

# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 740969.50	NucleoSpin totalRNA FFPE XS (50)	Page: 1/20
Printing date: 15.04.2026	Date of issue: 09.04.2026	Version: 2.20.14.8

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

### 1.1 Product identifier

REF	740969.50
Product name	NucleoSpin totalRNA FFPE XS (50)
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 25 mL MW2	
1 x 200 U rDNase	UFI: 8SGV-63EY-520U-3WWU
1 x 800 µL Liquid Proteinase K	UFI: TTWV-43C9-R202-NTGN
1 x 1 mL MKA	
1 x 13 mL RNase-free H <sub>2</sub> O	
1 x 60 mL Paraffin Dissolver (blue)	UFI: FM7W-U31J-N20G-1QX0
1 x 10 mL MLF	
1 x 60 mL MX	UFI: Y01V-43QP-G20R-A6PR
1 x 7 mL DRB	

### 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  
 Phone: +49 2421 969 0  
 E-mail: [sds@mn-net.com](mailto:sds@mn-net.com) ([msds@mn-net.com](mailto: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 Gif tinformat ionszentrum (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 identification

### 2.0 Classification of the complete product according to Regulation (EC) 1272/2008



Signal word	DANGER
<b>Hazard identification</b>	<b>Hazard classes/categories</b>
H225	Flam. Liq. 2
H304	Asp. Tox. 1
H319	Eye Irrit. 2
H334	Resp. Sens. 1
H335	resp. irrit. STOT SE 3
H351	Carc. 2

### 2.1 Classification of the substance or mixture according to Regulation (EC) 1272/2008



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

according to Regulations REACH 1907/2006/EC

REF: 740969.50

NucleoSpin totalRNA FFPE XS (50)

Page: 2/20

Printing date: 15.04.2026

Date of issue: 09.04.2026

Version: 2.20.14.8

## 60 mL MX



GHS02 GHS07 GHS08

Signal word **DANGER**

Hazard identification	Hazard classes/categories
H225	Flam. Liq. 2
H319	Eye Irrit. 2
H335	resp. irrit. STOT SE 3
H351	Carc. 2

## 800 µL Liquid Proteinase K



GHS08

Signal word **DANGER**

Hazard identification	Hazard classes/categories
H334	Resp. Sens. 1

## 60 mL Paraffin Dissolver (blue)



GHS08

Signal word **DANGER**

Hazard identification	Hazard classes/categories
H304	Asp. Tox. 1

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

Signal word Do not need labelling as hazardous  
-

No hazard class

## 10 mL MLF

Signal word Do not need labelling as hazardous  
-

No hazard class

## 200 U rDNase



GHS08



MACHEREY-NAGEL GmbH & Co. KG  
Valenciener 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

according to Regulations REACH 1907/2006/EC

REF: 740969.50	NucleoSpin totalRNA FFPE XS (50)	Page: 3/20
Printing date: 15.04.2026	Date of issue: 09.04.2026	Version: 2.20.14.8

Signal word	DANGER
<b>Hazard identification</b>	<b>Hazard classes/categories</b>
H334	Resp. Sens. 1

## 25 mL MW2

Signal word	Do not need labelling as hazardous
No hazard class	-

## 1 mL MKA

Signal word	Do not need labelling as hazardous
No hazard class	-

## 7 mL DRB

Signal word	Do not need labelling as hazardous
No hazard class	-

List of H phrases: see section 16.2

## 2.2 Label elements according regulation (EC) 1272/2008

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 MX



Signal word: DANGER  
 H351  
 Suspected of causing cancer.  
 P201, P202, P280sh, P308+313, P405, P501  
 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/eye protection. IF exposed or concerned: Get medical advice/attention. Store locked up. Dispose of contents/container to regulated waste treatment.

## 800 µL Liquid Proteinase K



Signal word: DANGER  
 H334  
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 P261sh, P284, P342+311, P501  
 Avoid breathing dust/vapours. [In case of inadequate ventilation] wear respiratory protection. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. Dispose of contents/container to regulated waste treatment.



# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 740969.50

NucleoSpin totalRNA FFPE XS (50)

Page: 4/20

Printing date: 15.04.2026

Date of issue: 09.04.2026

Version: 2.20.14.8

**60 mL Paraffin Dissolver (blue)**



GHS08

Signal word: DANGER

H304

May be fatal if swallowed and enters airways.

P301+310, P331

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.Do NOT induce vomiting.

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

Do not need labelling as hazardous

Signal word: -

**10 mL MLF**

Do not need labelling as hazardous

Signal word: -

**200 U rDNase**



GHS08

Signal word: DANGER

H334

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

P261sh, P284, P342+311, P501

Avoid breathing dust/vapours.[In case of inadequate ventilation] wear respiratory protection.If experiencing respiratory symptoms: Call a POISON CENTER/doctor.Dispose of contents/container to regulated waste treatment.

