

# Safety Data Sheet

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

REF: 740412.10

NucleoBond Xtra Midi Plus (10)

Page: 1/15

Printing date: 15.11.2021

Date of issue: 22.10.2021

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

### 1.1 Product identifier

REF 740412.10  
Product name NucleoBond Xtra Midi Plus (10)

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 60 mL ELU  
1 x 200 mL EQU  
1 x 100 mL LYS  
1 x 100 mL NEU  
1 x 100 mL RES  
1 x 0.6-100 mg RNase A (lyo)  
1 x 13 mL TRIS  
1 x 100 mL WASH

### 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  
Valenciennr Str. 11, 52355 Düren, 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



GHS07



GHS08

Signal word

DANGER

#### Hazard identification

H226  
H315  
H319  
H334

#### Hazard classes/categories

Flam. Liq. 3  
Skin Irrit. 2  
Eye Irrit. 2  
Resp. Sens. 1

### 2.1 Classification of the substance or mixture

60 mL ELU

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GHS02

GHS07

Signal word

WARNING

## Hazard identification

## Hazard classes/categories

H226

Flam. Liq. 3

H319

Eye Irrit. 2

### 200 mL EQU

Signal word

Do not need labelling as hazardous

-

No hazard class

### 100 mL LYS



GHS07

Signal word

WARNING

## Hazard identification

## Hazard classes/categories

H315

Skin Irrit. 2

H319

Eye Irrit. 2

### 100 mL NEU

Signal word

Do not need labelling as hazardous

-

No hazard class

### 100 mL RES

Signal word

Do not need labelling as hazardous

-

No hazard class

### 0.6-100 mg RNase A (Iyo)



GHS08

Signal word

DANGER

## Hazard identification

## Hazard classes/categories

H334

Resp. Sens. 1

### 13 mL TRIS

Do not need labelling as hazardous

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Signal word

-

No hazard class

100 mL WASH



GHS02

Signal word

WARNING

**Hazard identification**

**Hazard classes/categories**

H226

Flam. Liq. 3

## 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** 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). This labelling exemption is NOT valid for sensibilizing substances.

60 mL ELU



GHS02



GHS07

Signal word: WARNING

200 mL EQU

Do not need labelling as hazardous

Signal word: -

100 mL LYS



GHS07

Signal word: WARNING

100 mL NEU

Do not need labelling as hazardous

Signal word: -

100 mL RES

Do not need labelling as hazardous

Signal word: -

0.6-100 mg RNase A (Iyo)



GHS08

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Signal word: DANGER

H334

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

P261sh, P342+311

Avoid breathing dust/vapours. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

## 13 mL TRIS

Do not need labelling as hazardous

Signal word: -

## 100 mL WASH



GHS02

Signal word: WARNING

## 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. Flammable properties. ---

### Information pertaining to particular risks to human and possible symptoms

Cause after impairments of health when ingested in small quantities.

Kit contains small amounts of enzymes: May cause allergy or asthma symptoms or breathing difficulties if inhaled. -

### 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

#### 60 mL ELU

Chemical: 2-propanol

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

Formula: C<sub>3</sub>H<sub>8</sub>O

Pseudonym: isopropanol, IPA, propan-2-ol

TSCA Inventory: listed

REACH Reg. No.: 01-2119457558-25-XXXX

EC No.: 200-661-7

Indice No.: 603-117-00-0

RTECS: NT8050000

MFCD: 00011674

KE No.: KE-29363

Concentration: 10 - <15 %

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

CAS No.: 67-63-0

Chemical: potassium chloride

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

Formula: KCl

TSCA Inventory: listed

REACH Reg. No.: 01-2119539416-36-xxxx

EC No.: 231-211-8

MFCD: 00011360

RTECS: TS8050000

KE No.: KE-29086

Concentration: 1 - <10 %

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

CAS No.: 7447-40-7

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Chemical: *chemicals/mixture < 1%*

CAS No.: -

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

TSCA Inventory: all listed, &lt;1%

KE No.: listed

Concentration: 0.1 - &lt;1 %

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

## 200 mL EQU

Chemical: *potassium chloride*

CAS No.: 7447-40-7

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

Formula: KCl

TSCA Inventory: listed

REACH Reg. No.: 01-2119539416-36-xxxx

EC No.: 231-211-8

RTECS: TS8050000

MFCD:

