>3</sub> H		
TSCA Inventory:	listed		
REACH Reg. No.:	01-2119488633-28-xxxx		
EC No.:	226-218-8	Indice No.:	016-026-00-0
RTECS:	WO5950000	MFCID:	0005994x
Concentration:	90 - <100 %		
acc. CLP (GHS):	H315, Skin Irrit. 2, H319, Eye Irrit. 2, H412, Aquatic Chronic 3		

#### 100 mL Sulfide R2

Chemical:	<i>N,N-dimethyl-1,4-phenylenediammonium dichloride</i>	CAS No.:	536-46-9
Classification:	No criteria for classification or naming of chemical not required.		
Formula:	C <sub>8</sub> H <sub>12</sub> N <sub>2</sub> •HCl		
TSCA Inventory:	listed		
REACH Reg. No.:	---		
EC No.:	208-635-7		
RTECS:	ST1300000	MFCID:	00012991
Concentration:	< 1,00 %		
acc. CLP (GHS):	The criteria for classification are not fulfilled.		

Chemical:	<i>sulfuric acid</i>	CAS No.:	7664-93-9
Classification:	H314, Skin Corr. 1B		
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.:	016-020-00-8
RTECS:	WS5600000		
KE No.:	KE-32570, >10% Toxic 97-1-405, Acc. Precaution Chem.		
Concentration:	51 - <65 %		
acc. CLP (GHS):	H314, Skin Corr. 1B		

#### 100 mL Sulfide R3

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Chemical: *sulfuric acid* (diluted < 5 %) CAS No.: 7664-93-9d  
 Classification: H315, Skin Irrit. 2, H319, Eye Irrit. 2  
 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.: 016-020-00-8  
 RTECS: WS5600000  
 KE No.: KE-32570  
 Concentration: 1 - <5 %  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

Chemical: *iron(III) chloride* CAS No.: 7705-08-0  
 Classification: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H318, Eye Dam. 1  
 Formula: FeCl<sub>3</sub>  
 TSCA Inventory: listed  
 REACH Reg. No.: 01-2119497998-05-xxxx  
 EC No.: 231-729-4  
 RTECS: LJ9100000 MFCD: 00011004  
 Concentration: 1 - <2 %  
 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. Remove contaminated clothing. Show product package, packing insert and this material safety data sheet to the doctor.

#### 4.1.1 After SKIN Contact

Remove contaminated clothing immediately. Rinse the affected skin or mucous membrane thoroughly for min. 15 minutes under running water. (If possible) use soap. Avoid neutralisation. Then apply a loose bandage.

#### 4.1.2 After EYE Contact

After contact with the eyes rinse thoroughly under running water with the eyelid wide open for min. 10 minutes with eye washing bottle, eye douche or running water (protect intact eye). Before (if possible) apply eye drops Proxymetacaine 0.5%, if the opening the eyelid convulsion is painful. Further treatment to be carried out by an eye specialist.

#### 4.1.3 After INHALATION of vapours

After inhalation of foam or vapour fresh air should be inhaled. Keep airways free. If vomiting and if insensible place patient in recovery position and keep airways free. ---

#### 4.1.4 After ORAL Intake

After oral intake lots of water with activated charcoal supplement should be drunk after it has been ingested. Do not induce vomiting under any circumstances. Do not make any efforts to neutralise it. Contact medical advice for possible consequences. ---

### 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

CORROSIVE DAMAGE: After SKIN CONTACT rinse with water for a long time. Efforts to neutralise the substance can frequently make matters worse. Apply glucocorticosteroides following inflammatory reactions. After EYE CONTACT rinse immediately with plenty of water for a long time. Eyelid convulsion measures. Name the corrosive chemical. Further treatment must to be carried out by an eye specialist. After INTAKE administer aluminium oxide drug suspensions. Administer a prophylaxis to counter pulmonary oedema following the INGESTION of corrosive aerosols. In the event of RESPIRATORY DISTRESSES ensure that the patient inhales oxygen. ---

## 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.

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## 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. Spray any vapours released with water. Retent fire water. Use only acid-resistant safety equipment.