**25 mL MW2**

Do not need labelling as hazardous

Signal word: -

**1 mL MKA**

Do not need labelling as hazardous

Signal word: -

**7 mL DRB**

Do not need labelling as hazardous

Signal word: -

**Label elements of the complete product**



GHS02



GHS07



GHS08

Signal word: DANGER

H304, H334, H351

May be fatal if swallowed and enters airways.May cause allergy or asthma symptoms or breathing difficulties if inhaled.Suspected of causing cancer.

P201, P202, P261sh, P280sh, P284, P301+310, P331, P405, P501

Obtain special instructions before use.Do not handle until all safety precautions have been read and understood.Avoid breathing dust/vapours.Wear protective gloves/eye protection.[In case of inadequate ventilation] wear respiratory protection.IF SWALLOWED: Immediately call a POISON CENTER/ doctor.Do NOT induce vomiting.Store locked up.Dispose of contents/container to regulated waste treatment.

**2.3 Other hazards**



MACHEREY-NAGEL GmbH & Co. KG  
Valenciener 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

according to Regulations REACH 1907/2006/EC

REF: 740969.50	NucleoSpin totalRNA FFPE XS (50)	Page: 5/20
Printing date: 15.04.2026	Date of issue: 09.04.2026	Version: 2.20.14.8

**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 inhalation of vapours/dust, 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. In liquid form no hazard H334. Suspected of causing cancer. May be fatal if swallowed and enters airways. The Paraffin Dissolver needs no labeling H350, because the aromates are reduced (<0.03%).

**Information pertaining to particular risks to the environment**

**PBT:** This substance/mixture contains components considered to be persistent, bioaccumulating and toxic (PBT) at levels of 0.1% or higher (see 12.5).  
**vPvB:** not applicable

**Possible endocrine disrupting effects**

no data available

## SECTION 3: Composition / information on ingredients

### 3.1 Substances or 3.2 Mixtures

**60 mL MX**

Substance name: *1,4-dioxane*  
 CAS No.: 123-91-1

Substance rating: H225, Flam. Liq. 2, H319, Eye Irrit. 2, H335, resp. irrit. STOT SE 3, H351, Carc. 2  
 Formula: C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>  
 Pseudonym (de): Glycoethylether, Ethylendioxid  
 REACH Reg. No.: 01-2119462837-26-0001  
**SVHC listed: listed (08/07/2021) Cand. Lst. REACH Art59(10)**  
 EC No.: 204-661-8 Index No.: 603-024-00-5  
 Concentration: 90 - <100 %  
 acc. CLP (GHS): H225, Flam. Liq. 2, H319, Eye Irrit. 2, H335, resp. irrit. STOT SE 3, H351, Carc. 2

**800 µL Liquid Proteinase K**

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

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

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

Substance rating: No criteria for classification or naming of chemical not required.  
 Formula: C<sub>3</sub>H<sub>8</sub>O<sub>3</sub>  
 Pseudonym (de): 1,2,3-Propantriol  
 REACH Reg. No.: 01-2119471987-18-xxxx  
 EC No.: 200-289-5 Index No.: n/a  
 Concentration: 10 - <50 %  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

**60 mL Paraffin Dissolver (blue)**



# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 740969.50	NucleoSpin totalRNA FFPE XS (50)	Page: 6/20
Printing date: 15.04.2026	Date of issue: 09.04.2026	Version: 2.20.14.8

Substance name: *paraffin dissolver*  
 CAS No.: 64742-46-7

Substance rating: H304, Asp. Tox. 1  
 Formula: C<sub>15</sub>-C<sub>20</sub>, isomere aliphates  
 Pseudonym (de): KW-Fraktion C<sub>15</sub>-C<sub>20</sub>  
 REACH Reg. No.: 01-2119827000-58-XXXX  
 EC No.: 934-956-3  
 Concentration: 90 - <100 %  
 acc. CLP (GHS): H304, Asp. Tox. 1

Indice No.: 649-275-00-4

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

Substance name: *water*  
 CAS No.: 7732-18-5

Substance rating: No criteria for classification or naming of chemical not required.  
 Formula: H<sub>2</sub>O  
 REACH Reg. No.: exempt, Annex IV  
 EC No.: 231-791-2  
 Concentration: 90 - <100 %  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

### 10 mL MLF

Substance name: *tris(hydroxymethyl)aminomethane*  
 CAS No.: 77-86-1

Substance rating: No criteria for classification or naming of chemical not required.  
 Formula: C<sub>4</sub>H<sub>11</sub>NO<sub>3</sub>  
 Pseudonym (de): TRIS, Trometamol  
 REACH Reg. No.: 01-2119957659-16-0014  
 EC No.: 201-064-4  
 Concentration: 1 - <3 %  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