00011360

KE No.: KE-29086

Concentration: 1 - &lt;10 %

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

## 100 mL LYS

Chemical: *sodium hydroxide solution (diluted < 2 %)*

CAS No.: 1310-73-2d

Classification: H314, Skin Corr. 1B

Formula: NaOH•H<sub>2</sub>O

Pseudonym: diluted soda lye

TSCA Inventory: listed

REACH Reg. No.: 01-2119457892-27-xxxx

EC No.: 215-185-5

Indice No.:

011-002-00-6

RTECS: WB4900000

KE No.: KE-31487

Concentration: 0.5 - &lt;1 %

acc. CLP (GHS): H315, Skin Irrit. 2, H319, Eye Irrit. 2

Chemical: *dodecyl sulfate, sodium salt*

CAS No.: 151-21-3

Classification: H228, Flam. Sol. 1, H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H318, Eye Dam. 1, H332, Acute Tox. 4 inh., H335, STOT SE 3, H412, Aquatic Chronic 3

Formula: C<sub>12</sub>H<sub>25</sub>NaO<sub>4</sub>S

Pseudonym: sodium lauryl sulfate, sulfuric acid monododecyl ester sodium salt

TSCA Inventory: listed

REACH Reg. No.: 01-2119489461-32-xxxx

EC No.: 205-788-1

RTECS: WT1050000

MFCD:

00036175

KE No.: KE-21884

Concentration: 0.1 - &lt;1 %

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

Chemical: *indicator dye(s)*

CAS No.: -

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

TSCA Inventory: all listed, &lt;1%

Concentration: &lt; 0.10 %

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

## 100 mL NEU

Chemical: *acetate buffer solution*

CAS No.: -

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

Formula: CH<sub>3</sub>COOH/K/Na•H<sub>2</sub>O

TSCA Inventory: all listed

KE No.: listed

Concentration: 25 - &lt;45 %

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

## 100 mL RES

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Chemical: chemicals/mixture < 1%

CAS No.: -

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

TSCA Inventory: all listed, <1%

KE No.: listed

Concentration: 0.1 - <1 %

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

## 0.6-100 mg RNase A (lyo)

Chemical: RNase

CAS No.: 9001-99-4

Classification: H334, Resp. Sens. 1

Formula: Enzyme Comm. No. 3.1.27.5, origin: bovine pancreas (controlled population)

Pseudonym: Nuclease, ribo-

TSCA Inventory: listed

EC No.: 232-646-6

RTECS: RF0760000

KE No.: KE-30341

Concentration: 90 - <100 %

acc. CLP (GHS): H334, Resp. Sens. 1

## 13 mL TRIS

Chemical: chemicals/mixture < 1%

CAS No.: -

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

TSCA Inventory: all listed, <1%

KE No.: listed

Concentration: 0.1 - <1 %

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

## 100 mL WASH

Chemical: ethanol (diluted < 20 %)

CAS No.: 64-17-5d

(denatured with 1%IPA/1%MEK, acc.2016/1867/EU)

Classification: H225, Flam. Liq. 2

Formula: C<sub>2</sub>H<sub>6</sub>O; C<sub>2</sub>H<sub>5</sub>OH

Pseudonym: ethyl alcohol, methylated spirit

TSCA Inventory: listed

REACH Reg. No.: 01-2119457610-43-xxxx

EC No.: 200-578-6

RTECS: KQ6300000

KE No.: KE-13217

Concentration: 5 - <20 %

acc. CLP (GHS): H226, Flam. Liq. 3

Indice No.:

603-002-00-5

MFCD:

00003568

Chemical: potassium chloride

CAS No.: 7447-40-7

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

Formula: KCl

TSCA Inventory: listed

REACH Reg. No.: 01-2119539416-36-xxxx

EC No.: 231-211-8

RTECS: TS8050000

KE No.: KE-29086

Concentration: 1 - <10 %

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

MFCD:

00011360

## 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

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Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water. (If possible) use soap.

## 4.1.2 After EYE Contact

After contact with the eyes rinse thoroughly under running water with the eyelid wide open with eye washing bottle, eye douche or running water (protect intact eye).

