

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740873.1

NucleoSpin 96 cfDNA (1x96)

Page: 1/18

Printing Date: 04.04.2023

Date of Issue: 03.03.2023

Version: 2.2.15.8

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

### 1.1 Product Identifier / Product Name

|                              |                            |
|------------------------------|----------------------------|
| REF                          | 740873.1                   |
| Product Name                 | NucleoSpin 96 cfDNA (1x96) |
| 2 x 250 mL PMB               | UFI: 60EV-03C8-D201-X08S   |
| 1 x 50 mL PMW2               |                            |
| 1 x 75 mL PMA                | UFI: H8PT-538R-N207-U9GD   |
| 1 x 100 mL PML               | UFI: F37V-23QV-720V-9F2A   |
| 1 x 100 mL PMW1              | UFI: MMPT-631A-V206-GNTN   |
| 1 x 13 mL PME                |                            |
| 1 x 6 mL Liquid Proteinase K | UFI: TTWV-43C9-R202-NTGN   |

### 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 and of the Safety Data Sheet

#### Manufactured by:

MACHEREY-NAGEL GmbH & Co. KG  
Valenciennner Str. 11, 52355 Düren, Germany  
Phone: +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.

USA: American Association Of Poison Control Centers

Rockville, MD 20857. tel. 1-800-222-1222, <<https://www.poisonhelp.org>>

DE: Gemeinsames Giftinformationszentrum (GGIZ)

99089 Erfurt tel. +49 361 730 730

<<https://www.ggiz-erfurt.de>>

You find our current versions of SDS in Internet:

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

## SECTION 2: Hazard(s) Identification

### 2.0 Classification of the complete Product



GHS02

GHS07

GHS08

Signal Word

DANGER

#### Hazard Identification

#### Hazard Classes/Categories

|      |                   |
|------|-------------------|
| H226 | Flam. Liq. 3      |
| H302 | Acute Tox. 4 oral |
| H315 | Skin Irrit. 2     |
| H319 | Eye Irrit. 2      |
| H334 | Resp. Sens. 1     |
| H336 | STOT SE 3         |

### 2.1 Classification of the substance or mixture

75 mL PMA


MACHEREY-NAGEL GmbH & Co. KG  
Valenciennner Str. 11  
52355 Düren · Germany  
[www.mn-net.com](http://www.mn-net.com)

DE Tel.: +49 24 21 969-0 info@mn-net.com  
CH Tel.: +41 62 388 55 00 sales-ch@mn-net.com  
FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com  
US Tel.: +1 888 321 62 24 sales-us@mn-net.com

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740873.1

NucleoSpin 96 cfDNA (1x96)

Page: 2/18

Printing Date: 04.04.2023

Date of Issue: 03.03.2023

Version: 2.2.15.8



GHS07

Signal Word

WARNING

### Hazard Identification

### Hazard Classes/Categories

H315

Skin Irrit. 2

H319

Eye Irrit. 2

### 6 mL Liquid Proteinase K



GHS08

Signal Word

DANGER

### Hazard Identification

### Hazard Classes/Categories

H334

Resp. Sens. 1

### 100 mL PML



GHS07

Signal Word

WARNING

### Hazard Identification

### Hazard Classes/Categories

H302

Acute Tox. 4 oral

H315

Skin Irrit. 2

H319

Eye Irrit. 2

### 250 mL PMB



GHS02



GHS07

Signal Word

WARNING

### Hazard Identification

### Hazard Classes/Categories

H226

Flam. Liq. 3

H302

Acute Tox. 4 oral

H315

Skin Irrit. 2

H319

Eye Irrit. 2

### 100 mL PMW1



GHS02



GHS07

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740873.1

NucleoSpin 96 cfDNA (1x96)

Page: 3/18

Printing Date: 04.04.2023

Date of Issue: 03.03.2023

Version: 2.2.15.8

Signal Word

WARNING

### Hazard Identification

### Hazard Classes/Categories

|      |                   |
|------|-------------------|
| H226 | Flam. Liq. 3      |
| H302 | Acute Tox. 4 oral |
| H315 | Skin Irrit. 2     |
| H319 | Eye Irrit. 2      |
| H336 | STOT SE 3         |

### 13 mL PME

Signal Word

Do not need labelling as hazardous

No Hazard Class

### 50 mL PMW2

Signal Word

Do not need labelling as hazardous

No Hazard Class

List of H phrases: see section 16.2

## 2.2

### Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

According the implementation of GHS immediate packages only must be labelled with product identifier(s), GHS symbol(s), signal word, manufacturer name and phone number (OSHA's interpretation of HCS 2012). 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) / **until 100 mL** (Canada WHMIS 2015). This labelling exemption does not apply to U.S.A. This labelling exemption is NOT valid for sensiblizing substances.

### 75 mL PMA



GHS07

Signal Word: WARNING

### 6 mL Liquid Proteinase K



GHS08

Signal Word: DANGER

H334

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

P261sh, P342+311

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

### 100 mL PML



GHS07

Signal Word: WARNING

### 250 mL PMB

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740873.1

NucleoSpin 96 cDNA (1x96)

Page: 4/18

Printing Date: 04.04.2023

Date of Issue: 03.03.2023

Version: 2.2.15.8



GHS02



GHS07

Signal Word: WARNING

H226, H302, H315, H319

Flammable liquid and vapor. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation.

P210, P264W, P280sh, P301+312, P330

Wash with water thoroughly after handling. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Wear protective gloves/eye protection. Rinse mouth.

### 100 mL PMW1



GHS02



GHS07

Signal Word: WARNING

### 13 mL PME

Do not need labelling as hazardous

Signal Word: -

### 50 mL PMW2

Do not need labelling as hazardous

Signal Word: -

## Label elements of the complete product



GHS02



GHS07



GHS08

Signal Word: DANGER

H226, H302, H315, H319, H334

Flammable liquid and vapor. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

P210, P261sh, P264W, P280sh, P301+312, P330, P342+311

Avoid breathing dust/vapors. Wash with water thoroughly after handling. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Wear protective gloves/eye protection. Rinse mouth. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

## 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. Vapour forms explosive mixtures with air.

#### Information pertaining to particular Risks to Human and possible Symptoms

Cause after oral intake, impairments of health when ingested in small quantities. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Kit contains small amounts of enzymes, which may cause sensitization by direct and repeated contact.

