

Safety Data Sheet

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

REF: 740618.4

NucleoSpin 96 Flash (4x96)

Page: 1/10

Printing date: 15.11.2021

Date of issue: 22.10.2021

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

1.1 Product identifier

REF 740618.4
Product name NucleoSpin 96 Flash (4x96)

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 250 mL F1
1 x 250 mL F2 (with LyseControl)
1 x 250 mL F3
1 x 60 mL FE
1 x 25-100 mg RNase A (Iyo)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses
Product for analytical use.

Exposure Scenario Classification according REACH, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0
The exposure scenario is integrated into sections 1-16.

Uses advised against
not described

1.3 Details of the supplier of the safety data sheet

Manufactured by:
MACHEREY-NAGEL GmbH & Co. KG
Valenciennr Str. 11, 52355 Düren, GERMANY
Tel.: +49 2421 969 0

E-mail: sds@mn-net.com (msds@mn-net.com)

1.4 Emergency telephone number

Outside Germany (DE): Call your regional Poisons Information Service or call local Life Saving Service.
DE: Gemeinsames Giftinformationszentrum (GGIZ) 99089 Erfurt tel. +49 361 730 730

You find our current versions of SDS (22 languages) in Internet:

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

SECTION 2: Hazard identification

2.0 Classification of the complete product



GHS07 GHS08

Signal word DANGER

Hazard identification	Hazard classes/categories
H315	Skin Irrit. 2
H319	Eye Irrit. 2
H334	Resp. Sens. 1

2.1 Classification of the substance or mixture

250 mL F1

Signal word Do not need labelling as hazardous
-

No hazard class

Safety Data Sheet

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

REF: 740618.4

NucleoSpin 96 Flash (4x96)

Page: 2/10

Printing date: 15.11.2021

Date of issue: 22.10.2021

250 mL F2 (with LyseControl)



GHS07

Signal word

WARNING

Hazard identification

Hazard classes/categories

H315

Skin Irrit. 2

H319

Eye Irrit. 2

250 mL F3

Signal word

Do not need labelling as hazardous

-

No hazard class

60 mL FE

Signal word

Do not need labelling as hazardous

-

No hazard class

25-100 mg RNase A (Iyo)



GHS08

Signal word

DANGER

Hazard identification

Hazard classes/categories

H334

Resp. Sens. 1

2.2 Label elements

According **CLP directive** inner packages must be only labelled with GHS symbol(s) and product identifier(s) (EU 1272/2008 Annex I - 1.5.1.2).

Harmful chemicals/mixtures with signal word: **WARNING** 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.

250 mL F1

Do not need labelling as hazardous

Signal word: -

250 mL F2 (with LyseControl)



GHS07

Signal word: WARNING

H315, H319

Safety Data Sheet

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

REF: 740618.4

NucleoSpin 96 Flash (4x96)

Page: 3/10

Printing date: 15.11.2021

Date of issue: 22.10.2021

Causes skin irritation. Causes serious eye irritation.

P280sh

Wear protective gloves/eye protection.

250 mL F3

Do not need labelling as hazardous

Signal word: -

60 mL FE

Do not need labelling as hazardous

Signal word: -

25-100 mg RNase A (Iyo)



GHS08

Signal word: DANGER

H334

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

P261sh, P342+311

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

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. ---

Information pertaining to particular risks to human and possible symptoms

Cause after impairments of health when ingested in small quantities.

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

Information pertaining to particular risks to the environment

PBT: not applicable

vPvB: not applicable

Other hazards

SECTION 3: Composition/information on ingredients

3.1 Substances or 3.2 Mixtures

250 mL F1

Chemical: chemicals/mixture < 1%

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

TSCA Inventory: all listed, <1%

KE No.: listed

Concentration: 0.1 - <1 %

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

CAS No.: -

250 mL F2 (with LyseControl)

Safety Data Sheet

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

REF: 740618.4

NucleoSpin 96 Flash (4x96)

Page: 4/10

Printing date: 15.11.2021

Date of issue: 22.10.2021

Chemical: *sodium hydroxide solution* (diluted < 2 %)
 Classification: H314, Skin Corr. 1B
 Formula: NaOH·H₂O
 Pseudonym: diluted soda lye
 TSCA Inventory: listed
 REACH Reg. No.: 01-2119457892-27-xxxx
 EC No.: 215-185-5
 RTECS: WB4900000
 KE No.: KE-31487
 Concentration: 0.5 - <1 %
 acc. CLP (GHS): H315, Skin Irrit. 2, H319, Eye Irrit. 2