For great amount - if necessary - protective breathing apparatus which is independent of the ambient air (isolated equipment), and sealed protective clothing is necessary in the event of a large-scale formation of toxic substances.

## 5.4 Additional information

Danger for environment **only in the event of a large-scale leakage** or formation of hazardous substances. ---

## SECTION 6: Accidental release measures

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

Do not breathe vapours. Wear suitable protective gloves (see 8.2.2). Wear eye protection, respectively face protection. Regular staff training is necessary, indicating hazards and precautions on the basis of operating instructions. Restrictions on activity must be observed.

### 6.2 Environmental precautions

not necessary, contains only small amounts of these substances

### 6.3 Methods and material for containment and cleaning up

Bind any escaping liquid with inert absorbent. And dispose in accordance to local regulations for the disposal of hazardous chemicals.

Clean any contaminated equipment and floors with plenty of water.

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

### 6.4 Reference to other sections

see information in section 5.4 ---

## 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. Use inbreakable container for transport of glass bottles.

### 7.3 Specific end use(s)

Product for analytical use.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### 10 g Sulfide R1

Chemical: *aminosulfonic acid (sulfamic acid)*

CAS No.: 5329-14-6

DNEL: [derm] 10 mg/kg bw/d; [inh] 70,5 mg/m<sup>3</sup>

DNEL = Derived No-Effect Level (for workers)

PNEC<sub>(fresh water)</sub>: 1.8 mg/L

PNEC = Predicted No Effect Concentration

#### 100 mL Sulfide R2

Chemical: *N,N-dimethyl-1,4-phenylenediammonium dichloride*

CAS No.: 536-46-9

Chemical: *sulfuric acid*

CAS No.: 7664-93-9

DNEL: [inh] 50 µg/m<sup>3</sup>

DNEL = Derived No-Effect Level (for workers)

PNEC<sub>(fresh water)</sub>: 2.5 µg/L

PNEC = Predicted No Effect Concentration

EU value: 0.1 e mg/m<sup>3</sup>

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

E/e respirable

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Short-term exposure factor: 1 (I), Y  
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>  
 NIOSH: NTP Report on Carcinogens (RoC) List Yes (Known to be a human carcinogen); [TWA] 1 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>

**100 mL Sulfide R3**

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

DNEL: 50 µg/m<sup>3</sup>  
DNEL = Derived No-Effect Level (for workers)

PNEC<sub>(fresh water)</sub>: 2.5 µg/L  
PNEC = Predicted No Effect Concentration

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

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>  
 NIOSH: NTP Report on Carcinogens (RoC) List Yes (Known to be a human carcinogen); TWA 1 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>

Chemical: *iron(III) chloride* CAS No.: 7705-08-0

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

## 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 or face protection.

### 8.2.4 Skin protection

Recommended to avoid clothing damage, and to avoid contamination with these hazards.

### 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

**10 g Sulfide R1**

Appearance: solid	Colour: colourless	Odor: odorless
pH: < 2		
Solubility in water: 0-17 %		

**100 mL Sulfide R2**

Appearance: liquid	Colour: colourless	Odor: odorless
pH: 0		
Specific gravity: 1,42 g/cm <sup>3</sup>		
Solubility in water: 0-100 %		

**100 mL Sulfide R3**

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



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## 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

Can react violently with organic material. No further data available.

### 10.4 Conditions to avoid

Not necessary. 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.