### 200 U rDNase

Substance name: *rDNase*  
 CAS No.: 9003-98-9

Substance rating: H334, Resp. Sens. 1  
 Formula: Enzyme C. No. 3.1.21.1, origin: cloned  
 Pseudonym (de): Deoxyribonucleodepolymerase  
 EC No.: 232-667-0  
 Concentration: 90 - <100 %  
 acc. CLP (GHS): H334, Resp. Sens. 1

### 25 mL MW2

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

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

### 1 mL MKA



# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 740969.50

NucleoSpin totalRNA FFPE XS (50)

Page: 7/20

Printing date: 15.04.2026

Date of issue: 09.04.2026

Version: 2.20.14.8

Substance name: *acetate buffer solution*  
CAS No.: -

Substance rating: No criteria for classification or naming of chemical not required.  
Formula:  $\text{CH}_3\text{COOH}/\text{K}/\text{Na}\cdot\text{H}_2\text{O}$   
Concentration: 45 - <60 %  
acc. CLP (GHS): The criteria for classification are not fulfilled.

## 7 mL DRB

Substance name: *chemicals/mixture until 2%*  
CAS No.: -

Substance rating: No criteria for classification or naming of chemical not required.  
Concentration: 1 - <2 %  
acc. CLP (GHS): The criteria for classification are not fulfilled.

### 3.3 Remarks

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

List of H and P phrases: see section 16.2.

## 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. 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

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

CMR Effekte: Suspected of causing cancer.

### 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

#### 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

no data available

### 5.2 Special hazards arising from the substance or mixture

DANGER: Highly flammable (GHS regulation). Forms explosive vapour-air mixtures. Formation of hazardous and caustic vapour-air mixtures possible.



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

according to Regulations REACH 1907/2006/EC

REF: 740969.50

NucleoSpin totalRNA FFPE XS (50)

Page: 8/20

Printing date: 15.04.2026

Date of issue: 09.04.2026

Version: 2.20.14.8

## 5.3 Advice for firefighters

No, for listed product. Product package burns like paper or plastic.

## 5.4 Additional information

no data available

## SECTION 6: Accidental release measures

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

Do not breathe vapours. Wear suitable protective gloves (see 8.2.2). 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

**PBT:** This substance/mixture contains components considered to be persistent, bioaccumulating and toxic (PBT) at levels of 0.1% or higher (see 12.5).

**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 hazardous chemicals. Clean any contaminated equipment and floors with plenty of water.

Collect small amounts of leaked liquid and flush with water into drains. Not for organic solvents (see section 13).

### 6.4 Reference to other sections

no data available

## 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

Safe storage is guaranteed in the original packaging from MACHEREY-NAGEL. 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

#### 200 U rDNase

Chemical: *rDNase*

CAS No.: 9003-98-9

#### 10 mL MLF

Chemical: *tris(hydroxymethyl)aminomethane*

CAS No.: 77-86-1

DNEL: [derm] 166.7 mg/kg bw/day; [inh] 117.5 mg/m<sup>3</sup>

DNEL = Derived No-Effect Level (for workers)

PNEC (fresh water): no data mg/L

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

#### 25 mL MW2

Chemical: *chemicals/mixture until 1%*

CAS No.: -

#### 800 µL Liquid Proteinase K



# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 740969.50	NucleoSpin totalRNA FFPE XS (50)	Page: 9/20
Printing date: 15.04.2026	Date of issue: 09.04.2026	Version: 2.20.14.8

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  
 TRGS 900 (DE): 200 E mg/m<sup>3</sup>  
E/e respirable  
 Short-term exposure factor: 2 (I), Y  
skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded  
 SUVA(CH) MAK value: 50 e\* mg/m<sup>3</sup>

Chemical: *proteinase K, liquid* CAS No.: 39450-01-6  
 SUVA(CH) MAK value: 0,00006 15min mg/m<sup>3</sup>

**60 mL Paraffin Dissolver (blue)**  
 Chemical: *paraffin dissolver* CAS No.: 64742-46-7  
 TRGS 900 (DE): 600 mg/m<sup>3</sup>  
E/e respirable  
 Short-term exposure factor: 2 (II)  
skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded  
 NIOSH STEL: 10 mg/m<sup>3</sup>  
 OSHA: 5 mg/m<sup>3</sup>

**7 mL DRB**  
 Chemical: *chemicals/mixture until 2%* CAS No.: -

**60 mL MX**  
 Chemical: *1,4-dioxane* CAS No.: 123-91-1  
 DNEL: 73 mg/m<sup>3</sup>  
DNEL = Derived No-Effect Level (for workers)  
 PNEC (fresh water): 10 mg/L  
PNEC = Predicted No Effect Concentration  
 EU value: 20 ppm / 73 mg/m<sup>3</sup>  
 TRGS 900 (DE): 20 ppm / 73 mg/m<sup>3</sup>  
E/e respirable  
 Short-term exposure factor: 2 (I), H, Y  
skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded  
 SUVA(CH) MAK value: 20 ppm / 72 mg/m<sup>3</sup>  
 TRGS 903 (DE): 2-Hydroxyethoxyessigsäure U/b Kreatinin 400 mg/g  
B blood, U urine, a no limitation, b end of exposition or shift  
 NIOSH: Occupational Carcinogen List Yes; TWA 30min 1 ppm / 3.6 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: [skin] TWA 100 ppm / 360 mg/m<sup>3</sup>

