

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

NANOCOLOR Nitrate 250 Page: 1/11

Date of issue: 20.05.2019 Printing date: 02.06.2020

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

1.1 **Product identifier**

REF 985066

Product name NANOCOLOR Nitrate 250

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.

20 x 4 mL Nitrate 250 (R0) 1 x 11 mL NO₃ /N (R2)

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







GHS02

GHS05

GHS07

DANGER Signal word

Hazard identification	Hazard classes/categories
H226	Flam. Liq. 3
H290	Met. Corr. 1
H302	Acute Tox. 4 oral
H314	Skin Corr. 1B
H319	Eye Irrit. 2
H336	STOT SF 3

2.1 Classification of the substance or mixture

4 mL Nitrate 250 (R0)





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> Signal word **DANGER**

Hazard identification	Hazard classes/categories
H290	Met. Corr. 1
H302	Acute Tox. 4 oral
H314	Skin Corr. 1B

11 mL NO₃/N (R2)





Signal word WARNING

Hazard identification	Hazard classes/categories
H226	Flam. Liq. 3
H319	Eye Irrit. 2
H336	STOT SE 3

2.2 Label elements

According CLP directive inner packages must be only labelled with GHS symbol(s) and product identificator(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 and highly flammable chemicals/mixtures 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)

4 mL Nitrate 250 (R0)





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.

11 mL NO₃ /N (R2)





Signal word: WARNING

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. Flammable properties. ---

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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.

Cause after oral intake, impairments of health when ingested in small quantities. -

Information pertaining to particular risks to the environment

Avoid contact of substance/mixture to environment.

PBT: not applicable vPvB: not applicable

Other hazards

SECTION 3: Composition/information on ingredients

3.1 Substances or 3.2 Mixtures

4 mL Nitrate 250 (R0)

Chemical: o-phosphoric acid CAS No.: 7664-38-2

Classification: H290, Met. Corr. 1, H302, Acute Tox. 4 oral, H314, Skin Corr. 1B

Formula: H₃ PO₄ •H₂ 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

TB6300000 RTECS: KE-27427 KE No.: Concentration: 25 - <40 %

H290, Met. Corr. 1, H302, Acute Tox. 4 oral, H314, Skin Corr. 1B acc. CLP (GHS):

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

Classification: H314, Skin Corr. 1B Formula: H₂ SO₄ (•H₂ O)

TSCA Inventory: listed

REACH Reg. No.: 01-2119458838-20-xxxx

EC No.: 231-639-5 016-020-00-8 Indice No.:

RTECS: WS5600000

KE No.: KE-32570, >10% Toxic 97-1-405, Acc. Precaution Chem.

Concentration: 51 - <65 % acc. CLP (GHS): H314, Skin Corr. 1B

11 mL NO₃/N (R2)

Chemical: 2,6-dimethylphenol CAS No.: 576-26-1

H301, Acute Tox. 3 oral, H311, Acute Tox. 3 derm., H314, Skin Corr. 1B, H411, Aquatic Chronic 2 Classification:

Formula: C₈ H₁₀ O; (CH₃)₂ -C₆ H₃ -OH

Pseudonym: 2,6-xylenol TSCA Inventory: listed

REACH Reg. No.: 01-2119552794-29-xxxx

EC No.: 209-400-1 Indice No.: 604-006-00-X RTECS: ZE6125000 MFCD: 00002240

KE-35435, >5% Toxic 97-1-274 KE No.:

Concentration: 0.1 - <1 %

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

Chemical: CAS No.: 67-63-0 2-propanol

Classification: H225, Flam. Liq. 2, H319, Eye Irrit. 2, H336, STOT SE 3

Formula: C₃ H₈ O

Pseudonvm: isopropanol, IPA, propan-2-ol TSCA Inventory: listed REACH Reg. No.: 01-2119457558-25-XXXX

200-661-7 EC No.: Indice No.: 603-117-00-0 RTECS: NT8050000 00011674 MFCD:

KE-29363 KE No .: Concentration: 35 - < 50 %

acc. CLP (GHS): H226, Flam. Liq. 3, H319, Eye Irrit. 2, H336, STOT SE 3

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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

Description of first aid measures 4.1

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

After SKIN Contact 4.1.1

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 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.

After INHALATION of vapours 4.1.3

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 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

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 INTAKÉ administer aluminium oxide drug suspensions. Administer a prophylaxis to counter pulmonary oedema following the INGESTION of corrosive aerosols. In the event of RESPIRATORY DISTREES 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.

