

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

REF: 740990.10 NucleoSpin RNA Plus XS (10) Page: 1/14

Date of issue: 05.07.2019 Printing date: 12.05.2021

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

#### 1.1 **Product identifier**

REF 740990.10

Product name NucleoSpin RNA Plus XS (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 10 mL BSXS 1 x 6 mL LB1 1 x 6 mL LB2 1 x 10 mL MDB 1 x 6 mL WB2

1 x 13 mL RNase-free H<sub>2</sub> O

#### 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 Valencienner 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

Aquatic Chronic 3

Signal word WARNING

Hazard identification Hazard classes/categories Flam. Liq. 3 H226 H302 Acute Tox. 4 oral

#### 2.1 Classification of the substance or mixture

10 mL BSXS

H412

Do not need labelling as hazardous

Signal word

No hazard class

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6 mL LB1

Signal word WARNING

Hazard identification Hazard classes/categories

H302 Acute Tox. 4 oral H412 Aquatic Chronic 3

6 mL LB2

Signal word WARNING

Hazard identification Hazard classes/categories

H302 Acute Tox. 4 oral H412 Aquatic Chronic 3

10 mL MDB



Signal word WARNING

Hazard identification Hazard classes/categories

H226 Flam. Liq. 3

6 mL WB2

Do not need labelling as hazardous

Signal word

No hazard class

13 mL RNase-free H<sub>2</sub> O

Do not need labelling as hazardous

Signal word

No hazard class

#### 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).

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).

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## **ACHEREY-NAGE**I



# **Safety Data Sheet**

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### 10 mL BSXS

Do not need labelling as hazardous Signal word: -

### 6 mL LB1



Signal word: WARNING

Harmful to aquatic life with long lasting effects.

### 6 mL LB2



Signal word: WARNING

Harmful to aquatic life with long lasting effects.

### 10 mL MDB



Signal word: WARNING

### 6 mL WB2

Do not need labelling as hazardous Signal word: -

### 13 mL RNase-free H<sub>2</sub> O

Do not need labelling as hazardous Signal word: -

#### Other hazards 2.3

### Possible hazards from physicochemical properties

Flammable properties. For guanidine thiocyanate CAS 593-84-0: The properties H314, H332 "Causes severe skin burns and eye damage. Harmful if inhaled." are not relevant, because the mixture solution is buffered to pH 4-9 (see GHS Directive 1272/2008/EC Annex I, chapter 3.2.3.1.2.). ---

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

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

### Information pertaining to particular risks to the environment

Harmful to aquatic life with long lasting effects. Avoid contact of substance/mixture to environment.

not applicable vPvB: not applicable

Other hazards

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## **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances or 3.2 Mixtures

10 ml BSXS

Chemical: diethyl malonate CAS No.: 105-53-3

Classification: No criteria for classification or naming of chemical not required. C7  $H_{12}\ O_4$  ;  $CH_2\ (COOC_2\ H_5\ )_2$ Formula:

EC No.: 203-305-9 OO0700000 RTECS: Concentration: 50 - <80 %

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

ethyleneglycol diacetate CAS No.: 111-55-7 Chemical:

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

Formula: C<sub>6</sub> H<sub>10</sub> O<sub>4</sub>

Pseudonym: 1,2-Ethanediol, 1,2-diacetate TSCA Inventory: listed

REACH Reg. No.: 01-2119969454-26-xxxx

EC No.: 203-881-1

KW4025000 MFCD: 00008718 RTFCS

KE No.: KE-13170 Concentration: 10 - <30 %

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

Chemical: formic acid CAS No.: 64-18-6

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

Formula: CH<sub>2</sub> O<sub>2</sub>; H-COOH TSCA Inventory: listed

REACH Reg. No.: 01-2119491174-37-xxxx

EC No.: 200-579-1 Indice No: 607-001-00-0 LQ4900000 00003297 RTFCS: MFCD:

KE No.: KE-17233, Acc. Precaution Chem.