#### Information pertaining to particular Risks to the Environment

PBT: not applicable

vPvB: not applicable

#### Possible endocrine disrupting effects

data not available

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740873.1

NucleoSpin 96 cDNA (1x96)

Page: 5/18

Printing Date: 04.04.2023

Date of Issue: 03.03.2023

Version: 2.2.15.8

## SECTION 3: Composition/Information on Ingredients

### 3.1 Substances or 3.2 Mixtures

#### 250 mL PMB

Substance name: *guanidine hydrochloride*  
CAS No.: 50-01-1

Substance rating: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2  
Chemical Formula: CH<sub>6</sub>ClN<sub>3</sub>  
Synonyms (de): Guanidiniumchlorid  
REACH Reg. No.: 01-2119977063-35-0005  
EC No.: 200-002-3 Indice No.: 607-148-00-0  
Concentration: 24 - <36 %  
acc. GHS: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2

Substance name: *ethanol*  
CAS No.: 64-17-5  
(denatured with 1% 2-butanone)

Substance rating: H225, Flam. Liq. 2  
Chemical Formula: C<sub>2</sub>H<sub>6</sub>O; C<sub>2</sub>H<sub>5</sub>OH  
Synonyms (de): Äthylalkohol, vergällter Spiritus  
REACH Reg. No.: 01-2119457610-43-xxxx  
EC No.: 200-578-6 Indice No.: 603-002-00-5  
Concentration: 35 - <55 %  
acc. GHS: H226, Flam. Liq. 3

#### 100 mL PMW1

Substance name: *2-propanol*  
CAS No.: 67-63-0

Substance rating: H225, Flam. Liq. 2, H319, Eye Irrit. 2, H336, STOT SE 3  
Chemical Formula: C<sub>3</sub>H<sub>8</sub>O  
Synonyms (de): Isopropanol, IPA, Propan-2-ol  
REACH Reg. No.: 01-2119457558-25-XXXX  
EC No.: 200-661-7 Indice No.: 603-117-00-0  
Concentration: 20 - <35 %  
acc. GHS: H226, Flam. Liq. 3, H319, Eye Irrit. 2, H336, STOT SE 3

Substance name: *guanidine hydrochloride*  
CAS No.: 50-01-1

Substance rating: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2  
Chemical Formula: CH<sub>6</sub>ClN<sub>3</sub>  
Synonyms (de): Guanidiniumchlorid  
REACH Reg. No.: 01-2119977063-35-0005  
EC No.: 200-002-3 Indice No.: 607-148-00-0  
Concentration: 36 - <50 %  
acc. GHS: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2

#### 50 mL PMW2

Substance name: *chemicals/mixture until 1%*  
CAS No.: -

Substance rating: No criteria for classification or naming of chemical is not required.  
Concentration: 0,1 - <1 %  
acc. GHS: The criteria for classification are not fulfilled.

#### 13 mL PME

Substance name: *chemicals/mixture until 1%*  
CAS No.: -

Substance rating: No criteria for classification or naming of chemical is not required.  
Concentration: 0,1 - <1 %  
acc. GHS: The criteria for classification are not fulfilled.

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740873.1

NucleoSpin 96 cDNA (1x96)

Page: 6/18

Printing Date: 04.04.2023

Date of Issue: 03.03.2023

Version: 2.2.15.8

### 100 mL PML

Substance name: *guanidine hydrochloride*  
CAS No.: 50-01-1

Substance rating: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2  
Chemical Formula:  $\text{CH}_6\text{N}_3$   
Synonyms (de): Guanidiniumchlorid  
REACH Reg. No.: 01-2119977063-35-0005  
EC No.: 200-002-3 Indice No.: 607-148-00-0  
Concentration: 50 - <66 %  
acc. GHS: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2

### 6 mL Liquid Proteinase K

Substance name: *glycerole*  
CAS No.: 56-81-5

Substance rating: No criteria for classification or naming of chemical is not required.  
Chemical Formula:  $\text{C}_3\text{H}_8\text{O}_3$   
Synonyms (de): 1,2,3-Propantriol  
REACH Reg. No.: 01-2119471987-18-xxxx  
EC No.: 200-289-5 Indice No.: n/a  
Concentration: 50 - <80 %  
acc. GHS: The criteria for classification are not fulfilled.

Substance name: *proteinase K, liquid*  
CAS No.: 39450-01-6

Substance rating: H315, Skin Irrit. 2, H319, Eye Irrit. 2, H334, Resp. Sens. 1  
Chemical Formula: Enzyme Comm. No. 3.4.21.64, origin: tritirachium album  
Synonyms (de): Endopeptidase K  
EC No.: 254-457-8 Indice No.: 647-014-00-9  
Concentration: 1 - <3 %  
acc. GHS: H334, Resp. Sens. 1

### 75 mL PMA

Substance name: *sodium hydroxide solution*  
CAS No.: 1310-73-2

Substance rating: H314, Skin Corr. 1A  
Chemical Formula:  $\text{NaOH} \cdot \text{H}_2\text{O}$   
Synonyms (de): verdünnte Natronlauge  
REACH Reg. No.: 01-2119457892-27-xxxx  
EC No.: 215-185-5 Indice No.: 011-002-00-6  
Concentration: 0,5 - <1 %  
acc. GHS: H315, Skin Irrit. 2, H319, Eye Irrit. 2

Substance name: *dodecyl sulfate, sodium salt*  
CAS No.: 151-21-3

Substance rating: 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  
Chemical Formula:  $\text{C}_{12}\text{H}_{25}\text{NaO}_4\text{S}$   
Synonyms (de): Natriumlaurylsulfat  
REACH Reg. No.: 01-2119489461-32-xxxx  
EC No.: 205-788-1  
Concentration: 0,1 - <1 %  
acc. 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%.List of Hazard and Precaution phrases: see section 16.2.

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740873.1

NucleoSpin 96 cfDNA (1x96)

Page: 7/18

Printing Date: 04.04.2023

Date of Issue: 03.03.2023

Version: 2.2.15.8

### SECTION 4: First-Aid Measures

#### 4.1 Description of First-Aid Measures

Place insured person out of danger zone to fresh air immediately. Ensure quiet, warmth, and provide resuscitation if necessary. If necessary contact medical advice. Take to a doctor, in a raised position if there are breathing difficulties.

