

Safety Data Sheet

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

REF: 91832

NANOCOLOR Detergents anionic

Page: 1/12

Printing date: 02.06.2020

Date of issue: 19.12.2019

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

1.1 Product identifier

REF 91832
 Product name NANOCOLOR Detergents anionic

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 160 mL Anionic Detergents R1
- 1 x 80 mL Anionic Detergents R2
- 1 x 80 mL Anionic Detergents R3
- 3 x 535 mL org. phase (R3)
- 1 x 2 g wadding

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



GHS06 GHS07 GHS08

Signal word DANGER

Hazard identification	Hazard classes/categories
H302	Acute Tox. 4 oral
H315	Skin Irrit. 2
H319	Eye Irrit. 2
H331	Acute Tox. 3 inh.
H336	STOT SE 3
H351	Carc. 2
H361	Repr. 2
H372	STOT RE 1

2.1 Classification of the substance or mixture

160 mL Anionic Detergents R1

Do not need labelling as hazardous

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Signal word -
No hazard class

80 mL Anionic Detergents R2

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

80 mL Anionic Detergents R3

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

535 mL org. phase (R3)



GHS06 GHS07 GHS08

Signal word DANGER

Hazard identification	Hazard classes/categories
H302	Acute Tox. 4 oral
H315	Skin Irrit. 2
H319	Eye Irrit. 2
H331	Acute Tox. 3 inh.
H336	STOT SE 3
H351	Carc. 2
H361	Repr. 2
H372	STOT RE 1

2 g wadding

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).

160 mL Anionic Detergents R1

Do not need labelling as hazardous
Signal word: -

80 mL Anionic Detergents R2

Do not need labelling as hazardous
Signal word: -

80 mL Anionic Detergents R3

Do not need labelling as hazardous

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Signal word: -

535 mL org. phase (R3)



GHS06



GHS07



GHS08

Signal word: DANGER

H302, H315, H319, H331, H336, H351, H361, H372

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Toxic if inhaled. May cause drowsiness or dizziness. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

P201, P260sh, P264W, P280sh, P301+312, P311, P330, P405

Obtain special instructions before use. Do not breathe dust/vapours. Wash with water thoroughly after handling. Wear protective gloves/eye protection. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Call a POISON CENTER/doctor. Rinse mouth. Store locked up.

2 g wadding

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

Cause severe after inhalation of vapours, impairments of health or can lead to death even when only ingested in small quantities. Cause after oral intake, impairments of health when ingested in small quantities. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. -

Information pertaining to particular risks to the environment

PBT: not applicable

vPvB: not applicable

Other hazards

SECTION 3: Composition/information on ingredients

3.1 Substances or 3.2 Mixtures

160 mL Anionic Detergents 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.

80 mL Anionic Detergents R2

Chemical: *methylene blue*

CAS No.: 61-73-4

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

Formula: $C_{16} H_{18} ClN_3 S$

Pseudonym: Basic Blue 9, phenothiazin-5-ium, 3,7-bis(dimethylamino)-, chloride (1:1)

TSCA Inventory: listed

EC No.: 200-515-2

RTECS: SO5600000

MFCD:

00012111

KE No.: KE-06942

Concentration: < 1.00 %

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

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Chemical:	<i>sulfuric acid</i> (diluted < 5 %)	CAS No.:	7664-93-9d
Classification:	H315, Skin Irrit. 2, H319, Eye Irrit. 2		
Formula:	H ₂ SO ₄ • H ₂ 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:	0.1 - <1 %		
acc. CLP (GHS):	The criteria for classification are not fulfilled.		

80 mL Anionic Detergents R3

Chemical:	<i>methylene blue</i>	CAS No.:	61-73-4
Classification:	No criteria for classification or naming of chemical not required.		
Formula:	C ₁₆ H ₁₈ ClN ₃ S		
Pseudonym:	Basic Blue 9, phenothiazin-5-ium, 3,7-bis(dimethylamino)-, chloride (1:1)		
TSCA Inventory:	listed		
EC No.:	200-515-2		
RTECS:	SO5600000	MFCD:	00012111
KE No.:	KE-06942		
Concentration:	< 1.00 %		
acc. CLP (GHS):	The criteria for classification are not fulfilled.		