Concentration: < 0.10 %

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

6 mL LB1

guanidinium thiocyanate Chemical: CAS No.: 593-84-0

Classification: H302, Acute Tox. 4 oral, H312, Acute Tox. 4 derm., H314, Skin Corr. 1B, H332, Acute Tox. 4 inh.,

H412, Aquatic Chronic 3

Formula:  $C_2 H_6 N_4 S$ Pseudonym: quanidine rhodanide

TSCA Inventory: listed

REACH Reg. No.: 01-2120735072-65-0001

209-812-1 EC No.: 615-004-00-3 Indice No.: RTECS: XL1225000 MFCD: 00013027

KE No.: not listed 30 - < 45 %

Concentration:

acc. CLP (GHS): H302, Acute Tox. 4 oral, H412, Aquatic Chronic 3

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: 01-<1%

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

6 mL LB2

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> guanidinium thiocyanate CAS No.: 593-84-0 Chemical:

H302, Acute Tox. 4 oral, H312, Acute Tox. 4 derm., H314, Skin Corr. 1B, H332, Acute Tox. 4 inh., Classification:

H412, Aquatic Chronic 3

Formula: C2 H6 N4 S guanidine rhodanide

Pseudonym: TSCA Inventory: listed

REACH Reg. No.: 01-2120735072-65-0001

615-004-00-3 EC No.: 209-812-1 Indice No.: RTECS: XL1225000 MFCD: 00013027

KE No .: not listed Concentration: 30 - <45 %

acc. CLP (GHS): H302, Acute Tox. 4 oral, H412, Aquatic Chronic 3

Chemical: chemicals/mixture < 1% CAS No .: -

Classification: No criteria for classification or naming of chemical not required. all listed, <1%

TSCA Inventory: KE No.: listed Concentration: 01-<1%

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

10 mL MDB

Chemical: guanidinium thiocyanate CAS No.: 593-84-0

Classification: H302, Acute Tox. 4 oral, H312, Acute Tox. 4 derm., H314, Skin Corr. 1B, H332, Acute Tox. 4 inh.,

H412, Aquatic Chronic 3

Formula: C<sub>2</sub> H<sub>6</sub> N<sub>4</sub> S

guanidine rhodanide Pseudonvm:

TSCA Inventory: listed

REACH Reg. No.: 01-2120735072-65-0001

EC No.: 209-812-1 615-004-00-3 Indice No.: RTECS: XL1225000 MFCD: 00013027

not listed KE No.: Concentration: 5 - < 10 %

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

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

ethyl alcohol, methylated spirit Pseudonym:

TSCA Inventory: listed

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

200-578-6 EC No.: 603-002-00-5 Indice No : KQ6300000 RTECS: MFCD: 00003568

KE No.: KE-13217 Concentration: 5 - <20 % acc. CLP (GHS): H226, Flam. Liq. 3

6 mL WB2

CAS No .: -Chemical: chemicals/mixture < 1%

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.

13 mL RNase-free H<sub>2</sub> O

Chemical: CAS No.: 7732-18-5 water

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

Formula:  $H_2 O$ TSCA Inventory: listed

REACH Reg. No.: exempt, Annex IV 231-791-2 EC No.: ZC0110000 RTFCS: KE No.: KE-35400 Concentration: 90 - <100 %

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

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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**

### 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.

### 4.1.1 After SKIN Contact

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. ---

### 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

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

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## **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

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### **SECTION 6: Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapours. Regular staff training is necessary.

### 6.2 Environmental precautions

not necessary, contains only small amounts of these substances

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

Bind any escaping liquid with inert absorbent.

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.

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.

7.3 Specific end use(s)

Product for analytical use.

## **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

10 mL BSXS

CAS No.: 105-53-3 Chemical: diethyl malonate

Chemical: CAS No.: 111-55-7 ethyleneglycol diacetate

Chemical: formic acid CAS No.: 64-18-6

DNEL: 9,5 mg/m<sup>3</sup> = Derived No-Effect Level (for workers)

EU value: 9.5 mg/m<sup>3</sup>

TRGS 900 (DE): 5 mL/m3 / 9.5 mg/m3

E/e respirable Short-term exposure factor: 2 (I)

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

6 mL LB1

Chemical: guanidinium thiocyanate CAS No.: 593-84-0

[inh] 1092 µg/m<sup>3</sup> DNEL: Level (for workers)

 $\begin{array}{ccc} PNEC_{(fresh\ water)} : & 42.4\ \mu g/L \\ PNEC = Predicted\ No\ Effected\ Concentration \end{array}$ 

not listed 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

CAS No .: -Chemical: chemicals/mixture < 1%

6 mL LB2

Chemical: guanidinium thiocyanate CAS No.: 593-84-0

[inh] 1092 µg/m³ Level (for workers) DNFI · DNEL = Derived No-Effect

 $\begin{array}{ccc} PNEC_{(fresh\ water)}: & 42.4\ \mu g/L \\ PNEC = Predicted\ No\ Effected\ Concentration \end{array}$ 