##### 4.1.1 After SKIN Contact

Remove contaminated clothing immediately. Rinse the affected skin or mucous membrane thoroughly for min. 15 minutes under running water. (If possible) use soap. Avoid neutralisation. Then apply a loose bandage.

##### 4.1.2 After EYE Contact

After contact with the eyes rinse thoroughly under running water with the eyelid wide open for min. 10 minutes with eye washing bottle, eye douche or running water (protect intact eye). Before (if possible) apply eye drops Proxymetacaine 0.5%, if the opening the eyelid convulsion is painful. Further treatment to be carried out by an eye specialist.

##### 4.1.3 After INHALATION of Vapors

After inhalation of foam or vapor fresh air should be inhaled. Keep airways free. Administer a Dexamethasone spray as soon as possible. Ensure quiet, warmth, and provide resuscitation if necessary. In the event of respiratory distress ensure that the patient inhales oxygen. Secure the breathing, heart and circulatory function.

##### 4.1.4 After ORAL Intake

After oral intake lots of water with activated charcoal supplement should be drunk after it has been ingested. Do not induce vomiting under any circumstances. Do not make any efforts to neutralize it. Contact medical advice for possible consequences.

#### 4.2 Most important Symptoms and Effects, both acute and delayed

May cause allergy or asthma symptoms or breathing difficulties if inhaled. Chronic effects: Repeated contact, even in small amounts, can lead to sensitization. Causes serious eye irritation.

#### 4.3 Indication of any immediate Medical Attention and Special Treatment needed

After SKIN CONTACT rinse with water for a long time. Apply glucocorticosteroides following inflammatory reactions. After EYE CONTACT rinse immediately with plenty of water for a long time. Eyelid convulsion measures. Name the corrosive substance. Further treatment must be carried out by an eye specialist. Inform patient respectively further measures and the possibility of long-term damages. ---

### SECTION 5: Fire-Fighting Measures

#### 5.1 Extinguishable Media

##### 5.1.1 Suitable 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.

##### 5.1.2 Unsuitable extinguishing media

data not available

#### 5.2 Special Hazards arising from the Substance or Mixture

WARNING: Flammable. May form explosive vapor-air mixtures. Formation of hazardous and caustic vapor-air mixtures possible.

#### 5.3 Advice for Firefighters

No, for listed product. The substance/mixture is flammable. Product package burns like paper or plastic. Cool any undamaged containers in water, and remove from the danger zone if possible. Heating will lead to an increase in pressure, and a danger of bursting. Spray any vapours released with water. Retent fire water. Use only acid-resistant safety equipment. For great amount - if necessary - protective breathing apparatus which is independent of the ambient air (isolated equipment), and sealed protective clothing is necessary in the event of a large-scale formation of toxic substances.

#### 5.4 Additional Information

Danger for environment **only in the event of a large-scale leakage** or formation of hazardous substances.

### SECTION 6: Accidental Release Measures

#### 6.1 Personal Precautions, Protective Equipment and Emergency Procedure

Do not breathe vapors. Wear suitable protective gloves (see 8.2.2). Wear eye protection. Keep product away from sources of ignition - No smoking. Regular staff training is necessary, indicating hazards and precautions on the basis of operating instructions. Restrictions on activity must be observed.



# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740873.1

NucleoSpin 96 cfDNA (1x96)

Page: 8/18

Printing Date: 04.04.2023

Date of Issue: 03.03.2023

Version: 2.2.15.8

### 6.2 Environmental Precautions

PBT: not applicable  
vPvB: not applicable

### 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 hazards. Clean any contaminated equipment and floors with plenty of water. Collect small amounts of leaked liquid and flush with water into sewer.

### 6.4 Reference to other Sections

see information in section 5.4,7,8 and 13

## 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 allows a safe storage. Storage class (German chemical industry): see chapter 12.1

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.

### 7.3 Specific End Use(s)

Product for analytical use.

## SECTION 8: Exposure Controls/Personal Protection

### 8.1 Control Parameters

#### 250 mL PMB

Chemical: *guanidine hydrochloride*

CAS No.: 50-01-1

DNEL: [inh] 3.5 mg/m<sup>3</sup>

DNEL = Derived No-Effect Level (for workers)

PNEC (fresh water): -  
PNEC = Predicted No Effect Concentration

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: *ethanol*

CAS No.: 64-17-5

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

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>

#### 100 mL PMW1

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

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: *guanidine hydrochloride*

CAS No.: 50-01-1

DNEL: [inh] 3.5 mg/m<sup>3</sup>

DNEL = Derived No-Effect Level (for workers)

PNEC (fresh water): -  
PNEC = Predicted No Effect Concentration

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



MACHEREY-NAGEL GmbH & Co. KG  
Valencienner Str. 11  
52355 Düren · Germany  
[www.mn-net.com](http://www.mn-net.com)

DE Tel.: +49 24 21 969-0 [info@mn-net.com](mailto:info@mn-net.com)  
CH Tel.: +41 62 388 55 00 [sales-ch@mn-net.com](mailto:sales-ch@mn-net.com)  
FR Tel.: +33 388 68 22 68 [sales-fr@mn-net.com](mailto:sales-fr@mn-net.com)  
US Tel.: +1 888 321 62 24 [sales-us@mn-net.com](mailto:sales-us@mn-net.com)



# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740873.1

NucleoSpin 96 cDNA (1x96)

Page: 9/18

Printing Date: 04.04.2023

Date of Issue: 03.03.2023

Version: 2.2.15.8

OSHA: not listed

### 50 mL PMW2

Chemical: chemicals/mixture until 1%

CAS No.: -

### 13 mL PME

Chemical: chemicals/mixture until 1%

CAS No.: -

### 100 mL PML

Chemical: guanidine hydrochloride

CAS No.: 50-01-1

DNEL: [inh] 3.5 mg/m<sup>3</sup>

DNEL = Derived No-Effect Level (for workers)

PNEC (fresh water): -

PNEC = Predicted No Effect Concentration

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

### 6 mL Liquid Proteinase K

Chemical: glycerole

CAS No.: 56-81-5

DNEL: [inh] 56 mg/m<sup>3</sup>

DNEL = Derived No-Effect Level (for workers)

PNEC (fresh water): 0.885 mg/L

PNEC = Predicted No Effect Concentration

Chemical: proteinase K, liquid

CAS No.: 39450-01-6

### 75 mL PMA

Chemical: sodium hydroxide solution

CAS No.: 1310-73-2

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

## 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 vapor/dust respirator, class A/AX. No additional recommendations.