Chemical:	<i>sulfuric acid</i> (diluted < 5 %)	CAS No.:	7664-93-9d
Classification:	H315, Skin Irrit. 2, H319, Eye Irrit. 2		
Formula:	H ₂ SO ₄ • H ₂ 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.		

535 mL org. phase (R3)

Chemical:	<i>chloroform</i>	CAS No.:	67-66-3
Classification:	H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2, H331, Acute Tox. 3 inh., H336, STOT SE 3, H351, Carc. 2, H361, Repr. 2, H372, STOT RE 1		
Formula:	CHCl ₃		
Pseudonym:	trichloromethane		
TSCA Inventory:	listed		
REACH Reg. No.:	01-2119486657-20-xxxx		
EC No.:	200-663-8	Indice No.:	602-006-00-4
RTECS:	FS9100000	MFCD:	00000826
KE No.:	KE-34076, Toxic 97-1-281		
Concentration:	95 - <100 %		
acc. CLP (GHS):	H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2, H331, Acute Tox. 3 inh., H336, STOT SE 3, H351, Carc. 2, H361, Repr. 2, H372, STOT RE 1		

2 g wadding

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. Take to a doctor, in a raised position if there are breathing difficulties.

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.

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- 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. Administer a Dexamethasone spray as soon as possible. Ensure quiet, warmth, and provide resuscitation if necessary. In the event of respiratory distress ensure that the patient inhales oxygen. Secure the breathing, heart and circulatory function. ---
- 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**
Chronic Effects:
CMR Effects: Suspected of causing cancer. Suspected of damaging fertility or the unborn child. ---
- 4.3 Indication of any immediate medical attention and special treatment needed**
After SKIN CONTACT rinse with water for a long time. 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. In the event of RESPIRATORY DISTRESS ensure that the patient inhales oxygen. Inform patient respectively further measures and the possibility of long-term damages. ---

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. 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. 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
- 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. Not for organic solvents (see section 13).
- 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. Use only in well-ventilated working areas.
- 7.2 Conditions for safe storage, including any incompatibilities**
The original product package of MACHEREY-NAGEL allows a safe storage. Products containing also toxic substances should be kept locked up.

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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, and store in a well-ventilated place at max. 25 °C, away or preferably separate from substances with which a hazardous reaction could take place, so that they are not immediately accessible to outside parties. 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

160 mL Anionic Detergents R1

Chemical: *phosphate buffer solution*

CAS No.: -

80 mL Anionic Detergents R2

Chemical: *methylene blue*

CAS No.: 61-73-4

Chemical: *sulfuric acid*

CAS No.: 7664-93-9d

DNEL: 50 µg/m³
DNEL = Derived No-Effect Level (for workers)

PNEC_(fresh water): 2.5 µg/L
PNEC = Predicted No Effect Concentration

TRGS 900 (DE): 0.1 E mg/m³
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/m³

NIOSH: 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/m³

80 mL Anionic Detergents R3

Chemical: *methylene blue*

CAS No.: 61-73-4

Chemical: *sulfuric acid*

CAS No.: 7664-93-9d

DNEL: 50 µg/m³
DNEL = Derived No-Effect Level (for workers)

PNEC_(fresh water): 2.5 µg/L
PNEC = Predicted No Effect Concentration

TRGS 900 (DE): 0.1 E mg/m³
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/m³

NIOSH: 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/m³

535 mL org. phase (R3)

Chemical: *chloroform*

CAS No.: 67-66-3

DNEL: [derm] 0.94 mg/kg bw/day; [inh] 2.5 mg/m³
DNEL = Derived No-Effect Level (for workers)

PNEC_(fresh water): 0.146 mg/L
PNEC = Predicted No Effect Concentration

EU value: 0.5 ppm / 2.5 mg/m³
 TRGS 900 (DE): 0,5 mL/m³ / 2,5 mg/m³
E/e respirable

Short-term exposure factor: 2 (II), H, X, Y
skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

SUVA(CH) MAK value: 0,5 ppm / 2,5 mg/m³

NIOSH: Ca ST 2 ppm / 9.78_{60 min} 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: 50 ppm / 240 mg/m³