**1 mL MKA**  
 Chemical: *acetate buffer solution* CAS No.: -

**13 mL RNase-free H<sub>2</sub>O**  
 Chemical: *water* 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

Use for open access of these substances for example a protection filter, class A/AX. No additional recommendations.

### 8.2.2 Skin protection / 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 / Face Protection

Yes, safety glasses according EN 166 with integrated side shields or wrap-around protection.

### 8.2.4 Skin protection



MACHEREY-NAGEL GmbH & Co. KG  
 Valenciener 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

according to Regulations REACH 1907/2006/EC

REF: 740969.50

NucleoSpin totalRNA FFPE XS (50)

Page: 10/20

Printing date: 15.04.2026

Date of issue: 09.04.2026

Version: 2.20.14.8

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.
- 8.2.6 Thermal hazards**  
no data available
- 8.3 Limitation and monitoring of environmental exposure**  
Do not release product into environment.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**200 U rDNase**

- |  |                     |
|--|---------------------|
| a) State of aggregation:                       | solid (lyophilized) |
| b) Colour:                                     | white               |
| c) Odor:                                       | odorless            |
| d) Melting point:                              | no data available   |
| e) Boiling point:                              | no data available   |
| f) Flammability:                               | no data available   |
| g) Explosive limits (lower / upper):           | no data available   |
| h) Flash point:                                | no data available   |
| i) Flashing temperature:                       | no data available   |
| j) Decomposition temperature:                  | no data available   |
| k) pH value:                                   | no data available   |
| l) Kinematic viscosity:                        | no data available   |
| m) Solubility in water:                        | no data available   |
| n) Dispersion coefficient (K <sub>o/w</sub> ): | no data available   |
| o) Vapour pressure (20°C):                     | no data available   |
| p) Specific gravity:                           | no data available   |
| q) Relative vapour density (air=1):            | no data available   |
| r) Particle size:                              | no data available   |

**10 mL MLF**

- |  |                   |
|--|-------------------|
| a) State of aggregation:                       | liquid            |
| b) Colour:                                     | colourless        |
| c) Odor:                                       | odorless          |
| d) Melting point:                              | no data available |
| e) Boiling point:                              | no data available |
| f) Flammability:                               | no data available |
| g) Explosive limits (lower / upper):           | no data available |
| h) Flash point:                                | no data available |
| i) Flashing temperature:                       | no data available |
| j) Decomposition temperature:                  | no data available |
| k) pH value:                                   | no data available |
| l) Kinematic viscosity:                        | no data available |
| m) Solubility in water:                        | 0-100 %           |
| n) Dispersion coefficient (K <sub>o/w</sub> ): | no data available |
| o) Vapour pressure (20°C):                     | no data available |
| p) Specific gravity:                           | no data available |
| q) Relative vapour density (air=1):            | no data available |
| r) Particle size:                              | no data available |

**25 mL MW2**

- |                                      |                   |
|--------------------------------------|-------------------|
| a) State of aggregation:             | liquid            |
| b) Colour:                           | colourless        |
| c) Odor:                             | odorless          |
| d) Melting point:                    | no data available |
| e) Boiling point:                    | no data available |
| f) Flammability:                     | no data available |
| g) Explosive limits (lower / upper): | no data available |
| h) Flash point:                      | no data available |
| i) Flashing temperature:             | no data available |



MACHEREY-NAGEL GmbH & Co. KG  
Valenciener 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

according to Regulations REACH 1907/2006/EC

REF: 740969.50

NucleoSpin totalRNA FFPE XS (50)

Page: 11/20

Printing date: 15.04.2026

Date of issue: 09.04.2026

Version: 2.20.14.8

j) Decomposition temperature:	no data available
k) pH value:	7-8
l) Kinematic viscosity:	no data available
m) Solubility in water:	no data available
n) Dispersion coefficient (K <sub>o/w</sub> ):	no data available
o) Vapour pressure (20°C):	no data available
p) Specific gravity:	1.00 g/cm <sup>3</sup>
q) Relative vapour density (air=1):	no data available
r) Particle size:	no data available