CAS No.: 1310-73-2d

Indice No.: 011-002-00-6

Chemical: *dodecyl sulfate, sodium salt*
 Classification: H228, Flam. Sol. 1, H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H318, Eye Dam. 1, H332, Acute Tox. 4 inh., H335, STOT SE 3, H412, Aquatic Chronic 3
 Formula: C₁₂H₂₅NaO₄S
 Pseudonym: sodium lauryl sulfate, sulfuric acid monododecyl ester sodium salt
 TSCA Inventory: listed
 REACH Reg. No.: 01-2119489461-32-xxxx
 EC No.: 205-788-1
 RTECS: WT1050000
 KE No.: KE-21884
 Concentration: 0.1 - <1 %
 acc. CLP (GHS): The criteria for classification are not fulfilled.

CAS No.: 151-21-3

MFCD: 00036175

Chemical: *indicator dye(s)*
 Classification: No criteria for classification or naming of chemical not required.
 TSCA Inventory: all listed, <1%
 Concentration: < 0.10 %
 acc. CLP (GHS): The criteria for classification are not fulfilled.

CAS No.: -

250 mL F3

Chemical: *acetate buffer solution*
 Classification: No criteria for classification or naming of chemical not required.
 Formula: CH₃COOH/K/Na·H₂O
 TSCA Inventory: all listed
 KE No.: listed
 Concentration: 25 - <45 %
 acc. CLP (GHS): The criteria for classification are not fulfilled.

CAS No.: -

60 mL FE

Chemical: *chemicals/mixture < 1%*
 Classification: No criteria for classification or naming of chemical not required.
 TSCA Inventory: all listed, <1%
 KE No.: listed
 Concentration: 0.1 - <1 %
 acc. CLP (GHS): The criteria for classification are not fulfilled.

CAS No.: -

25-100 mg RNase A (Iyo)

Chemical: *RNase*
 Classification: H334, Resp. Sens. 1
 Formula: Enzyme Comm. No. 3.1.27.5, origin: bovine pancreas (controlled population)
 Pseudonym: Nuclease, ribo-
 TSCA Inventory: listed
 EC No.: 232-646-6
 RTECS: RF0760000
 KE No.: KE-30341
 Concentration: 90 - <100 %
 acc. CLP (GHS): H334, Resp. Sens. 1

CAS No.: 9001-99-4

3.3 Remarks

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

List of H and P phrases: see section 16.1

Safety Data Sheet

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

REF: 740618.4

NucleoSpin 96 Flash (4x96)

Page: 5/10

Printing date: 15.11.2021

Date of issue: 22.10.2021

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 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 with activated charcoal supplement should be drunk after it has been ingested. Do not induce vomiting under any circumstances. Do not make any efforts to neutralise it. Contact medical advice for possible consequences. ---

4.2 Most important symptoms and effects, both acute and delayed

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

4.3 Indication of any immediate medical attention and special treatment needed

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 chemical. Further treatment must to be carried out by an eye specialist. Inform patient respectively further measures and the possibility of long-term damages. ---

SECTION 5: Firefighting measures

5.1 Extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.

5.2 Special hazards arising from the substance or mixture

Formation of hazardous and caustic vapour-air mixtures possible. ---

5.3 Advice for firefighters

No, for listed product. Product package burns like paper or plastic. Spray any vapours released with water. Retent fire water. Use only acid-resistant safety equipment.

For great amount - if necessary - protective breathing apparatus which is independent of the ambient air (isolated equipment), and sealed protective clothing is necessary in the event of a large-scale formation of toxic substances.

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 procedures

Do not breathe vapours. Wear suitable protective gloves (see 8.2.2). Wear eye protection. Regular staff training is necessary, indicating hazards and precautions on the basis of operating instructions. Restrictions on activity must be observed.

6.2 Environmental precautions

not necessary

6.3 Methods and material for containment and cleaning up

Bind any escaping liquid with inert absorbent. And dispose in accordance to local regulations for the disposal of hazardous chemicals.

Clean any contaminated equipment and floors with plenty of water.

Collect small amounts of leaked liquid and flush with water into drains.