### 8.2.2 Skin protection / Hand protection

Yes, gloves (permeation time >30 min - level 2), consist of PVC, Natural latex, Neopren, or Nitril. Use for short times chemical resistant Latex gloves f.ex. with code EN 374-3 level 1.

### 8.2.3 Eye / Face Protection

Yes, Splash Goggles.

### 8.2.4 Skin Protection

Recommended to avoid contamination with these hazards.

### 8.2.5 Hygiene Measures

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.

### 8.2.6 Thermal hazards

data not available

## 8.3 Limitation and monitoring of environmental exposure

Do not release product into environment.

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740873.1

NucleoSpin 96 cDNA (1x96)

Page: 10/18

Printing Date: 04.04.2023

Date of Issue: 03.03.2023

Version: 2.2.15.8

## SECTION 9: Physical and Chemical Properties

### 9.1 Information on Basic Physical and Chemical Properties

#### 250 mL PMB

|                                      |                        |
|--------------------------------------|------------------------|
| a) State of aggregation:             | liquid                 |
| b) Color:                            | yellow                 |
| c) Odor:                             | alcoholic              |
| d) Melting Point:                    | data not available     |
| e) Boiling Point:                    | data not available     |
| f) Flammability:                     | data not available     |
| g) Explosive Limits (lower / upper): | data not available     |
| h) Flash Point:                      | 23 °C                  |
| i) Autoignition Temperature:         | data not available     |
| j) Decomposition Temperature:        | data not available     |
| k) pH Value:                         | 5-7                    |
| l) Kinematic Viscosity:              | data not available     |
| m) Soluble in Water:                 | data not available     |
| n) Partition Coefficient (o/w) :     | data not available     |
| o) Vapor Pressure (68°F):            | data not available     |
| p) Specific Gravity:                 | 1.01 g/cm <sup>3</sup> |
| q) Relative Vapor Density (air=1) :  | data not available     |
| r) Particle Size:                    | data not available     |

#### 100 mL PMW1

|                                      |                        |
|--------------------------------------|------------------------|
| a) State of aggregation:             | liquid                 |
| b) Color:                            | colorless              |
| c) Odor:                             | alcoholic              |
| d) Melting Point:                    | data not available     |
| e) Boiling Point:                    | data not available     |
| f) Flammability:                     | data not available     |
| g) Explosive Limits (lower / upper): | data not available     |
| h) Flash Point:                      | 25 °C                  |
| i) Autoignition Temperature:         | data not available     |
| j) Decomposition Temperature:        | data not available     |
| k) pH Value:                         | 7-8                    |
| l) Kinematic Viscosity:              | data not available     |
| m) Soluble in Water:                 | data not available     |
| n) Partition Coefficient (o/w) :     | data not available     |
| o) Vapor Pressure (68°F):            | data not available     |
| p) Specific Gravity:                 | 1.06 g/cm <sup>3</sup> |
| q) Relative Vapor Density (air=1) :  | data not available     |
| r) Particle Size:                    | data not available     |

#### 50 mL PMW2

|                                      |                        |
|--------------------------------------|------------------------|
| a) State of aggregation:             | liquid                 |
| b) Color:                            | colorless              |
| c) Odor:                             | odorless               |
| d) Melting Point:                    | data not available     |
| e) Boiling Point:                    | data not available     |
| f) Flammability:                     | data not available     |
| g) Explosive Limits (lower / upper): | data not available     |
| h) Flash Point:                      | data not available     |
| i) Autoignition Temperature:         | data not available     |
| j) Decomposition Temperature:        | data not available     |
| k) pH Value:                         | 7-8                    |
| l) Kinematic Viscosity:              | data not available     |
| m) Soluble in Water:                 | data not available     |
| n) Partition Coefficient (o/w) :     | data not available     |
| o) Vapor Pressure (68°F):            | data not available     |
| p) Specific Gravity:                 | 1.00 g/cm <sup>3</sup> |
| q) Relative Vapor Density (air=1) :  | data not available     |
| r) Particle Size:                    | data not available     |



MACHEREY-NAGEL GmbH & Co. KG  
Valenciennr Str. 11  
52355 Düren · Germany  
[www.mn-net.com](http://www.mn-net.com)

DE Tel.: +49 24 21 969-0 [info@mn-net.com](mailto:info@mn-net.com)  
CH Tel.: +41 62 388 55 00 [sales-ch@mn-net.com](mailto:sales-ch@mn-net.com)  
FR Tel.: +33 388 68 22 68 [sales-fr@mn-net.com](mailto:sales-fr@mn-net.com)  
US Tel.: +1 888 321 62 24 [sales-us@mn-net.com](mailto:sales-us@mn-net.com)

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740873.1

NucleoSpin 96 cDNA (1x96)

Page: 11/18

Printing Date: 04.04.2023

Date of Issue: 03.03.2023

Version: 2.2.15.8

### 13 mL PME

|                                      |                    |
|--------------------------------------|--------------------|
| a) State of aggregation:             | liquid             |
| b) Color:                            | colorless          |
| c) Odor:                             | odorless           |
| d) Melting Point:                    | 0 °C               |
| e) Boiling Point:                    | data not available |
| f) Flammability:                     | data not available |
| g) Explosive Limits (lower / upper): | data not available |
| h) Flash Point:                      | data not available |
| i) Autoignition Temperature:         | data not available |
| j) Decomposition Temperature:        | data not available |
| k) pH Value:                         | 8-9                |
| l) Kinematic Viscosity:              | data not available |
| m) Soluble in Water:                 | data not available |
| n) Partition Coefficient (o/w) :     | data not available |
| o) Vapor Pressure (68°F):            | data not available |
| p) Specific Gravity:                 | 1.0 g/cm³          |
| q) Relative Vapor Density (air=1) :  | data not available |
| r) Particle Size:                    | data not available |