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2 g wadding

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

Use for open access of these substances for example a protection filter, class A/AX. 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, for chlorinated carbons consist of viton (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

Recommended 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

160 mL Anionic Detergents R1

Appearance: liquid	Colour: colourless	Odor: odorless
pH:	10-11	
Specific gravity:	1,01 g/cm ³	
Solubility in water:	0-100 %	

80 mL Anionic Detergents R2

Appearance: liquid	Colour: blue	Odor: odorless
pH:	1-2	
Specific gravity:	1,0 g/cm ³	
Solubility in water:	0-100 %	

80 mL Anionic Detergents R3

Appearance: liquid	Colour: blue	Odor: odorless
pH:	0-1	
Specific gravity:	1,01 g/cm ³	
Solubility in water:	0-100 %	

535 mL org. phase (R3)

Appearance: liquid	Colour: colourless	Odor: like chloroform
Odor limit:	50-200 mg/m ³	
Melting point:	-63.5 °C	
Boiling point:	61.7 °C	
Vapour pressure (20°C):	211 hPa	
Vapour density(air=1) :	4,12	
Specific gravity:	1,48 g/cm ³	
Solubility in water:	< 1 %	
Flashing temperature:	982 °C	
Volatiles by volume:	1035 g/m ³	

2 g wadding

Appearance: solid	Colour: colourless	Odor: odorless
pH:	-	
Solubility in water:	-	

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

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.

160 mL Anionic Detergents R1

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

CAS No.: -

80 mL Anionic Detergents R2

Chemical: *methylene blue*
 TSCA Inventory: listed
 Korea Exist.Chem.Inventory: KE-06942
 LD50_{orl rat}: 1180 mg/kg

CAS No.: 61-73-4

Chemical: *sulfuric acid*
 TSCA Inventory: 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
 Australia NICNAS: not listed
 Japan CSCL/PRTR: not listed, Japan PDSCL: 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
 LD50_{orl rat}: 2140 mg/kg
 LC50_{ihl rat}: [8h] 600/ [4h] 850 mg/m³

CAS No.: 7664-93-9d

California Proposition 65 List: not listed

TRGS 905 (DE): R_F C

80 mL Anionic Detergents R3

Chemical: *methylene blue*
 TSCA Inventory: listed
 Korea Exist.Chem.Inventory: KE-06942
 LD50_{orl rat}: 1180 mg/kg

CAS No.: 61-73-4

Chemical: *sulfuric acid*
 TSCA Inventory: listed
 ACGIH: 1 ppm
 Exposure Routes: inhalation, ingestion, skin and/or eye contact
 Target Organs: Eyes, skin, respiratory system, teeth

CAS No.: 7664-93-9d

California Proposition 65 List: not listed

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Symptoms:	irritation eyes, skin, nose
Australia NICNAS:	not listed
Japan CSCL/PRTR:	not listed, Japan PDSCCL: 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 _{orl rat} :	2140 mg/kg
LC50 _{ihl rat} :	[8h] 600/ [4h] 850 mg/m ³
TRGS 905 (DE):	R _F C

535 mL org. phase (R3)

Chemical:	<i>chloroform</i>	CAS No.:	67-66-3
TSCA Inventory:	listed	California Proposition 65 List:	listed: cancer, developmental
ACGIH:	10 ppm		
Exposure Routes:	inhalation, skin absorption, ingestion, skin and/or eye contact		
Target Organs:	Liver, kidneys, heart, eyes, skin, central nervous system		
Symptoms:	irritation eyes, skin; dizziness, mental dullness, nausea, confusion; headache, lassitude (weakness, exhaustion); anesthesia; enlarged liver; [potent		
Australia NICNAS:	not listed	Canada CEPA 1999:	DSL yes
Japan CSCL/PRTR:	PCA Yes, PRTR: $\geq 1,0\%$ class I, Japan PDSCCL: Deleterious Substance		
Japan ISHL:	listed $\geq 1,0\%$ / $\geq 0,1\%$, Article 57-1+2 (Labelling&SDS required)		
South Korea TCCA:	not listed		
Korea Exist.Chem.Inventory:	KE-34076, Toxic 97-1-281		
LD50 _{orl rat} :	908 mg/kg		
LC _{LoWihl hmn} :	25000 mg/m ³		
LC _{LoWorl hum/rbt} :	140/500 mg/m ³		
LC50 _{ihl rat} :	47.7 _{4h} g/m ³		
LD50 _{drm rat} :	>15800 mg/kg		
LD50 _{drm rbt} :	> 20 g/kg		
Acute Effects:	Cause severe after inhalation of vapours, impairments of health or can lead to death even when only ingested in small quantities. Acute Effects: Cause after oral intake, impairments of health when ingested in small quantities.		
Chronic Effects:			
Carcinogenic Effects:	Suspected of causing cancer. Suspected of damaging fertility or the unborn child.		
EU carcinogen:	carc. 2, repr. 2		
TRGS 905 (DE):	K 1B, M 2, R _D 2		