## 4.1.3 After INHALATION of vapours

After inhalation of foam or vapour fresh air should be inhaled. Keep airways free. 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 should be drunk after it has been ingested. ---

## 4.2 Most important symptoms and effects, both acute and delayed

Chronic Effects: May cause sensitization by skin contact, also in repeated contact of small amounts. May cause allergy or asthma symptoms or breathing difficulties if inhaled. ---

## 4.3 Indication of any immediate medical attention and special treatment needed

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

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.

### 5.4 Additional information

---

## SECTION 6: Accidental release measures

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

Do not breathe vapours. 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.

### 6.4 Reference to other sections

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product. 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.

Storage class (VCI): 3

Water hazard class (DE): 2

#### 7.2.1 Requirements for stock rooms and containers

Keep original product packages tightly closed during handling and storage.

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## 7.3 Specific end use(s)

Product for analytical use.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### 60 mL ELU

Chemical: 2-propanol

CAS No.: 67-63-0

DNEL: [inh] 500 mg/m<sup>3</sup>  
DNEL = Derived No-Effect Level (for workers)

PNEC(fresh water): 140.9 mg/L  
PNEC = Predicted No Effect Concentration

TRGS 900 (DE): 200 ppm / 500 mg/m<sup>3</sup>  
E/e respirable

Short-term exposure factor: 2 (II), Y  
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/m<sup>3</sup>  
TRGS 903 (DE): [Aceton B/b, U/b] 25 mg/L  
B blood, U urine, a no limitation, b end of exposition or shift

NIOSH: [TWA] 400 ppm / 980 mg/m<sup>3</sup>  
NIOSH STEL: 500 ppm / 1225 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] 400 ppm / 980 mg/m<sup>3</sup>

Chemical: potassium chloride

CAS No.: 7447-40-7

Chemical: chemicals/mixture < 1%

CAS No.: -

#### 200 mL EQU

Chemical: potassium chloride

CAS No.: 7447-40-7

#### 100 mL LYS

Chemical: sodium hydroxide solution

CAS No.: 1310-73-2d

Chemical: dodecyl sulfate, sodium salt

CAS No.: 151-21-3

NIOSH: not listed  
[TWA] Time-weighted average to a reference period of 8 hours, [STEL] Short-term exposure limit related to a 15-minute period

OSHA: not listed

Chemical: indicator dye(s)

CAS No.: -

#### 100 mL NEU

Chemical: acetate buffer solution

CAS No.: -

#### 100 mL RES

Chemical: chemicals/mixture < 1%

CAS No.: -

#### 0.6-100 mg RNase A (lyo)

Chemical: RNase

CAS No.: 9001-99-4

#### 13 mL TRIS

Chemical: chemicals/mixture < 1%

CAS No.: -

#### 100 mL WASH

Chemical: ethanol

CAS No.: 64-17-5d

DNEL: [derm] 343 mg/kg; [inh] 950 mg/m<sup>3</sup>  
DNEL = Derived No-Effect Level (for workers)

PNEC(fresh water): 0.96 mg/L  
PNEC = Predicted No Effect Concentration

TRGS 900 (DE): 200 ppm / 380 mg/m<sup>3</sup>  
E/e respirable

Short-term exposure factor: 4 (II), Y  
skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

SUVA(CH) MAK value: 500 ppm / 960 mg/m<sup>3</sup>

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NIOSH: [TWA] 1000 ppm / 1900 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: 1000 ppm / 1900 mg/m<sup>3</sup>

Chemical: *potassium chloride*

CAS No.: 7447-40-7

## 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 (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

#### 60 mL ELU

|                    |                        |                 |
|--------------------|------------------------|-----------------|
| Appearance: liquid | Colour: colourless     | Odor: alcoholic |
| pH:                | 8.5-9.5                |                 |
| Flash point:       | 30 °C                  |                 |
| Specific gravity:  | 1.04 g/cm <sup>3</sup> |                 |

#### 200 mL EQU

|                    |                        |                |
|--------------------|------------------------|----------------|
| Appearance: liquid | Colour: colourless     | Odor: odorless |
| pH:                | 6-7                    |                |
| Specific gravity:  | 1.05 g/cm <sup>3</sup> |                |

