

Safety Data Sheet

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

REF: 985084

NANOCOLOR Residual hardness 1

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Printing date: 01.10.2019

Date of issue: 21.06.2018

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

1.1 Product identifier

REF 985084
Product name NANOCOLOR Residual hardness 1

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 20x 5 mg NANOFIX Residual Hardness 1 (R2)
20 x 3 mL Residual Hardness 1 (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

Information not necessary.

You find our current versions of SDS (22 languages) in Internet:

<http://www.mn-net.com/SDS>

SECTION 2: Hazard identification

2.0 Classification of the complete product

-

2.1 Classification of the substance or mixture

20x 5 mg NANOFIX Residual Hardness 1 (R2)

Signal word Do not need labelling as hazardous
-

No hazard class

3 mL Residual Hardness 1 (R0)

Signal word Do not need labelling as hazardous
-

No hazard class

2.2 Label elements

20x 5 mg NANOFIX Residual Hardness 1 (R2)

Do not need labelling as hazardous
Signal word: -

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3 mL Residual Hardness 1 (R0)

Do not need labelling as hazardous
Signal word: -

2.3 Other hazards

Possible hazards from physicochemical properties

According to our current status of knowledge and experience we state, that this product does not contain any substances, which - in accordance with EC regulations 1272/2008/EC, 1907/2006/EC and German Regulations for Hazardous goods - have to be declared as dangerous goods, either because of their applied concentration or because of their total amount in anyone kit. An individual package has considerably less hazardous potential. ---

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

20x 5 mg NANOFIX Residual Hardness 1 (R2)

Chemical:	<i>Phthalein purple (phthalein complexon)</i>	CAS No.:	2411-89-4
Classification:	No criteria for classification or naming of chemical not required.		
Formula:	$C_{32}H_{32}N_2O_{12}$		
Pseudonym:			
N,N'-[[(3-oxo-1(3H)-isobenzofuranylidene)bis[(6-hydroxy-5-methyl-3,1-phenylene)methylene]]bis[N-(carboxymethyl)-glycine]			
TSCA Inventory:	listed		
EC No.:	219-318-8	MFCD:	00005911
Concentration:	1 - <10 %		
acc. CLP (GHS):	The criteria for classification are not fulfilled.		

3 mL Residual Hardness 1 (R0)

Chemical:	<i>boric acid</i>	CAS No.:	10043-35-3
Classification:	H360FD, Repr. 1B		
Formula:	H_3BO_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.		

3.3 Remarks

When not listed, mixtures are added with water [CAS No. 7732-18-5] to 100%.

SECTION 4: First aid measures

4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately.

4.1.1 After SKIN Contact

Not necessary.

4.1.2 After EYE Contact

Not necessary.

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- 4.1.3 After INHALATION of vapours**
Not necessary. ---
- 4.1.4 After ORAL Intake**
Not necessary. ---
- 4.2 Most important symptoms and effects, both acute and delayed**

- 4.3 Indication of any immediate medical attention and special treatment needed**
No additionally recommendations. ---

SECTION 5: Firefighting measures

- 5.1 Extinguishing media**
Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.
- 5.2 Special hazards arising from the substance or mixture**
None.
- 5.3 Advice for firefighters**
No, for listed product. Product package burns like paper or plastic.
- 5.4 Additional information**

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures**
Do not breathe vapours. Not necessary.
- 6.2 Environmental precautions**
not necessary
- 6.3 Methods and material for containment and cleaning up**
Clean working area with water. Flush used water into drains.
- 6.4 Reference to other sections**

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): 6.1D
Water hazard class (DE): 2
- 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

20x 5 mg NANOFIX Residual Hardness 1 (R2)
Chemical: *Phthalein purple (phthalein complexon)*

CAS No.: 2411-89-4

3 mL Residual Hardness 1 (R0)

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Chemical: *boric acid* CAS No.: 10043-35-3
 DNEL: [derm] 392 mg/kg bw/day; [inh] 8.3 mg/m³
DNEL = Derived No-Effect Level (for workers)
 PNEC_(fresh water): 2.9 mg/L
PNEC = Predicted No Effect Concentration
 TRGS 900 (DE): 0.5 E mg/m³
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/m³
 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

8.2 Exposure controls

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

8.2.1 Respiratory protection

Not necessary.

8.2.2 Hand protection

Not necessary.

8.2.3 Eye protection

Not necessary.

8.2.4 Skin protection

Not necessary.

8.2.5 Personal hygiene

Information not necessary.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

20x 5 mg NANOFIX Residual Hardness 1 (R2)

Appearance: - Colour: - Odor: -
 pH: 6-8

3 mL Residual Hardness 1 (R0)

Appearance: liquid Colour: colourless Odor: odorless
 pH: 9,5-10,5
 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

SECTION 10: Stability and reactivity

10.1 Reactivity

None

10.2 Chemical stability

No known instability.

10.3 Possibility of hazardous reactions

None.

10.4 Conditions to avoid

Not known. Observe labeled storage temperature. ---

10.5 Incompatible materials

Not known.

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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.

20x 5 mg NANOFIX Residual Hardness 1 (R2)

Chemical: *Phthalein purple (phthalein complexon)*
TSCA Inventory: listed

CAS No.: 2411-89-4

3 mL Residual Hardness 1 (R0)

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_{orl rat}: >3765 mg/kg
LC50_{ihl rat}: > 2 mg/m³
LD50_{drm rat}: >2000 mg/kg
EU carcinogen: R_D 1B, R_F 1B
TRGS 905 (DE): R_E 2, R_F 2

CAS No.: 10043-35-3

California Proposition 65 List: not listed
Canada CEPA 1999: DSL yes

SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

20x 5 mg NANOFIX Residual Hardness 1 (R2)

Chemical: *Phthalein purple (phthalein complexon)*
Water hazard class (DE): 2

CAS No.: 2411-89-4

3 mL Residual Hardness 1 (R0)

Chemical: *boric acid*
PNEC(fresh water): 2.9 mg/L
PNEC = Predicted No Effected Concentration
LC50_{fish/96h}: [4d] 79.7 mg/L
EC50_{daphnia/48h}: 91-165 mg/L
IC50_{scenedesmus quadricauda/72h}: [72h] 52.4 mg/L
EC10_{pseudomonas putita/16h}: [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

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

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12.6 Other adverse effects

no additional data available

SECTION 13: Disposal considerations

Not necessary.

13.1 Waste treatment methods

GENERAL: Empty solids into municipal waste, empty liquids diluted into drains.

SECTION 14: Transport information

14.1 - 14.4 Not necessary

14.5 Environmental hazards

none

14.6 Special precautions for user

not necessary

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013
 German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC
 MN Leaflet/User manual, also see www.mn-net.com
 Look for your country-specific regulations.

15.2 Chemical safety assessment

SECTION 16: Other information

16.1 List of H and P phrases

16.1.1 List of relevant H phrases

16.1.2 List of relevant P phrases

16.2 Training advice

Regular safety training.

16.3 Recommended restriction on use

None

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, 4th adaptation of CLP regulation to technical and scientific progress
 Regulation 669/2018/EU, 4th adaptation of CLP regulation to technical and scientific progress
 TRGS 900, German engineering rules governing limits in air at work, updated 03/2018
 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

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