2 g wadding

SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

160 mL Anionic Detergents R1

Chemical:	<i>phosphate buffer solution</i>	CAS No.:	-
Water hazard class (DE):	1		
Storage class (VCI):	12		

80 mL Anionic Detergents R2

Chemical:	<i>methylene blue</i>	CAS No.:	61-73-4
Water hazard class (DE):	2		
Storage class (VCI):	12		

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

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80 mL Anionic Detergents R3

Chemical: *methylene blue* CAS No.: 61-73-4
 Water hazard class (DE): 2
 Storage class (VCI): 12

Chemical: *sulfuric acid* CAS No.: 7664-93-9d
 PNEC_(fresh water) : 2.5 µg/L
 PNEC = Predicted No Effect Concentration
 LC50_{fish/96h} : [NOEC, 65d] 25 µg/L
 EC50_{daphnia/48h} : 100 mg/L
 EC10_{pseudomonas putida/16h} : [72h] 100 mg/L
 Water hazard class (DE): 1 WGK No.: 0182
 Storage class (VCI): 8 B

535 mL org. phase (R3)

Chemical: *chloroform* CAS No.: 67-66-3
 PNEC_(fresh water) : 0.146 mg/L
 PNEC = Predicted No Effect Concentration
 LC50_{fish/96h} : 18 mg/L
 EC50_{daphnia/48h} : 6.321d NOEC mg/L
 Water hazard class (DE): 3 WGK No.: 0054
 Dispersion coefficient_(octanol-water) : 1.97
 Storage class (VCI): 12

2 g wadding

- 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). Or collect in solvent waste (waste code number 07 07 04). Close container tightly.

- 13.1 Waste treatment methods**
Normally it is possible to empty small amounts (diluted!) into drains.
Dispose of contents/container to regulated waste treatment.

SECTION 14: Transport information

14.1 UN number: 1888 **14.2 UN proper shipping name:** Chloroform
14.3 Class: 6.1 **14.4 Packing group:** III
Road transport
 Classification code: T1
 Limited Quantity: 5 L Tunnel restriction code: E
 Excepted Quantity: E 1
Air transport
 PAX: 680 max. weight PAX: 60 L
 CAO: 680 max. weight CAO: 220 L
Maritime transport
 EmS: F-A, S-A Storage category: A



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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
 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

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.

16.1.2 List of relevant P phrases

P201	Obtain special instructions before use.
P260D	Do not breathe vapours.
P260sh	Do not breathe dust/vapours.
P261sh	Avoid breathing dust/vapours.
P264W	Wash with water thoroughly after handling.
P280sh	Wear protective gloves/eye protection.
P301+312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P304+340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P311	Call a POISON CENTER/doctor.
P314	Get medical advice/attention if you feel unwell.
P330	Rinse mouth.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

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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product to which the information refers. Accordingly MACHEREY-NAGEL GmbH & Co. KG will not be responsible for damages resulting from use of or reliance upon this information. See terms and conditions at the end of our price lists for additional information.

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, 4th adaptation of CLP regulation to technical and scientific progress

Regulation 1480/2018/EU, 4th 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

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work

TRGS 905, German engineering rules governing carcinogens and mutagens, updated 03/18

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

Revisions/Updates

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