### 800 µL Liquid Proteinase K

a) State of aggregation:	liquid
b) Colour:	colourless
c) Odor:	odorless
d) Melting point:	no data available
e) Boiling point:	no data available
f) Flammability:	no data available
g) Explosive limits (lower / upper):	no data available
h) Flash point:	no data available
i) Flashing temperature:	no data available
j) Decomposition temperature:	no data available
k) pH value:	7-8
l) Kinematic viscosity:	no data available
m) Solubility in water:	0-100 %
n) Dispersion coefficient (K <sub>o/w</sub> ):	no data available
o) Vapour pressure (20°C):	no data available
p) Specific gravity:	1.1 g/cm <sup>3</sup>
q) Relative vapour density (air=1):	no data available
r) Particle size:	no data available

### 60 mL Paraffin Dissolver (blue)

a) State of aggregation:	liquid
b) Colour:	blue
c) Odor:	organic
d) Melting point:	-18 <sub>pourpoint</sub> °C
e) Boiling point:	245-330 °C
f) Flammability:	no data available
g) Explosive limits (lower / upper):	1-6 Vol%
h) Flash point:	>115 °C
i) Flashing temperature:	>230 °C
j) Decomposition temperature:	no data available
k) pH value:	-
l) Kinematic viscosity:	no data available
m) Solubility in water:	<0.001 %
n) Dispersion coefficient (K <sub>o/w</sub> ):	7-8.7
o) Vapour pressure (20°C):	< 0.003 hPa
p) Specific gravity:	0.82 g/cm <sup>3</sup>
q) Relative vapour density (air=1):	no data available
r) Particle size:	no data available

### 7 mL DRB

a) State of aggregation:	liquid
b) Colour:	colourless
c) Odor:	odorless
d) Melting point:	no data available
e) Boiling point:	no data available
f) Flammability:	no data available
g) Explosive limits (lower / upper):	no data available
h) Flash point:	no data available
i) Flashing temperature:	no data available
j) Decomposition temperature:	no data available
k) pH value:	6.5-7.5
l) Kinematic viscosity:	no data available
m) Solubility in water:	no data available



MACHEREY-NAGEL GmbH & Co. KG  
 Valenciennes 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

according to Regulations REACH 1907/2006/EC

REF: 740969.50

NucleoSpin totalRNA FFPE XS (50)

Page: 12/20

Printing date: 15.04.2026

Date of issue: 09.04.2026

Version: 2.20.14.8

n) Dispersion coefficient (K <sub>o/w</sub> ):	no data available
o) Vapour pressure (20°C):	no data available
p) Specific gravity:	1.01 g/cm <sup>3</sup>
q) Relative vapour density (air=1):	no data available
r) Particle size:	no data available

**60 mL MX**

a) State of aggregation:	liquid
b) Colour:	colourless
c) Odor:	odorless
d) Melting point:	12 °C
e) Boiling point:	101.5 °C
f) Flammability:	no data available
g) Explosive limits (lower / upper):	1.9-22.5 Vol%
h) Flash point:	11 °C
i) Flashing temperature:	375 °C
j) Decomposition temperature:	no data available
k) pH value:	6-8
l) Kinematic viscosity:	no data available
m) Solubility in water:	< 2 %
n) Dispersion coefficient (K <sub>o/w</sub> ):	no data available
o) Vapour pressure (20°C):	41 hPa
p) Specific gravity:	1.01-1.03 g/cm <sup>3</sup>
q) Relative vapour density (air=1):	3.04
r) Particle size:	no data available

**1 mL MKA**

a) State of aggregation:	liquid
b) Colour:	colourless
c) Odor:	acetic
d) Melting point:	no data available
e) Boiling point:	no data available
f) Flammability:	no data available
g) Explosive limits (lower / upper):	no data available
h) Flash point:	no data available
i) Flashing temperature:	no data available
j) Decomposition temperature:	no data available
k) pH value:	5-6
l) Kinematic viscosity:	no data available
m) Solubility in water:	no data available
n) Dispersion coefficient (K <sub>o/w</sub> ):	no data available
o) Vapour pressure (20°C):	no data available
p) Specific gravity:	1.19 g/cm <sup>3</sup>
q) Relative vapour density (air=1):	no data available
r) Particle size:	no data available

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

a) State of aggregation:	liquid
b) Colour:	colourless
c) Odor:	odorless
d) Melting point:	no data available
e) Boiling point:	no data available
f) Flammability:	no data available
g) Explosive limits (lower / upper):	no data available
h) Flash point:	no data available
i) Flashing temperature:	no data available
j) Decomposition temperature:	no data available
k) pH value:	6-8
l) Kinematic viscosity:	no data available
m) Solubility in water:	no data available
n) Dispersion coefficient (K <sub>o/w</sub> ):	no data available
o) Vapour pressure (20°C):	no data available
p) Specific gravity:	1.0 g/cm <sup>3</sup>
q) Relative vapour density (air=1):	no data available



MACHEREY-NAGEL GmbH & Co. KG  
 Valenciennes 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

according to Regulations REACH 1907/2006/EC

REF: 740969.50

NucleoSpin totalRNA FFPE XS (50)

Page: 13/20

Printing date: 15.04.2026

Date of issue: 09.04.2026

Version: 2.20.14.8

r) Particle size: no data available

## 9.2 Other information

### 9.2.1 Information on physical hazard classes

no data available

### 9.2.2 Other safety-related parameters

No data is available for the other parameters for the mixtures, since no registration and no chemical safety report is required.