### 100 mL PML

|                                      |                    |
|--------------------------------------|--------------------|
| a) State of aggregation:             | liquid             |
| b) Color:                            | colorless          |
| c) Odor:                             | odorless           |
| d) Melting Point:                    | data not available |
| e) Boiling Point:                    | data not available |
| f) Flammability:                     | data not available |
| g) Explosive Limits (lower / upper): | data not available |
| h) Flash Point:                      | data not available |
| i) Autoignition Temperature:         | data not available |
| j) Decomposition Temperature:        | data not available |
| k) pH Value:                         | 4.5-5.2            |
| l) Kinematic Viscosity:              | data not available |
| m) Soluble in Water:                 | data not available |
| n) Partition Coefficient (o/w) :     | data not available |
| o) Vapor Pressure (68°F):            | data not available |
| p) Specific Gravity:                 | 1.18 g/cm³         |
| q) Relative Vapor Density (air=1) :  | data not available |
| r) Particle Size:                    | data not available |

### 6 mL Liquid Proteinase K

|                                      |                    |
|--------------------------------------|--------------------|
| a) State of aggregation:             | liquid             |
| b) Color:                            | colorless          |
| c) Odor:                             | odorless           |
| d) Melting Point:                    | data not available |
| e) Boiling Point:                    | data not available |
| f) Flammability:                     | data not available |
| g) Explosive Limits (lower / upper): | data not available |
| h) Flash Point:                      | data not available |
| i) Autoignition Temperature:         | data not available |
| j) Decomposition Temperature:        | data not available |
| k) pH Value:                         | 7-8                |
| l) Kinematic Viscosity:              | data not available |
| m) Soluble in Water:                 | 0-100 %            |
| n) Partition Coefficient (o/w) :     | data not available |
| o) Vapor Pressure (68°F):            | data not available |
| p) Specific Gravity:                 | 1.1 g/cm³          |
| q) Relative Vapor Density (air=1) :  | data not available |
| r) Particle Size:                    | data not available |

### 75 mL PMA

|                          |                    |
|--------------------------|--------------------|
| a) State of aggregation: | liquid             |
| b) Color:                | colorless          |
| c) Odor:                 | odorless           |
| d) Melting Point:        | data not available |



MACHEREY-NAGEL GmbH & Co. KG  
Valenciennr Str. 11  
52355 Düren · Germany  
[www.mn-net.com](http://www.mn-net.com)

DE Tel.: +49 24 21 969-0 [info@mn-net.com](mailto:info@mn-net.com)  
CH Tel.: +41 62 388 55 00 [sales-ch@mn-net.com](mailto:sales-ch@mn-net.com)  
FR Tel.: +33 388 68 22 68 [sales-fr@mn-net.com](mailto:sales-fr@mn-net.com)  
US Tel.: +1 888 321 62 24 [sales-us@mn-net.com](mailto:sales-us@mn-net.com)

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740873.1

NucleoSpin 96 cDNA (1x96)

Page: 12/18

Printing Date: 04.04.2023

Date of Issue: 03.03.2023

Version: 2.2.15.8

|                                      |                    |
|--------------------------------------|--------------------|
| e) Boiling Point:                    | data not available |
| f) Flammability:                     | data not available |
| g) Explosive Limits (lower / upper): | data not available |
| h) Flash Point:                      | data not available |
| i) Autoignition Temperature:         | data not available |
| j) Decomposition Temperature:        | data not available |
| k) pH Value:                         | > 12               |
| l) Kinematic Viscosity:              | data not available |
| m) Soluble in Water:                 | data not available |
| n) Partition Coefficient (o/w) :     | data not available |
| o) Vapor Pressure (68°F):            | data not available |
| p) Specific Gravity:                 | 1.008 g/mL         |
| q) Relative Vapor Density (air=1) :  | data not available |
| r) Particle Size:                    | data not available |

## 9.2 Further Information

No data is available for the other parameters for the mixtures, since no registration and no chemical safety report is required.  
**Properties relevant to substance groups**

## 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

But avoid reactions with oxidizing agents. Can form very reactive substances with oxidizing agents. No further data available.

### 10.4 Conditions to avoid

But formation of explosive gases/vapours with air is possible. Use only in well ventilated rooms. No more required.

### 10.5 Incompatible Materials

Avoid storage with oxidizing substances. ---

### 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 chemicals. Quantitative data on the toxicity of this product are not available.

#### 250 mL PMB

Chemical: *guanidine hydrochloride* CAS No.: 50-01-1

TSCA Inventory: listed California Prop. 65 List: not listed

Canada CEPA 1999: DSL yes

LD50 orl rat : 475-907 mg/kg

LC50 inh rat : 3181-7655 µg/m³/4H

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

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

TSCA Inventory: listed California Prop. 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

Canada CEPA 1999: DSL yes

LD50 orl rat : 6200 mg/kg

LC<sub>Low</sub> inh gpg : 21,900 mg/L

LC<sub>Low</sub> orl hmn : 1400 mg/kg



MACHEREY-NAGEL GmbH & Co. KG  
Valencienn Str. 11  
52355 Düren · Germany  
[www.mn-net.com](http://www.mn-net.com)

DE Tel.: +49 24 21 969-0 [info@mn-net.com](mailto:info@mn-net.com)  
CH Tel.: +41 62 388 55 00 [sales-ch@mn-net.com](mailto:sales-ch@mn-net.com)  
FR Tel.: +33 388 68 22 68 [sales-fr@mn-net.com](mailto:sales-fr@mn-net.com)  
US Tel.: +1 888 321 62 24 [sales-us@mn-net.com](mailto:sales-us@mn-net.com)

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740873.1

NucleoSpin 96 cDNA (1x96)

Page: 13/18

Printing Date: 04.04.2023

Date of Issue: 03.03.2023

Version: 2.2.15.8

LC50 ihl mus : 123,4 mg/L/4H  
LC50 ihl rat : 115,9-133,8 mg/L/4H  
LD50 orl mus : 3450 mg/kg

### 100 mL PMW1

Chemical: *2-propanol* CAS No.: 67-63-0  
TSCA Inventory: listed California Prop. 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  
Canada CEPA 1999: DSL yes  
LD50 orl rat : 5045 mg/kg  
LC<sub>Low</sub> orl hmn : 3570 mg/kg  
LC50 ihl rat : 25 mg/L/4H

Chemical: *guanidine hydrochloride* CAS No.: 50-01-1  
TSCA Inventory: listed California Prop. 65 List: not listed  
Canada CEPA 1999: DSL yes  
LD50 orl rat : 475-907 mg/kg  
LC50 ihl rat : 3181-7655 µg/m³/4H  
Acute Effects: Cause after oral intake, impairments of health when ingested in small quantities.