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: chemicals/mixture < 1% CAS No .: -

10 mL MDB

Chemical: guanidinium thiocyanate CAS No.: 593-84-0

DNEL: [inh] 1092 µg/m<sup>3</sup> DNEL = Derived No-Effect Level (for workers)

 $\begin{array}{ccc} PNEC_{(fresh\ water)}: & 42.4\ \mu g/L \\ PNEC = Predicted\ No\ Effected\ Concentration \end{array}$ 

[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

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> Chemical: CAS No.: 64-17-5d ethanol

 $[derm] \ 343 \ mg/kg; \ [inh] \ 950 \ mg/m^{s} \\ \text{DNEL} = \text{Derived No-Effect Level (for workers)}$ DNEL:

 $\begin{array}{ccc} \text{PNEC}_{(\text{fresh water})}: & 0.96 \text{ mg/L} \\ \text{PNEC} = \text{Predicted No Effected Concentration} \end{array}$ 

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

4 (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: 500 ppm / 960 mg/m<sup>3</sup>

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

[TWA] Time-weighted aver age to a reference period of 8 hours, [STEL] Short-term exposure limit related to a 15-minute period

1000 ppm / 1900 mg/m<sup>3</sup> OSHA:

6 mL WB2

Chemical: chemicals/mixture < 1% CAS No .: -

13 mL RNase-free H<sub>2</sub> O

Chemical: CAS No.: 7732-18-5

#### 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.

#### 8.2.4 Skin protection

Recommended

#### 8.2.5 Personal hygiene

Eating, drinking, smoking, taking snuff and storage of food in work areas and at outdoor workplaces is prohibited. Avoid contact with the skin, eyes and clothing. Rinse any clothing on which the substance has been spilled, and soak it in water. Wash hands thoroughly with soap and water when stopping work and before eating, and then apply protective skin cream.

### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

10 mL BSXS

Appearance: liquid Colour: colourless Odor: organic

Specific gravity: 1.06 g/cm3

6 mL LB1

Appearance: liquid Colour: colourless Odor: odorless

pH: 4.5-5.0

Specific gravity: 1,10 g/cm<sup>3</sup>

6 mL LB2

Appearance: liquid Colour: colourless Odor: odorless

7-8 pH: Specific gravity: 1,10 g/cm<sup>3</sup>

10 mL MDB

Odor: alcoholic Colour colourless Appearance: liquid

pH: 6.7-7.2 Flash point: 55 °C Specific gravity: 1.01 g/cm<sup>3</sup>

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6 mL WB2

Colour: colourless Odor: odorless Appearance: liquid

pH. 7-8 Specific gravity: 1.00 g/cm<sup>3</sup>

13 mL RNase-free H<sub>2</sub> O

Odor: odorless Appearance: liquid Colour: colourless

6-8 Specific gravity: 1.0 g/cm<sup>3</sup>

#### 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

no further data available.

#### 10.2 Chemical stability

No known instability

#### 10.3 Possibility of hazardous reactions

Note: Can form very reactive substances with oxidizing agents. Possible: Contact with acids liberates toxic gas. No further data

#### 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.

### 10 mL BSXS

Chemical: diethyl malonate CAS No.: 105-53-3

LD50<sub>orl rat</sub>: 15.7 g/kg >16 g/kg LD50<sub>drm rbt</sub>:

Chemical: ethyleneglycol diacetate CAS No.: 111-55-7

TSCA Inventory: Korea Exist.Chem.Inventory: KE-13170 LD50<sub>orl rat</sub>: 6850 mg/kg LD50<sub>drm rbt</sub>: 9328 mg/kg

Chemical: CAS No.: 64-18-6 formic acid

TSCA Inventory: listed

Korea Exist.Chem.Inventory: KE-17233, Acc. Precaution Chem.