Substances are highly volatile and form flammable gas-air mixtures.

## 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

No more required.

### 10.5 Incompatible materials

no additional data available

### 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 the hazard classes according regulation (EC) 1272/2008

Following information is valid for pure substances. Quantitative data on the toxicity of this product are not available.

#### 200 U rDNase

Chemical: *rDNase* CAS No.: 9003-98-9

TSCA Inventory: listed

Japan CSCL/PRTR: not listed

Japan ISHL: not listed

Korea Exist.Chem.Inventory: KE-09612

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.

#### 10 mL MLF

Chemical: *tris(hydroxymethyl)aminomethane* CAS No.: 77-86-1

TSCA Inventory: listed California Proposition 65 List: not 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: KE-01403

LD50 orl rat : 5000 mg/kg

#### 25 mL MW2



MACHEREY-NAGEL GmbH & Co. KG  
Valenciener 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

according to Regulations REACH 1907/2006/EC

REF: 740969.50	NucleoSpin totalRNA FFPE XS (50)	Page: 14/20
Printing date: 15.04.2026	Date of issue: 09.04.2026	Version: 2.20.14.8

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

**800 µL 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  
 Japan CSCL/PRTR: not listed, Japan PDSCL: not listed  
 Japan ISHL: not listed  
 Korea Exist.Chem.Inventory: KE-29297  
 LD50 orl rat : 12600 mg/kg

TRGS 905 (DE): R F C

Chemical: *proteinase K, liquid* CAS No.: 39450-01-6  
 TSCA Inventory: listed (CAS 102925-54-2)  
 Japan CSCL/PRTR: not listed  
 Japan ISHL: not listed  
 Korea Exist.Chem.Inventory: not listed  
 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.

**60 mL Paraffin Dissolver (blue)**

Chemical: *paraffin dissolver* CAS No.: 64742-46-7  
 TSCA Inventory: listed  
 Japan CSCL/PRTR: not listed, Japan PDSCL: not listed  
 Japan ISHL: not listed  
 Korea Exist.Chem.Inventory: KE-12554  
 LD50 orl rat : > 5000 mg/kg

**7 mL DRB**

Chemical: *chemicals/mixture until 2%* CAS No.: -  
 TSCA Inventory: all listed, <2%  
 Korea Exist.Chem.Inventory: listed

**60 mL MX**

Chemical: *1,4-dioxane* CAS No.: 123-91-1  
 TSCA Inventory: listed California Proposition 65 List: listed cancer  
 Exposure Routes: inhalation, skin absorption, ingestion, skin and/or eye contact  
 Target Organs: Eyes, skin, respiratory system, liver, kidneys; [in animals: lung, liver & nasal cavity tumors]  
 Symptoms: irritation eyes, skin, nose, throat; drowsiness, headache; nausea, vomiting; liver damage; kidney failure; [potential occupational carcinogen]  
 Australia NICNAS: Yes (PEC/7) Canada CEPA 1999: DSL Yes  
 Japan CSCL/PRTR: PAC Yes, PRTR - Class I Designated Chemical Substance Yes, Japan PDSCL: PRTR: ≥1,0% class I  
 Japan ISHL: listed ≥1,0%/≥1,0%, Article 57-1+2 (Labelling&SDS required)  
 South Korea TCCA: not listed  
 Korea Exist.Chem.Inventory: KE-10463  
 LD50 orl rat : 5150 mg/kg  
 LC50 ihl rat : 155 mg/L  
 Acute Effects: Cause after inhalation of vapours/dust, impairments of health when ingested in small quantities.  
 Carcinogenic Effects: Suspected of causing cancer.  
 EU carcinogen: Carcinogenicity cat. 2  
 TRGS 905 (DE): K4, R F C

**1 mL MKA**

Chemical: *acetate buffer solution* CAS No.: -  
 TSCA Inventory: all listed  
 Korea Exist.Chem.Inventory: listed



# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 740969.50	NucleoSpin totalRNA FFPE XS (50)	Page: 15/20
Printing date: 15.04.2026	Date of issue: 09.04.2026	Version: 2.20.14.8

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

Chemical: *water* CAS No.: 7732-18-5  
 TSCA Inventory: listed  
 Korea Exist.Chem.Inventory: KE-35400  
 LD50 orl rat : > 90000 mg/kg

## 11.2 Other hazards

**Possible endocrine disrupting effects**  
 no data available

**Other information**  
 no additional data available

## SECTION 12: Ecological information

### 12.1 Toxicity

Following information is valid for pure substances.