#### 100 mL LYS

|                    |                         |                |
|--------------------|-------------------------|----------------|
| Appearance: liquid | Colour: blue            | Odor: odorless |
| pH:                | 13                      |                |
| Specific gravity:  | 1.008 g/cm <sup>3</sup> |                |

#### 100 mL NEU

|                    |                        |              |
|--------------------|------------------------|--------------|
| Appearance: liquid | Colour: colourless     | Odor: acetic |
| pH:                | 4-5                    |              |
| Flash point:       | 63 °C                  |              |
| Specific gravity:  | 1.19 g/cm <sup>3</sup> |              |

#### 100 mL RES

|                    |                        |                |
|--------------------|------------------------|----------------|
| Appearance: liquid | Colour: colourless     | Odor: odorless |
| pH:                | 7.5 - 8.5              |                |
| Specific gravity:  | 1.01 g/cm <sup>3</sup> |                |

#### 0.6-100 mg RNase A (lyo)

|                            |                    |                |
|----------------------------|--------------------|----------------|
| Appearance: solid (lyoph.) | Colour: colourless | Odor: odorless |
| Solubility in water:       | 0-100 %            |                |

#### 13 mL TRIS

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Appearance: liquid  
pH:  
Specific gravity:

Colour: colourless  
8-9  
1.0 g/cm<sup>3</sup>

Odor: odorless

## 100 mL WASH

Appearance: liquid  
pH:  
Flash point:  
Specific gravity:

Colour: colourless  
6.5 - 7.5  
31 °C  
1.04 g/cm<sup>3</sup>

Odor: alcoholic

## 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. ---

### 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.

#### 60 mL ELU

Chemical: 2-propanol

CAS No.: 67-63-0

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<sub>orl rat</sub>: 5045 mg/kg

LC<sub>50</sub><sub>hmn</sub>: 3570 mg/kg

LC50<sub>ihl rat</sub>: 164h g/m<sup>3</sup>

LD50<sub>drm rbt</sub>: 12.8 g/kg

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

Chemical: potassium chloride

CAS No.: 7447-40-7

TSCA Inventory: listed

Korea Exist.Chem.Inventory: KE-29086

LD50<sub>orl rat</sub>: 2600 mg/kg

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Chemical: chemicals/mixture < 1%  
TSCA Inventory: all listed, <1%  
Korea Exist.Chem.Inventory: listed

CAS No.: -

## 200 mL EQU

Chemical: potassium chloride  
TSCA Inventory: listed  
Korea Exist.Chem.Inventory: KE-29086  
LD50<sub>orl rat</sub>: 2600 mg/kg

CAS No.: 7447-40-7

## 100 mL LYS

Chemical: sodium hydroxide solution  
TSCA Inventory: listed  
Exposure Routes: inhalation, ingestion, skin and/or eye contact  
Target Organs: Eyes, skin, respiratory system  
Symptoms: -  
Japan CSCL/PRTR: not listed, Japan PDSCL: not listed  
Japan ISHL: listed ≥1,0%/≥1,0% SDS required  
Korea Exist.Chem.Inventory: KE-31487  
LD50<sub>orl rat</sub>: < 1% > 50 g/kg  
LD50<sub>drm rbt</sub>: not applicable  
LD50<sub>orl mus</sub>: < 1% > 4 g/kg

CAS No.: 1310-73-2d

Chemical: dodecyl sulfate, sodium salt  
TSCA Inventory: listed  
Australia NICNAS: not listed  
Japan CSCL/PRTR: PRTR - Class I Designated Chemical Substance, Japan PDSCL: not listed  
Japan ISHL: not listed  
South Korea TCCA: not listed  
Korea Exist.Chem.Inventory: KE-21884  
LD50<sub>orl rat</sub>: 1288 mg/kg  
LC50<sub>inh rat</sub>: 3900<sub>1h</sub> mg/m<sup>3</sup>  
LD50<sub>drm rbt</sub>: 10 g/kg

CAS No.: 151-21-3

Chemical: indicator dye(s)  
TSCA Inventory: all listed, <1%

CAS No.: -

## 100 mL NEU

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

CAS No.: -

## 100 mL RES

Chemical: chemicals/mixture < 1%  
TSCA Inventory: all listed, <1%  
Korea Exist.Chem.Inventory: listed

CAS No.: -

## 0.6-100 mg RNase A (Iyo)

Chemical: RNase  
TSCA Inventory: listed  
Japan CSCL/PRTR: not listed  
Japan ISHL: not listed  
Korea Exist.Chem.Inventory: KE-30341  
LD50<sub>intraperitoneal rat</sub>: 392 mg/kg

CAS No.: 9001-99-4

Acute Effects: Cause after impairments of health when ingested in small quantities.