5.2 Special hazards arising from the substance or mixture

WARNING: Flammable (GHS regulation). May form explosive vapour-air mixtures. 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.

54 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

6.2 **Environmental precautions**

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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.

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 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): Water hazard class (DE):

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

4 mL Nitrate 250 (R0)

Chemical: CAS No.: 7664-38-2 o-phosphoric acid

2.92 mg/m³
DNEL = Derived No-Effect Level (for workers)

EU value: [TWA] 1 /[STEL] 2 mg/m³

[8h] 1 / [15min] 2 mg/m³ E/e respirable TRGS 900 (DE):

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/m³

NIOSH: TWA 1 / ST 3 mg/m³

NIOSH STEL: 3 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

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

[inh] 50 µg/m³ DNEL: DNEL = Derived No-Effect Level (for workers) PNEC (fresh water) 2.5 µg/L PNEC = Predicted No Effected Concentration

FU value: 0.1 e mg/m3 TRGS 900 (DE): $0.1 \,\mathrm{F} \,\mathrm{mg/m^3}$ E/e respirable

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/m³

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 NIOSH:

OSHA: [TWA] 1 mg/m³

11 mL NO₃/N (R2)

Chemical: 2,6-dimethylphenol CAS No.: 576-26-1

not listed ppm NIOSH:

[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 ppm

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> Chemical: CAS No.: 67-63-0 2-propano

[inh] 500 mg/m³ Level (for workers) DNEL: DNEL = Derived No-Effect $\begin{array}{ccc} \text{PNEC}_{(\text{fresh water})}: & 140.9 \text{ mg/L} \\ \text{PNEC} = \text{Predicted No Effected Concentration} \end{array}$

TRGS 900 (DE): 200 ppm / 500 mg/m³

2 (II), Y Short-term exposure factor:

skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

SUVA(CH) MAK value: 200 ppm / 500 mg/m³ TRGS 903 (DE): [Aceton B/b, U/b] 25 mg/L

B blood, U urine, a no limitation, b end of exposition or shift

[TWA] 400 ppm / 980 mg/m³ NIOSH:

NIOSH STEL: 500 ppm / 1225 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] 400 ppm / 980 mg/m³

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

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

4 mL Nitrate 250 (R0)

Appearance: liquid Colour: colourless Odor: odorless

pH: 0-1 Specific gravity: 1,79 g/cm³ Solubility in water: 0-100 %

11 mL NO₃/N (R2)

Appearance: liquid Colour: rose Odor: alcoholic

6-8 pH: 18.5 °C Flash point: Specific gravity: 0,9 g/cm³ 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

Strong CORROSIVE, 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.

4 mL Nitrate 250 (R0)

Chemical: o-phosphoric acid CAS No.: 7664-38-2

California Proposition 65 List: not listed TSCA Inventory: 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: 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_{orl rat}: 1530 mg/kg LC50_{ihl rbt}: 1.689 mg/L

LD50_{drm rbt}: 2750 mg/kg
Acute Effects: Cause after oral intake, impairments of health when ingested in small quantities.

TRGS 905 (DE):

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

TSCA Inventory: California Proposition 65 List: not listed 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 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, >10% Toxic 97-1-405, Acc. Precaution Chem.

LD50_{orl rat}:

2140 mg/kg [8h] 600/ [4h] 850 mg/m³ LC50ihl rat:

TRGS 905 (DE): Kat 4

11 mL NO₃ /N (R2)

Chemical: 2,6-dimethylphenol CAS No.: 576-26-1

TSCA Inventory: California Proposition 65 List: not listed listed Target Organs: Leber, Niere

Canada CEPA 1999: DSL yes Australia NICNAS: not listed

Japan CSCL/PRTR: PRTR - Class I Designated Chemical Substance Yes, Japan PDSCL: not listed

Japan ISHL: not listed

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> South Korea TCCA: not listed

Korea Exist.Chem.Inventory: KE-35435, >5% Toxic 97-1-274

LD50_{orl rat}: 296 mg/kg 500 mg/m³ LC Lowin rbt: LD50_{drm rat}: 2325 mg/kg LD50_{drm rbt}: 1000 mg/kg LD50_{orl mus}: 450 mg/kg

CAS No.: 67-63-0 Chemical: 2-propanol

TSCA Inventory: listed California Proposition 65 List: not listed

ACGIH: 1230 ppm

Exposure Routes: inhalation, ingestion, skin and/or eye contact

Target Organs: Eyes, skin, respiratory system

Symptoms: irritation eyes, nose, throat; drowsiness, dizziness, headache; dry cracking skin; in animals: narcosis