**200 U rDNase**

Substance name: *rDNase* CAS-Nr.: 9003-98-9  
 Water hazard class (DE): 1 WGK No.: n.n.  
 Storage class (VCI): 13

**10 mL MLF**

Substance name: *tris(hydroxymethyl)aminomethane* CAS-Nr.: 77-86-1  
 PNEC (fresh water): no data mg/L  
 PNEC = Predicted No Effected Concentration = concentration at which no effect on the environment is expected  
 LC50 fish/96h : LD0 (4d): 1-10 g/L  
 EC50 pseudokirchneriella subcapitata/72h : 397; 48h: 473 mg/L  
 EC10 pseudomonas putita/16h : 1 3h g/L  
 Water hazard class (DE): 2  
 Storage class (VCI): 12-13

**25 mL MW2**

Substance name: *chemicals/mixture until 1%* CAS-Nr.: -  
 Water hazard class (DE): 1  
 Storage class (VCI): 12-13

**800 µL Liquid Proteinase K**

Substance name: *glycerole* CAS-Nr.: 56-81-5  
 PNEC (fresh water): 0.885 mg/L  
 PNEC = Predicted No Effected Concentration = concentration at which no effect on the environment is expected  
 LC50 fish/96h : >5000 24h mg/L  
 EC50 daphnia/48h : >10 24h g/L  
 IC50 scenedesmus quadricauda/72h : IC5 7d >10 g/L  
 EC10 pseudomonas putita/16h : EC5: >10 g/L  
 Water hazard class (DE): 0  
 Storage class (VCI): 10

Substance name: *proteinase K, liquid* CAS-Nr.: 39450-01-6  
 Water hazard class (DE): 1  
 Storage class (VCI): 13

**60 mL Paraffin Dissolver (blue)**

Substance name: *paraffin dissolver* CAS-Nr.: 64742-46-7  
 LC50 fish/96h : >1028 mg/L  
 Water hazard class (DE): 1 WGK No.: 0027  
 Storage class (VCI): 12

**7 mL DRB**

Substance name: *chemicals/mixture until 2%* CAS-Nr.: -  
 Water hazard class (DE): 1  
 Storage class (VCI): 12-13



# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 740969.50

NucleoSpin totalRNA FFPE XS (50)

Page: 16/20

Printing date: 15.04.2026

Date of issue: 09.04.2026

Version: 2.20.14.8

## 60 mL MX

Substance name: *1,4-dioxane* CAS-Nr.: 123-91-1  
 PNEC (fresh water): 10 mg/L  
 PNEC = Predicted No Effect Concentration = concentration at which no effect on the environment is expected  
 Bio Toxicity: 1/2.1/2.6  
 LC50 fish/96h: [21d] 100 mg/L  
 EC50 daphnia/48h: 1 g/L  
 IC50 scenedesmus quadricauda/72h: [72h] 1 g/L  
 Water hazard class (DE): 2 WGK No.: 0086  
 Storage class (VCI): 3

## 1 mL MKA

Substance name: *acetate buffer solution* CAS-Nr.: -  
 Storage class (VCI): 12

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

Substance name: *water* CAS-Nr.: 7732-18-5

## 12.2 Persistence and degradability

### 60 mL MX

Substance name: *1,4-dioxane* CAS-Nr.: 123-91-1  
 calc. half-life (SFO model, soil): 10000 d  
 Degradation half-life, soil (DegT<sub>50</sub>): 3000 d

## 12.3 Bioaccumulative potential

### 10 mL MLF

Substance name: *tris(hydroxymethyl)aminomethane* CAS-Nr.: 77-86-1  
 Dispersion coefficient (K<sub>o/w</sub>): -1,56

### 800 µL Liquid Proteinase K

Substance name: *glycerole* CAS-Nr.: 56-81-5  
 Dispersion coefficient (K<sub>o/w</sub>): -1,76

### 60 mL Paraffin Dissolver (blue)

Substance name: *paraffin dissolver* CAS-Nr.: 64742-46-7  
 Dispersion coefficient (K<sub>o/w</sub>): 7-8,7

### 60 mL MX

Substance name: *1,4-dioxane* CAS-Nr.: 123-91-1  
 Dispersion coefficient (K<sub>o/w</sub>): -0,27  
 Bioconcentration factor (BCF): 0,2-0,7

## 12.4 Mobility in soil

### 60 mL MX

Substance name: *1,4-dioxane* CAS-Nr.: 123-91-1  
 Soil adsorption coefficient (K<sub>oc</sub>): 17-29

## 12.5 Results of PBT and vPvB assessment

This substance/mixture contains components (CAS:123-91-1 {?5 CAS:1634-04-4 {/?5}}), in concentrations 0.1% or higher classified as either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