Chronic Effects: May cause sensitization by skin contact, also in repeated contact of small amounts. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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## 13 mL TRIS

Chemical: chemicals/mixture < 1%  
TSCA Inventory: all listed, <1%  
Korea Exist.Chem.Inventory: listed

CAS No.: -

## 100 mL WASH

Chemical: ethanol  
TSCA Inventory: listed  
ACGIH: 1000 ppm  
Exposure Routes: inhalation, ingestion, skin and/or eye contact  
Target Organs: Eyes, skin, respiratory system, central nervous system, liver, blood, reproductive system  
Symptoms: irritation eyes, skin, nose; headache, drowsiness, lassitude (weakness, exhaustion), narcosis; cough; liver damage; anemia; reproductive, teratogenic  
Australia NICNAS: not listed  
Japan CSCL/PRTR: not listed, Japan PDSC: not listed  
Japan ISHL: listed ≥0,1%/≥0,1%, Article 57-2 (SDS required)  
South Korea TCCA: not listed  
Korea Exist.Chem.Inventory: KE-13217  
LD50<sub>rat</sub>: 6200 mg/kg  
LC<sub>50</sub><sub>rat</sub>: 21.9 g/m<sup>3</sup>  
LC<sub>50</sub><sub>mouse</sub>: 1400 mg/kg  
LC<sub>50</sub><sub>rat</sub>: [4h] 39 g/m<sup>3</sup>  
LC<sub>50</sub><sub>rat</sub>: [10h] 20 g/m<sup>3</sup>  
LD50<sub>rat</sub>: 20 000 mg/kg  
LD50<sub>mouse</sub>: 3450 mg/kg

CAS No.: 64-17-5d

California Proposition 65 List: not listed

Canada CEPA 1999: DSL yes

TRGS 905 (DE): K5, M5, R<sub>F</sub> C

Chemical: potassium chloride  
TSCA Inventory: listed  
Korea Exist.Chem.Inventory: KE-29086  
LD50<sub>rat</sub>: 2600 mg/kg

CAS No.: 7447-40-7

## SECTION 12: Ecological information

### 12.1 Toxicity

Following information is valid for pure substances.

#### 60 mL ELU

Chemical: 2-propanol  
PNEC (fresh water): 140.9 mg/L  
PNEC = Predicted No Effect Concentration  
LC50<sub>fish/96h</sub>: 1400 mg/L  
EC50<sub>daphnia/48h</sub>: 13.3 g/L  
LC50<sub>scenedesmus quadricauda/72h</sub>: >1000 mg/L  
EC10<sub>pseudomonas putida/16h</sub>: EC5: 1050 mg/L  
Water hazard class (DE): 1 WGK No.: 0135  
Dispersion coefficient<sub>(octanol-water)</sub>: 0.05  
Storage class (VCI): 3

CAS No.: 67-63-0

Chemical: potassium chloride  
Water hazard class (DE): 1  
Storage class (VCI): 12-13

CAS No.: 7447-40-7

Chemical: chemicals/mixture < 1%  
Water hazard class (DE): 1  
Storage class (VCI): 12-13

CAS No.: -

#### 200 mL EQU

Chemical: potassium chloride  
Water hazard class (DE): 1  
Storage class (VCI): 12-13

CAS No.: 7447-40-7

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## 100 mL LYS

Chemical: *sodium hydroxide solution*  
 LC50<sub>leuciscus idus/96h</sub>: 35-189 mg/L  
 LC50<sub>fish/96h</sub>: 45.4 mg/L  
 EC50<sub>daphnia/48h</sub>: >100 mg/L  
 Water hazard class (DE): nwg WGK No.: 0142  
 Storage class (VCI): 12-13