#### 10 g Sulfide R1

Chemical:	<i>aminosulfonic acid (sulfamic acid)</i>	CAS No.: 5329-14-6
TSCA Inventory:	listed	
Target Organs:	affect the eye or visual capacity	
Symptoms:	conjunctivitis; corneal damage	
LD50 <sub>orl rat</sub> :	2065 mg/kg	
LC50 <sub>drum rbt</sub> :	2000 mg/m <sup>3</sup>	

#### 100 mL Sulfide R2

Chemical:	<i>N,N-dimethyl-1,4-phenylenediammonium dichloride</i>	CAS No.: 536-46-9
TSCA Inventory:	listed	

Chemical:	<i>sulfuric acid</i>	CAS No.: 7664-93-9
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, teeth	
Symptoms:	irritation eyes, skin, nose, throat; pulmonary edema, bronchitis; emphysema; conjunctivitis; stomatis;	
dental erosion; eye, skin burns; dermatitis		
Australia NICNAS:	not listed	Canada CEPA 1999: DSL Yes
Japan CSCL/PRTR:	not listed, Japan PDSC: Deleterious Substance	
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, >10% Toxic 97-1-405, Acc. Precaution Chem.	
LD50 <sub>orl rat</sub> :	2140 mg/kg	
LC50 <sub>ihl rat</sub> :	[8h] 600/ [4h] 850 mg/m <sup>3</sup>	
TRGS 905 (DE):	Kat 4	

#### 100 mL Sulfide R3

Chemical:	<i>sulfuric acid</i>	CAS No.: 7664-93-9d
TSCA Inventory:	listed	California Proposition 65 List: not listed
ACGIH:	1 ppm	
Exposure Routes:	inhalation, ingestion, skin and/or eye contact	

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MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6-8 · 52355 Düren · Germany

DE/international:

CH:

FR:

US:

Tel.: +49 24 21 969-0

Tel.: +41 62 388 55 00

Tel.: +33 388 68 22 68

Tel.: +1 484 821 0984

Fax: +49 24 21 969-199

Fax: +41 62 388 55 05

Fax: +33 388 51 76 88

Fax: +1 484 821 1272

E-mail: info@mn-net.com

E-mail: sales-ch@mn-net.com

E-mail: sales-fr@mn-net.com

E-mail: sales-us@mn-net.com

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Target Organs: Eyes, skin, respiratory system, teeth  
 Symptoms: irritation eyes, skin, nose  
 Australia NICNAS: not listed Canada CEPA 1999: DSL Yes  
 Japan CSCL/PRTR: not listed, Japan PDSCL: Deleterious Substance  
 Japan ISHL: listed  $\geq 1,0\%$ / $\geq 1,0\%$ , Article 57-2 (SDS required)  
 South Korea TCCA: Accident Precaution Chemical Yes  
 Korea Exist.Chem.Inventory: KE-32570  
 LD50<sub>orl rat</sub>: 2140 mg/kg  
 LC50<sub>ihl rat</sub>: [8h] 600/ [4h] 850 mg/m<sup>3</sup>

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

Chemical: *iron(III) chloride* CAS No.: 7705-08-0  
 TSCA Inventory: listed  
 Japan ISHL: listed  $> 1,0\%$ / $> 1,0\%$   
 LD50<sub>orl rat</sub>: 450 mg/kg

## SECTION 12: Ecological information

### 12.1 Toxicity

Following information is valid for pure substances.

#### 10 g Sulfide R1

Chemical: *aminosulfonic acid (sulfamic acid)* CAS No.: 5329-14-6  
 Harmful to aquatic life with long lasting effects. Avoid contact of substance/mixture to environment.  
 Environmental hazards must not be labelled with P phrases until 125 mL (EU 1272/2008 Annex I - 1.5.2).  
 PNEC<sub>(fresh water)</sub>: 1.8 mg/L  
 PNEC = Predicted No Effected Concentration  
 LC50<sub>fish/96h</sub>: [4d] 70.3 mg/L  
 EC50<sub>daphnia/48h</sub>: [48h=24h] 71.6 mg/L  
 IC50<sub>scenedesmus quadricauda/72h</sub>: [72h] 48 mg/L  
 Water hazard class (DE): 1 WGK No.: 1266  
 Dispersion coefficient<sub>(octanol-water)</sub>: -4.34  
 Storage class (VCI): 8 B