### 50 mL PMW2

Chemical: *chemicals/mixture until 1%* CAS No.: -  
TSCA Inventory: all listed, <1%

### 13 mL PME

Chemical: *chemicals/mixture until 1%* CAS No.: -  
TSCA Inventory: all listed, <1%

### 100 mL PML

Chemical: *guanidine hydrochloride* CAS No.: 50-01-1  
TSCA Inventory: listed California Prop. 65 List: not listed  
Canada CEPA 1999: DSL yes  
LD50 orl rat : 475-907 mg/kg  
LC50 ihl rat : 3181-7655 µg/m³/4H  
Acute Effects: Cause after oral intake, impairments of health when ingested in small quantities.

### 6 mL Liquid Proteinase K

Chemical: *glycerole* CAS No.: 56-81-5  
TSCA Inventory: listed (1,2,3-Propanetriol)  
Exposure Routes: inhalation, skin and/or eye contact  
Target Organs: Eyes, skin, respiratory system, kidneys  
Symptoms: irritation eyes, skin, respiratory system; headache, nausea, vomiting; kidney injury  
LD50 orl rat : 12600 mg/kg

Chemical: *proteinase K, liquid* CAS No.: 39450-01-6  
TSCA Inventory: listed (CAS 102925-54-2)  
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.

### 75 mL PMA

Chemical: *sodium hydroxide solution* CAS No.: 1310-73-2  
TSCA Inventory: listed California Prop. 65 List: not listed  
Exposure Routes: inhalation, ingestion, skin and/or eye contact  
Target Organs: Eyes, skin, respiratory system  
Symptoms: -  
LD50 orl rat : [< 1%] > 50000 mg/kg  
LD50 orl mus : [< 1%] > 4000 mg/kg

Chemical: *dodecyl sulfate, sodium salt* CAS No.: 151-21-3  
TSCA Inventory: listed California Prop. 65 List: not listed  
Canada CEPA 1999: DSL yes  
LD50 orl rat : 1288 mg/kg  
LC50 ihl rat : 3,900 mg/L/1H



MACHEREY-NAGEL GmbH & Co. KG  
Valencienn Str. 11  
52355 Düren · Germany  
[www.mn-net.com](http://www.mn-net.com)

DE Tel.: +49 24 21 969-0 [info@mn-net.com](mailto:info@mn-net.com)  
CH Tel.: +41 62 388 55 00 [sales-ch@mn-net.com](mailto:sales-ch@mn-net.com)  
FR Tel.: +33 388 68 22 68 [sales-fr@mn-net.com](mailto:sales-fr@mn-net.com)  
US Tel.: +1 888 321 62 24 [sales-us@mn-net.com](mailto:sales-us@mn-net.com)

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740873.1

NucleoSpin 96 cDNA (1x96)

Page: 14/18

Printing Date: 04.04.2023

Date of Issue: 03.03.2023

Version: 2.2.15.8

### 11.2 Other Hazards

#### Possible endocrine disrupting effects

data not available

#### Other Information

no additional data available

## SECTION 12: Ecological Information

### 12.1 Toxicity

Following information is valid for pure chemicals.

#### 250 mL PMB

Chemical: *guanidine hydrochloride*

CAS No.: 50-01-1

PNEC (fresh water): -

PNEC = Predicted No Effect Concentration

LC50 leuciscus idus/96h: 1759 mg/L

LC50 fish/96h: [4d] 690-1850; [48h] 1758-2420 mg/L

EC50 daphnia/48h: 70.2 mg/L

EC10 pseudomonas putida/16h: [72h] 11.8-33.5 mg/L

Chemical: *ethanol*

CAS No.: 64-17-5

PNEC (fresh water): 0.96 mg/L

PNEC = Predicted No Effect Concentration

LC50 daphnia magna/48h: >100 g/L

LC50 pimephales promelas/96h: 13.4-15.1 g/L

LC50 leuciscus idus/96h: [48h] 8.14 g/L

LC50 fish/96h: 13 g/L

EC50 daphnia/48h: 9.3-14.2 g/L

IC50 scenedesmus quadricauda/72h: [7d] 5000 mg/L

EC10 pseudomonas putida/16h: [EC5] 6500 mg/L

Partition Coefficient (o/w): -0,31

#### 100 mL PMW1

Chemical: *2-propanol*

CAS No.: 67-63-0

PNEC (fresh water): 140.9 mg/L

PNEC = Predicted No Effect Concentration

LC50 fish/96h: 1400 mg/L

EC50 daphnia/48h: 13.3 g/L

IC50 scenedesmus quadricauda/72h: >1000 mg/L

EC10 pseudomonas putida/16h: EC5: 1050 mg/L

Partition Coefficient (o/w): 0,05

Chemical: *guanidine hydrochloride*

CAS No.: 50-01-1

PNEC (fresh water): -

PNEC = Predicted No Effect Concentration

LC50 leuciscus idus/96h: 1759 mg/L

LC50 fish/96h: [4d] 690-1850; [48h] 1758-2420 mg/L

EC50 daphnia/48h: 70.2 mg/L

EC10 pseudomonas putida/16h: [72h] 11.8-33.5 mg/L

#### 50 mL PMW2

Chemical: *chemicals/mixture until 1%*

CAS No.: -

#### 13 mL PME

Chemical: *chemicals/mixture until 1%*

CAS No.: -

#### 100 mL PML

Chemical: *guanidine hydrochloride*

CAS No.: 50-01-1

PNEC (fresh water): -

PNEC = Predicted No Effect Concentration

LC50 leuciscus idus/96h: 1759 mg/L

LC50 fish/96h: [4d] 690-1850; [48h] 1758-2420 mg/L

EC50 daphnia/48h: 70.2 mg/L

EC10 pseudomonas putida/16h: [72h] 11.8-33.5 mg/L

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740873.1

NucleoSpin 96 cfDNA (1x96)