CAS No.: 1310-73-2d

Chemical: *dodecyl sulfate, sodium salt*  
 LC50<sub>daphnia magna/48h</sub>: 6.3 mg/L  
 LC50<sub>fish/96h</sub>: 1.31-22.5 mg/L  
 Water hazard class (DE): 2  
 Dispersion coefficient<sub>(octanol-water)</sub>: 1.6  
 Storage class (VCI): 12-13

CAS No.: 151-21-3

Chemical: *indicator dye(s)*  
 Storage class (VCI): 12-13

CAS No.: -

## 100 mL NEU

Chemical: *acetate buffer solution*  
 Storage class (VCI): 12

CAS No.: -

## 100 mL RES

Chemical: *chemicals/mixture < 1%*  
 Water hazard class (DE): 1  
 Storage class (VCI): 12-13

CAS No.: -

## 0.6-100 mg RNase A (lyo)

Chemical: *RNase*  
 Water hazard class (DE): 1  
 Storage class (VCI): 13

CAS No.: 9001-99-4

## 13 mL TRIS

Chemical: *chemicals/mixture < 1%*  
 Water hazard class (DE): 1  
 Storage class (VCI): 12-13

CAS No.: -

## 100 mL WASH

Chemical: *ethanol*  
 PNEC<sub>(fresh water)</sub>: 0.96 mg/L  
 PNEC = Predicted No Effect Concentration  
 LC50<sub>daphnia magna/48h</sub>: >100 g/L  
 LC50<sub>pimephales promelas/96h</sub>: 13.4-15.1 g/L  
 LC50<sub>leuciscus idus/96h</sub>: [48h] 8.14 g/L  
 LC50<sub>fish/96h</sub>: 13 g/L  
 EC50<sub>daphnia/48h</sub>: 9.3-14.2 g/L  
 IC50<sub>scenedesmus quadricauda/72h</sub>: [7d] 5000 mg/L  
 EC10<sub>pseudomonas putida/16h</sub>: [EC5] 6500 mg/L  
 Water hazard class (DE): 1 WGK No.: 0096  
 Dispersion coefficient<sub>(octanol-water)</sub>: -0.31  
 Storage class (VCI): 3

CAS No.: 64-17-5d

Chemical: *potassium chloride*  
 Water hazard class (DE): 1  
 Storage class (VCI): 12-13

CAS No.: 7447-40-7

## 12.2 Persistence and degradability

not necessary

## 12.3 Bioaccumulative potential

not necessary

## 12.4 Mobility in soil

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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.

## SECTION 14: Transport information

**14.1 UN number:** 1993 **14.2 UN proper shipping name:** Flammable liquid, n.o.s. (2-propanol mixture)

**14.3 Class:** 3 **14.4 Packing group:** III

*Road transport*

Classification code: F1

Limited Quantity: 5 L

Excepted Quantity: E 1

*Air transport*

PAX: 355

CAO: 366

*Maritime transport*

EmS: F-E, S-E

Tunnel restriction code: E

Special instructions: 640E

max. weight PAX: 60 L

max. weight CAO: 220 L

Storage category: A

### 14.5 Environmental hazards

none, contains only small quantities of hazardous substances

### 14.6 Special precautions for user

not necessary

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

not applicable

## SECTION 15: Regulatory information

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

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013

German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC

TRGS 200, German engineering rules governing the classification and labelling of hazardous substances, preparations and products, updated October 2011

MN Leaflet/User manual, also see [www.mn-net.com](http://www.mn-net.com)

Look for your country-specific regulations.

### 15.2 Chemical safety assessment

not necessary for these small amounts ---

## SECTION 16: Other information

### 16.1 List of H and P phrases

#### 16.1.1 List of relevant H phrases

H226 Flammable liquid and vapour.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

#### 16.1.2 List of relevant P phrases

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

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|          |                                                                            |
|----------|----------------------------------------------------------------------------|
| P261sh   | Avoid breathing dust/vapours.                                              |
| P280sh   | Wear protective gloves/eye protection.                                     |
| P304+340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P342+311 | If experiencing respiratory symptoms: 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  
Regulation 1480/2018/EU, 4<sup>th</sup> adaptation of CLP regulation to technical and scientific progress  
Regulation 849/2021/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 03/2019  
SUVA .CH, Limits in air at work 2009, revised on 01.2009  
TRGS 907, German engineering rules governing listing of substances and causes of sensitizations, updated November 2011  
KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

### Revisions/Updates

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