## 12.6 Endocrine disrupting properties

no data available

## 12.7 Other adverse effects

no additional data available



# Safety Data Sheet

according to Regulations REACH 1907/2006/EC

REF: 740969.50

NucleoSpin totalRNA FFPE XS (50)

Page: 17/20

Printing date: 15.04.2026

Date of issue: 09.04.2026

Version: 2.20.14.8

## 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). Or collect in solvent waste (waste code number 07 07 04).

### 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. (1,4-dioxane mixture)

14.3 Class: 3

14.4 Packing group: II

Road transport ADR

Classification code:	F1	Tunnel restriction code:	D/E
Limited Quantity:	1 L		
Excepted Quantity:	E 2		
Special instructions:	274, 601, 640D		

Air transport IATA DGR

Limited Quantity:	PAX: 353	max. quantity PAX:	5 L
	CAO: 364	max. quantity CAO:	60 L
Excepted Quantity:	E 2		

Maritime transport IMDG

EmS:	F-E, S-E	Staukategorie:	B
Special instructions:	274		

### 14.5 Environmental hazards

none, contains only small quantities of hazardous substances

### 14.6 Special precautions for user

not necessary

### 14.7 Carriage in bulk 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

Chemicals Prohibition Ordinance - (DE: ChemVerbotsV), aktualisiert Jan 2017

Dangerous Substances Protection Act (DE: Chemikaliengesetz - ChemG), Aug 2013, Stand: Okt 2020

Ordinance on protection against dangerous substances (E: Gefahrstoffverordnung - GefStoffV), Nov 2010, Stand: Mrz 2017

TRGS 201, Classification and labeling of activities involving hazardous substances, Feb 2017

TRGS 220, National aspects when preparing safety data sheets, Jan 2017

TRGS 400, Risk assessment for activities involving hazardous substances, Jul 2017

BekGS 408, Application of the GefStoffV and the TRGS with the entry into force of the CLP regulation, December 2009, status: Jan 2012

Wasserhaushaltsgesetz - WHG, Section 3 Handling substances hazardous to water, Jul 2009, status: Aug 2016

TRGS 561, Activities involving carcinogenic metals and their compounds, Oct 2017

MN leaflet/instructions for use, also at [www.mn-net.com](http://www.mn-net.com)

If necessary, observe other country-specific regulations.

### 15.2 Chemical safety assessment

no data available

## SECTION 16: Other information

### 16.1 Changes compared to the last version

Between versions 2.20.14.8 and 2.2.2.2 following changes were applied: - 18 product component data corrected - 12 composition data corrected - 6 substance data corrected



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

## according to Regulations REACH 1907/2006/EC

REF: 740969.50	NucleoSpin totalRNA FFPE XS (50)	Page: 18/20
Printing date: 15.04.2026	Date of issue: 09.04.2026	Version: 2.20.14.8

### 16.2 List of H and P phrases

#### 16.2.1 List of relevant H phrases

H	Between versions 2.20.14.8 and 2.2.2.2 following changes were applied: - 18 product component data corrected - 12 composition data corrected - 6 substance data corrected
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.

#### 16.2.2 List of relevant P phrases

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261sh	Avoid breathing dust/vapours.
P280sh	Wear protective gloves/eye protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P331	Do NOT induce vomiting.
P405	Store locked up.
P501	Dispose of contents/container to regulated waste treatment.

### 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 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  
 Directive 2004/37/EC on the protection of workers from the risk of carcinogens or mutagens at workSUVA .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)  
 Regulation 776/2017/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (10th ATP)  
 TRGS 905, German rules of technology for carcinogenic and mutagenic substances, as of March 18, 2016  
 Regulation 669/2018/EU, adaptation of Regulation 1272/2008/EC to technical and scientific progressText (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)  
 Regulation 692/2022/EU, adaptation of Annex VI, Part 1, of Regulation 1272/2008/EC to technical and scientific progress (18th 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

2017-11 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.



MACHEREY-NAGEL GmbH & Co. KG  
 Valenciener 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

according to Regulations REACH 1907/2006/EC

REF: 740969.50

NucleoSpin totalRNA FFPE XS (50)

Page: 19/20

Printing date: 15.04.2026

Date of issue: 09.04.2026

Version: 2.20.14.8

## 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
NIOSH:	National Institute for Occupational Safety and Health (US)
NRD:	Non-rapidly degradable
onchorhynchus mykiss:	fisch, 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:	fisch, 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
RIP:	REACH Implementations Projects
scu:	sub cutan
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



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  
 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

## according to Regulations REACH 1907/2006/EC

REF: 740969.50	NucleoSpin totalRNA FFPE XS (50)	Page: 20/20
Printing date: 15.04.2026	Date of issue: 09.04.2026	Version: 2.20.14.8

- 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.



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  
 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