Page: 15/18

Printing Date: 04.04.2023

Date of Issue: 03.03.2023

Version: 2.2.15.8

### 6 mL Liquid Proteinase K

Chemical: *glycerole*

CAS No.: 56-81-5

PNEC (fresh water): 0.885 mg/L

PNEC = Predicted No Effect Concentration

LC50 fish/96h: &gt;5000 24h mg/L

EC50 daphnia/48h: &gt;10 24h g/L

LC50 scenedesmus quadricauda/72h: IC5 7d &gt;10 g/L

EC10 pseudomonas putida/16h: EC5: &gt;10 g/L

Partition Coefficient (o/w): -1,76

Chemical: *proteinase K, liquid*

CAS No.: 39450-01-6

### 75 mL PMA

Chemical: *sodium hydroxide solution*

CAS No.: 1310-73-2

LC50 leuciscus idus/96h: 35-189 mg/L

LC50 fish/96h: 45.4 mg/L

EC50 daphnia/48h: &gt;100 mg/L

Chemical: *dodecyl sulfate, sodium salt*

CAS No.: 151-21-3

LC50 daphnia magna/48h: 6.3 mg/L

LC50 fish/96h: 1.31-22.5 mg/L

Partition Coefficient (o/w): 1,6

## 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

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

## 12.6 Endocrine disrupting properties

data not available

## 12.7 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 (RCRA Code D002/D003, EU 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/NA: 1993 14.2. Proper Shipping Name: Flammable liquid, n.o.s. (2-propanol, ethanol mixture)

14.3. Hazard Class: 3 14.4. Packing Group: III

Transportation by Road

Classification code: F1

Limited Quantity: 5 L

Tunnel restriction code: D/E

Excepted Quantity: E 1

Special instructions: 640E

Air Transportation

Limited Quantity: LQ 7

Excepted Quantity: E 1

PAX: 355

max. weight PAX: 60 L

CAO: 366

max. weight CAO: 220 L

Maritime Transport

EmS: F-E, S-E

Storage Category: A



MACHEREY-NAGEL GmbH & Co. KG  
Valencienner Str. 11  
52355 Düren · Germany  
[www.mn-net.com](http://www.mn-net.com)

DE Tel.: +49 24 21 969-0 [info@mn-net.com](mailto:info@mn-net.com)  
CH Tel.: +41 62 388 55 00 [sales-ch@mn-net.com](mailto:sales-ch@mn-net.com)  
FR Tel.: +33 388 68 22 68 [sales-fr@mn-net.com](mailto:sales-fr@mn-net.com)  
US Tel.: +1 888 321 62 24 [sales-us@mn-net.com](mailto:sales-us@mn-net.com)



# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740873.1

NucleoSpin 96 cfDNA (1x96)

Page: 16/18

Printing Date: 04.04.2023

Date of Issue: 03.03.2023

Version: 2.2.15.8

### 14.5 Environmental Hazards

none, contains only small quantities of hazardous substances

### 14.6 Special Precautions for User

not necessary

### 14.7 Carriage of bulk cargo by sea in accordance with IMO instruments

Not applicable.

## SECTION 15: Regulatory Information

### 15.1 Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

#### U.S. Federal Regulations

OSHA "A Guide to The Globally Harmonized System of Classification and Labelling of Chemicals (GHS)"

<https://www.osha.gov/dsg/hazcom/ghs.html>

29 CFR 1910.1200 Hazard communication.

NIOSH Pocket Guide to Chemical Hazards

NIOSH Workplace Safety & Health Topics

TSCA Inventory

#### U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

#### Canada

Canada CEPA 1999 - Domestic Substances List (DSL), List of Toxic Substances (Schedule 1)

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

### 15.2 Chemical Safety Assessment

not necessary for these small amounts

## SECTION 16: Other Information

### 16.1 Changes compared to the last version

Between versions 2.2.15.8 and 2.2.2.2 following changes were applied: - 13 composition data corrected - 6 substance data corrected

### 16.2 List of Hazard and Precaution Phrases

#### 16.2.1 List of relevant H Phrases

|      |  |
|------|--|
| H226 | Flammable liquid and vapor.  |
| H302 | Harmful if swallowed.  |
| H315 | Causes skin irritation.  |
| H319 | Causes serious eye irritation.   |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H336 | May cause drowsiness or dizziness.   |

#### 16.2.2 List of relevant P Phrases

|          |  |
|----------|--|
| P210     | Keep away from heat/sparks/open flames/hot surfaces. No smoking.   |
| P261sh   | Avoid breathing dust/vapors.                                       |
| P264W    | Wash with water thoroughly after handling.                         |
| P280sh   | Wear protective gloves/eye protection.                             |
| P301+312 | IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.      |
| P330     | Rinse mouth.   |
| P342+311 | If experiencing respiratory symptoms: Call a POISON CENTER/doctor. |

### 16.3 Recommended Restriction on Use

Only for Professional User.

Look about employee restrictions for young people!

Look about employee restrictions for pregnant women and nursing women!

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

### 16.4 Sources of Key Data

KÜHN, BIRETT, Leaflets on hazardous materials, 2021

Directive 1999/92/EG Minimum requirements to improve the safety and health protection of workers at risk from potentially explosive atmospheres

SUVA .CH, limit values in the air at work 2009, revised on 01/2009

Regulation 790/2009/EU, adaptation of Regulation 1272/2008/EU to technical and scientific progress (1st ATP)

Regulation 453/2010/EU, adaptation of the REACH regulation 1907/2006/EG

TRGS 907, German technical rules for listing substances and causes of sensitization, updated November 2011 Regulation

487/2013/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (4th ATP)

Regulation 1221/2015/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (7th ATP)



MACHEREY-NAGEL GmbH & Co. KG  
Valenciennener Str. 11  
52355 Düren · Germany  
[www.mn-net.com](http://www.mn-net.com)

DE Tel.: +49 24 21 969-0 [info@mn-net.com](mailto:info@mn-net.com)  
CH Tel.: +41 62 388 55 00 [sales-ch@mn-net.com](mailto:sales-ch@mn-net.com)  
FR Tel.: +33 388 68 22 68 [sales-fr@mn-net.com](mailto:sales-fr@mn-net.com)  
US Tel.: +1 888 321 62 24 [sales-us@mn-net.com](mailto:sales-us@mn-net.com)

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740873.1

NucleoSpin 96 cDNA (1x96)