Australia NICNAS: Canada CEPA 1999: DSL yes

Japan CSCL/PRTR: PAC yes, Japan PDSCL: -

Japan ISHL: listed ≥1,0%/≥0,1%, Article 57-2 (SDS required)

South Korea TCCA:

Korea Exist.Chem.Inventory: KE-29363 LD50_{orl rat}: 5045 mg/kg LC_Loworl hmn: 3570 mg/kg LC50_{ihl rat}: 16_{4h} g/m³ LD50_{drm rbt}: 12.8 g/kg

TRGS 905 (DE):

SECTION 12: Ecological information

12.1

Following information is valid for pure substances.

4 mL Nitrate 250 (R0)

CAS No.: 7664-38-2 Chemical: o-phosphoric acid

Avoid contact of substance/mixture to environment. LC50_{fish/96h}: 3-3.5 mg/L

Water hazard class (DE): WGK No.: 0392

Storage class (VCI): 8 B

sulfuric acid CAS No.: 7664-93-9

Avoid contact of substance/mixture to environment. PNEC (fresh water):
PNEC = Predicted No Effected Concentration 2.5 µg/L

LC50fish/96h: [NOEC, 65d] 25 µg/L EC50_{daphnia/48h}: 100 mg/L EC10_{pseudomonas putita/16h}: Water hazard class (DE): [72h] 100 mg/L WGK No.: 0182

Storage class (VCI):

11 mL NO₃/N (R2)

Chemical: 2,6-dimethylphenol CAS No.: 576-26-1

LC50_{pimephales} promelas/96h: 22-27 mg/L EC50 daphnia/48h: 11.2 mg/L

Water hazard class (DE): WGK No.: 1689

Dispersion coefficient(octanol-water) 2 36 Storage class (VCI): 6.1 C

CAS No.: 67-63-0 2-propanol

140.9 mg/L

PNEC (fresh water):
PNEC = Predicted No Effected Concentration

 $LC50_{fish/96h}$: 1400 mg/L EC50daphnia/48h: 13.3 g/L IC50_{scenedesmus} quadricauda/72h: >1000 mg/L EC10_{pseudomonas} putita/16h: Water hazard class (DE): EC5: 1050 mg/L WGK No.: 0135

Dispersion coefficient_(octanol-water): 0.05 Storage class (VCI):

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12.2 Persistence and degradability

not necessary

12.3 Bioaccumulative potential

not necessary

12.4 Mobility in soil

not necessary

Results of PBT and vPvB assessment 12.5

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. UN number: 3316 14.2. UN proper shipping name: Chemical Kit

14.3. Class: 14.4. Packing group:

Road transport Classification code:

M11 Tunnel restriction code:

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:

Or use Alternative declaration for transportation:

UN No.: (see below) UN 1993 class 3 II, class 8 II, Excepted Quantities (≤30 mL/∑≤500 mL) = ADR/ IATA E2

14.1 UN number: 3264

14.2 UN proper shipping name: Corrosive liquid, acidic, inorganic, n.o.s. (o-phosphoric acid, sulfuric acid solution)

14.3 Class: 14.4 Packing group:

Road transport

Classification code: C1

Limited Quantity: Tunnel restriction code: F 1 I E 2

Excepted Quantity: Air transport

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

Maritime transport

F-A, S-B R EmS: Storage category:

14.5 **Environmental hazards**

none, contains only small quantities of hazardous substances

14.6 Special precautions for user

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

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

H226 Flammable liquid and vapour. H290 May be corrosive to metals. H302 Harmful if swallowed.

Causes severe skin burns and eye damage. H314

Causes serious eve irritation. H319 H336 May cause drowsiness or dizziness.

16.1.2 List of relevant P phrases

Keep away from heat/sparks/open flames/hot surfaces. No smoking. P210

P260D Do not breathe vapours. P260sh Do not breathe dust/vapours.

P264W Wash with water thoroughly after handling. Wear protective gloves/eye protection. P280sh

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P301+312

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.

Immediately call a POISON CENTER/doctor. P310

P330 Rinse mouth

P390 Absorb spillage to prevent material damage.

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**

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, 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

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

Revisions/Updates

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 REF: 985066
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 Printing date: 02.06.2020
 Date of issue: 20.05.2019

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

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