730 mg/kg LD50<sub>orl rat</sub>: LC50<sub>ihl rat</sub>: 7.4<sub>4h</sub> mg/m<sup>3</sup>

6 mL LB1

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> quanidinium thiocyanate Chemical: CAS No.: 593-84-0

TSCA Inventory: California Proposition 65 List: not listed listed Australia NICNAS: not listed Canada CEPA 1999: DSL yes

Japan CSCL/PRTR: not listed, Japan PDSCL: not listed

Japan ISHL: not listed South Korea TCCA: not listed Korea Exist.Chem.Inventory: not listed LD50<sub>orl rat</sub>: 593 mg/kg LC50<sub>drm rbt</sub>: >2000 mg/m<sup>3</sup> LC50<sub>ihl rat</sub>: [4h] 5.319 mg/L

LD50<sub>ipr mus</sub>: 300 mg/kg

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

Chemical: chemicals/mixture < 1% CAS No .: -

TSCA Inventory: all listed, <1% Korea Exist.Chem.Inventory: listed

6 mL LB2

Chemical: CAS No.: 593-84-0 guanidinium thiocyanate

California Proposition 65 List: not listed TSCA Inventory: listed Australia NICNAS: not listed Canada CEPA 1999: DSL yes

Japan CSCL/PRTR: not listed, Japan PDSCL: not listed

Japan ISHL: not listed South Korea TCCA: not listed Korea Exist.Chem.Inventory: not listed LD50<sub>orl rat</sub>: 593 mg/kg LC50<sub>drm rbt</sub>: >2000 mg/m<sup>3</sup> LC50<sub>ihl rat</sub>: [4h] 5.319 mg/L LD50<sub>ipr mus</sub> 300 mg/kg

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

chemicals/mixture < 1% CAS No.: -

TSCA Inventory: all listed, <1%

Korea Exist.Chem.Inventory: listed

10 mL MDB

Chemical: guanidinium thiocyanate CAS No.: 593-84-0

TSCA Inventory: listed California Proposition 65 List: not listed Australia NICNAS: not listed Canada CEPA 1999: DSL ves

not listed, Japan PDSCL: not listed Japan CSCL/PRTR:

Japan ISHL: not listed South Korea TCCA: not listed Korea Exist.Chem.Inventory: not listed LD50<sub>orl rat</sub>: 593 mg/kg LC50<sub>drm rbt</sub>: >2000 mg/m<sup>3</sup> [4h] 5.319 mg/L LC50<sub>ihl rat</sub>: LD50<sub>ipr mus</sub>: 300 mg/kg

Chemical: ethanol CAS No.: 64-17-5d

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

not listed, Japan PDSCL: not listed Japan CSCL/PRTR:

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>orl rat</sub>: 6200 mg/kg LC\_Lowihl gpg: 21.9 g/m<sup>3</sup> 1400 mg/kg LC\_Loworl hmn: LC50<sub>ihl mouse</sub>: [4h] 39 g/m<sup>3</sup> LC50ihl rat: [10h] 20 g/m<sup>3</sup>

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> 20 000 mg/kg LD50<sub>drm rbt</sub>: LD50<sub>oral mouse</sub>: 3450 mg/kg TRGS 905 (DE): K5, M5, R<sub>F</sub> C

6 mL WB2

Chemical: chemicals/mixture < 1% CAS No : -

TSCA Inventory: all listed, <1%

Korea Exist.Chem.Inventory: listed

13 mL RNase-free H2 O

Chemical: CAS No.: 7732-18-5

TSCA Inventory: listed Korea Exist.Chem.Inventory: KE-35400

## **SECTION 12: Ecological information**

#### 12.1 **Toxicity**

Following information is valid for pure substances.

10 mL BSXS

CAS No.: 105-53-3 Chemical: diethyl malonate

LC50pimephales promelas/96h: 11.8 mg/L EC50<sub>daphnia/48h</sub>: 202.3 mg/L

[Desm. subsp., 72h] 508.2 mg/L IC50<sub>scenedesmus</sub> quadricauda/72h 3.097 mg/L

EC10pseudomonas putita/16h: Water hazard class (DE):

Storage class (VCI): 10

Chemical: ethyleneglycol diacetate CAS No.: 111-55-7

Water hazard class (DE):

Chemical: CAS No.: 64-18-6

46-100 mg/L LC50leuciscus idus/96h: EC50<sub>daphnia/48h</sub>: 34 mg/L Water hazard class (DE): 1 Storage class (VCI): 3

6 mL LB1

guanidinium thiocyanate CAS No.: 593-84-0 Chemical:

Harmful to aquatic life with long lasting effects. Avoid contact of substance/mixture to environment.