Page: 17/18

Printing Date: 04.04.2023

Date of Issue: 03.03.2023

Version: 2.2.15.8

Regulation 776/2017/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (10th ATP)

Regulation 669/2018/EU, adaptation of Regulation 1272/2008/EC to technical and scientific progress (11th ATP)

Regulation 1480/2018/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (13th ATP)

Regulation 521/2019/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (12th ATP)

TRGS 900, German rules of technology on limit values in the air at work, as of 03/2019

Regulation 217/2020/EU, adaptation of Annex VI, Part 3, of Regulation 1272/2008/EC to technical and scientific progress (14th ATP)

Regulation 878/2020/EU, adaptation of Annex II of the REACH regulation 1907/2006/EG

Regulation 1182/2020/EU, adaptation of Annex VI, Part 3, of Regulation 1272/2008/EC to technical and scientific progress (15th ATP)

Regulation 643/2021/EU, adaptation of Annex VI, Part 1, of Regulation 1272/2008/EC to technical and scientific progress (16th ATP)

Regulation 849/2021/EU, adaptation of Annex VI, Part 3, of Regulation 1272/2008/EC to technical and scientific progress (17th ATP)

### revisions/updates

Reason for revision: 2014-02 Corrected structure of the sections according to Regulation 453/2010/EU, if necessary

2014-04 adjustment according Regulation 487/2013/EU

2016-03 adjustment according Regulation 1221/2015/EU

2017-08 adjustment according the Ordinance on Ethanol Denaturation 2016/1867/EU

2017-11 adjustment according the ECHA registration dossier

2022-11 adjustment according Regulation 878/2020/EU

## 16.5 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.

MACHEREY-NAGEL GmbH & Co. KG makes NO REPRESENTATIONS or WARRANTIES, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly MACHEREY-NAGEL GmbH & Co. KG will not be responsible for damages resulting from use of or reliance upon this information. See terms and conditions at the end of our price lists for additional information.

## 16.6 Legend / Abbreviations

|                 |   |
|-----------------|---|
| acc:            | according   |
| ADR:            | Convention concerning the International Carriage of Dangerous Goods by Road |
| Act:            | acute   |
| BAT:            | biological workplace tolerance value  |
| CAO:            | Cargo Aircraft Only   |
| Carc:           | carcinogen  |
| CAS:            | Chemical Abstracts Service  |
| CLP:            | Classification, Labelling and Packaging regulation                          |
| CMR:            | carcinogen, mutagen, reproduction toxic                                     |
| Corr:           | corrosive   |
| COD:            | chemical oxygen demand  |
| CSCL:           | Chemical Substance Control Law (Jp)   |
| Dam:            | damage  |
| DNEL:           | Derived No-Effect Level (for workers)                                       |
| derm:           | dermal  |
| dog:            | dog   |
| EC10:           | Concentration causing a toxic effect in 10% of the test organisms           |
| EC:             | European Community  |
| EC-Nr:          | Substance number of the EC substance inventory                              |
| EmS:            | Guide to accident management measures on ships                              |
| EU:             | European Union  |
| fish:           | fish (not specified)  |
| GHS:            | Global Harmonized System of Classification and Labeling of Chemicals        |
| gpg:            | guinea pig  |
| ICAO:           | International Civil Aviation Organization                                   |
| ihl:            | inhaled   |
| IMDG:           | International Maritime Dangerous Goods Code                                 |
| intrav:         | intravenous   |
| ipt:            | intraperitoneal   |
| ISHL:           | Industrial Safety and Health Law (Jp)                                       |
| LC50:           | lethal concentration 50%  |
| LD50:           | lethal dose 50%   |
| leuciscus idus: | fisch, ide, orfe  |
| MAK:            | maximum workplace concentration   |
| Met:            | Metall  |
| mus:            | mouse   |
| Muta:           | mutagen   |



MACHEREY-NAGEL GmbH & Co. KG  
Valenciennr Str. 11  
52355 Düren · Germany  
[www.mn-net.com](http://www.mn-net.com)

DE Tel.: +49 24 21 969-0 [info@mn-net.com](mailto:info@mn-net.com)  
CH Tel.: +41 62 388 55 00 [sales-ch@mn-net.com](mailto:sales-ch@mn-net.com)  
FR Tel.: +33 388 68 22 68 [sales-fr@mn-net.com](mailto:sales-fr@mn-net.com)  
US Tel.: +1 888 321 62 24 [sales-us@mn-net.com](mailto:sales-us@mn-net.com)

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740873.1

NucleoSpin 96 cDNA (1x96)

Page: 18/18

Printing Date: 04.04.2023

Date of Issue: 03.03.2023

Version: 2.2.15.8

NIOSH: National Institute for Occupational Safety and Health (US)  
 NRD: Non-rapidly degradable  
 onchorhynchus mykiss: fish, rainbow trout  
 orl: oral  
 OSHA: Occupational Safety and Health Administration  
 PAX: transport on passenger planes allowed  
 PBT: persistent, bioaccumulating, toxic substance  
 pH: pH value  
 pimephales promelas: fish, fathead minnow  
 PNEC: Predicted No Effect Concentration  
 PROC 15: Process category 'for laboratory use'  
 PRTR: Law for PRTR and Promotion of Chemical Management (Jp)  
 PVC: polyvinyl chloride  
 quail: bird, quail  
 rat: rat  
 rbt: rabbit  
 RD: rapidly degradable  
 RE: repeated  
 REACh: Registration, Evaluation, Authorisation and Restriction of Chemicals  
 REF: item number, reference number  
 Reg.No.: rRegistration number  
 Repr: harmful to reproduction  
 Resp: respiratory  
 scu: sub cutan  
 RIP: REACH Implementations Projects  
 SDS: safety data sheet  
 Sens: sensitisation  
 STEL: short term exposure limit  
 STOT: Specific Target Organ Toxicity  
 SVHC: Substance of Very High Concern  
 t/a: tons per year  
 TCCA: Toxic Chemicals Control Act (S. Korea)  
 Tox: toxic  
 TSCA: The Toxic Substances Control Act (US)  
 TWA: time weighted average  
 TRGS: technical regulations (DE)  
 vPvB: very persistent, very bioaccumulating substance

### 16.7 Training Advice

Regular safety training. 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.