#### 100 mL Sulfide R2

Chemical: *N,N-dimethyl-1,4-phenylenediammonium dichloride* CAS No.: 536-46-9  
 Water hazard class (DE): 3  
 Storage class (VCI): 6.1 D

Chemical: *sulfuric acid* CAS No.: 7664-93-9  
 Avoid contact of substance/mixture to environment.  
 PNEC<sub>(fresh water)</sub>: 2.5 µg/L  
 PNEC = Predicted No Effected Concentration  
 LC50<sub>fish/96h</sub>: [NOEC, 65d] 25 µg/L  
 EC50<sub>daphnia/48h</sub>: 100 mg/L  
 EC10<sub>pseudomonas putita/16h</sub>: [72h] 100 mg/L  
 Water hazard class (DE): 1 WGK No.: 0182  
 Storage class (VCI): 8 B

#### 100 mL Sulfide R3

Chemical: *sulfuric acid* CAS No.: 7664-93-9  
 PNEC<sub>(fresh water)</sub>: 2.5 µg/L  
 PNEC = Predicted No Effected Concentration  
 LC50<sub>fish/96h</sub>: [NOEC, 65d] 25 µg/L  
 EC50<sub>daphnia/48h</sub>: 100 mg/L  
 EC10<sub>pseudomonas putita/16h</sub>: [72h] 100 mg/L  
 Water hazard class (DE): 1 WGK No.: 0182  
 Storage class (VCI): 8 B

Chemical: *iron(III) chloride* CAS No.: 7705-08-0  
 LC50<sub>fish/96h</sub>: 23<sub>24h</sub> mg/L  
 EC50<sub>daphnia/48h</sub>: 29.7 mg/L  
 Water hazard class (DE): 1 WGK No.: 0515  
 Storage class (VCI): 8 B



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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

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. Empty containers of corrosive reagents prior to disposal, rinse with water.

## SECTION 14: Transport information

**14.1 UN number:** 3316    **14.2 UN proper shipping name:** Chemical Kit  
**14.3 Class:** 9    **14.4 Packing group:** II

*Road transport*

Classification code: M11    Tunnel restriction code: E  
Limited Quantity: acc. ADR 3.3.1/251: see LQ in Alternative declaration for transportation

*Air transport*

PAX: 960    max. weight PAX: 10 KG  
CAO: 960    max. weight CAO: 10 KG

*Maritime transport*

EmS: F-A, S-P    Storage category: A

Or use **Alternative declaration for transportation:**

**14.1 UN number:** 3264  
**14.2 UN proper shipping name:** Corrosive liquid, acidic, inorganic, n.o.s. (aminosulfonic acid (sulfamic acid), sulfuric acid solution)  
**14.3 Class:** 8    **14.4 Packing group:** II

*Road transport*

Classification code: C1    Tunnel restriction code: E  
Limited Quantity: 1 L  
Excepted Quantity: E 2

*Air transport*

PAX: 851    max. weight PAX: 1 L  
CAO: 855    max. weight CAO: 30 L

*Maritime transport*

EmS: F-A, S-B    Storage category: B

- 14.5 Environmental hazards**  
none, contains only small quantities of hazardous substances, contains only small amounts of these 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

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## 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

H314 Causes severe skin burns and eye damage.  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.  
 H412 Harmful to aquatic life with long lasting effects.

#### 16.1.2 List of relevant P phrases

P260sh Do not breathe dust/vapours.  
 P273 Avoid release to the environment.  
 P280sh Wear protective gloves/eye protection.  
 P303+361+353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
 P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310 Immediately call a POISON CENTER/doctor.

### 16.2 Training advice

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.

### 16.3 Recommended restriction on use

Only for professional user.  
 Look about employee restrictions for young people (f. ex. 94/33/EC or DE § 22 JArbSchG)!  
 Look about employee restrictions for pregnant women and nursing women (f.ex. 92/85/EEC or for DE §§ 11-13 MuSchG 2017)!  
 An individual package of this product or test kit has a moderate hazardous potential.

### 16.4 Further information

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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  
 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