Environmental hazards must not be labelled with P phrases until 125 mL (EU 1272/2008 Annex I - 1.5.2).

PNEC(fresh water):
PNEC = Predicted No Effected Concentration 42.4 µg/L

LC50<sub>fish/96h</sub>: [4d] 89.1 mg/L EC50daphnia/48h: 42.4 mg/L IC50<sub>scenedesmus</sub> quadricauda/72h: 130 mg/L EC10<sub>pseudomonas putita/16h</sub>: [10d] 200 mg/L

Water hazard class (DE):

Dispersion coefficient<sub>(octanol-water)</sub>: [pH 5.1] -1.11

Storage class (VCI):

Chemical: CAS No .: chemicals/mixture < 1%

Water hazard class (DE): 12-13 Storage class (VCI):

6 mL LB2

guanidinium thiocyanate CAS No.: 593-84-0

Harmful to aquatic life with long lasting effects. Avoid contact of substance/mixture to environment. Environmental hazards must not be labelled with P phrases until 125 mL (EU 1272/2008 Annex I - 1.5.2).

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

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> LC50<sub>fish/96h</sub>: [4d] 89.1 mg/L EC50<sub>daphnia/48h</sub>: 42.4 mg/L IC50<sub>scenedesmus</sub> quadricauda/72h: 130 mg/L EC10<sub>pseudomonas</sub> putita/16h [10d] 200 mg/L Water hazard class (DE): Dispersion coefficient<sub>(octanol-water)</sub>: [pH 5.1] -1.11

Storage class (VCI):

chemicals/mixture < 1% CAS No .: -

Water hazard class (DE): Storage class (VCI): 12-13

10 mL MDB

guanidinium thiocyanate CAS No.: 593-84-0 Chemical:

PNEC<sub>(fresh water)</sub>:
PNEC = Predicted No Effected Concentration 42.4 µg/L

LC50<sub>fish/96h</sub>: [4d] 89.1 mg/L 42.4 mg/L  $EC50_{daphnia/48h}$ : 130 mg/L IC50scenedesmus quadricauda/72h EC10pseudomonas putita/16h: [10d] 200 mg/L

Water hazard class (DE):

Dispersion coefficient<sub>(octanol-water)</sub>: [pH 5.1] -1.11

Storage class (VCI):

CAS No.: 64-17-5d Chemical: ethanol

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

LC50<sub>daphnia magna/48h</sub>: >100 g/L LC50<sub>pimephales</sub> promelas/96h: 13.4-15.1 g/L [48h] 8.14 g/L LC50<sub>leuciscus idus/96h</sub>: LC50fish/96h: 13 g/L 9.3-14.2 g/L EC50daphnia/48h: IC50<sub>scenedesmus</sub> quadricauda/72h: [7d] 5000 mg/L EC10<sub>pseudomonas putita/16h</sub>: Water hazard class (DE): [EC5] 6500 mg/L WGK No.: 0096

Dispersion coefficient<sub>(octanol-water)</sub>: -0.31 Storage class (VCI):

6 mL WB2

Chemical: chemicals/mixture < 1% CAS No .: -

Water hazard class (DE): Storage class (VCI): 12-13

13 mL RNase-free H<sub>2</sub> O

Chemical: CAS No.: 7732-18-5

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

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### **SECTION 13: Disposal considerations**

Do not collect in acidic waste. May form toxic gases.

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 - 14.4: No dangerous goods according the transport regulations (Ethanol: ADR SI144/ IATA A58)

#### 14.5 **Environmental hazards**

none, contains only small quantities of hazardous substances, contains only small amounts of these substances

#### 14.6 Special precautions for user

not necessary

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

not applicable

### **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.

H302 Harmful if swallowed.

Harmful to aquatic life with long lasting effects. H412

#### 16.1.2 List of relevant P phrases

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

P264W Wash with water thoroughly after handling.

P273 Avoid release to the environment

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

P330 Rinse mouth.

#### 16.2 Training advice

Multiple safety training of staffs about danger and protection by using hazards in working area.

#### 16.3 Recommended restriction on use

Only for professional user.

An individual package of this product or test kit has a moderate hazardous potential.

### 16.4

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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

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

### Revisions/Updates

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

2017-11 Adaption of ECHA Registration dossier

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