6.4 Reference to other sections

Safety Data Sheet

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

REF: 740618.4

NucleoSpin 96 Flash (4x96)

Page: 6/10

Printing date: 15.11.2021

Date of issue: 22.10.2021

see information in section 5.4 ---

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product. Use only in well-ventilated working areas.

7.2 Conditions for safe storage, including any incompatibilities

The original product package of MACHEREY-NAGEL allows a safe storage.

Storage class (VCI): 12

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 F1

Chemical: chemicals/mixture < 1%

CAS No.: -

250 mL F2 (with LyseControl)

Chemical: sodium hydroxide solution

CAS No.: 1310-73-2d

Chemical: dodecyl sulfate, sodium salt

CAS No.: 151-21-3

NIOSH: not listed

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

OSHA: not listed

Chemical: indicator dye(s)

CAS No.: -

250 mL F3

Chemical: acetate buffer solution

CAS No.: -

60 mL FE

Chemical: chemicals/mixture < 1%

CAS No.: -

25-100 mg RNase A (Iyo)

Chemical: RNase

CAS No.: 9001-99-4

8.2 Exposure controls

Good ventilation and extraction system in the room, floor resistant to chemicals with floor drainage and washing facilities. The highest level of cleanliness must be maintained at the workplace.

8.2.1 Respiratory protection

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

8.2.2 Hand protection

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

8.2.3 Eye protection

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

8.2.4 Skin protection

Recommended to avoid contamination with these hazards.

8.2.5 Personal hygiene

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

Safety Data Sheet

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

REF: 740618.4

NucleoSpin 96 Flash (4x96)

Page: 7/10

Printing date: 15.11.2021

Date of issue: 22.10.2021

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

250 mL F1

Appearance: liquid

Colour: colourless

Odor: odorless

pH:

7.5-8.5

Specific gravity:

1.00 g/cm³

250 mL F2 (with LyseControl)

Appearance: liquid

Colour: blue

Odor: odorless

pH:

13

Specific gravity:

1.008 g/cm³

250 mL F3

Appearance: liquid

Colour: colourless

Odor: odorless

pH:

5-6

Specific gravity:

1.15 g/cm³

60 mL FE

Appearance: liquid

Colour: colourless

Odor: odorless

pH:

8-9

Specific gravity:

1.0 g/cm³

25-100 mg RNase A (Iyo)

Appearance: solid (lyoph.)

Colour: colourless

Odor: odorless

Solubility in water:

0-100 %

9.2 Other information

Data for the other parameters of the mixtures are not available, because no registration and no chemical safety report is required.

Relevant Properties of Substance Group

SECTION 10: Stability and reactivity

10.1 Reactivity

no further data available.

10.2 Chemical stability

No known instability.

10.3 Possibility of hazardous reactions

No further data available.

10.4 Conditions to avoid

Not necessary. ---

10.5 Incompatible materials

Avoid contact with strong acids or alkalines.

10.6 Hazardous decomposition products

In the original package all parts/all reagents are safety and separated stored. Decompositions are not observed during the expiration period under recommended conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

250 mL F1

Chemical: chemicals/mixture < 1%

CAS No.: -

TSCA Inventory: all listed, <1%

Korea Exist.Chem.Inventory: listed

Safety Data Sheet

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

REF: 740618.4

NucleoSpin 96 Flash (4x96)

Page: 8/10

Printing date: 15.11.2021

Date of issue: 22.10.2021

250 mL F2 (with LyseControl)

Chemical: *sodium hydroxide solution* CAS No.: 1310-73-2d
TSCA Inventory: listed California Proposition 65 List: not listed
Exposure Routes: inhalation, ingestion, skin and/or eye contact
Target Organs: Eyes, skin, respiratory system
Symptoms: -
Japan CSCL/PRTR: not listed, Japan PDSCL: not listed
Japan ISHL: listed $\geq 1,0\%$ / $\geq 1,0\%$ SDS required
Korea Exist.Chem.Inventory: KE-31487
LD50_{orl rat}: [$< 1\%$] > 50 g/kg
LD50_{drm rbt}: not applicable
LD50_{orl mus}: [$< 1\%$] > 4 g/kg

Chemical: *dodecyl sulfate, sodium salt* CAS No.: 151-21-3
TSCA Inventory: listed California Proposition 65 List: not listed
Australia NICNAS: not listed Canada CEPA 1999: DSL yes
Japan CSCL/PRTR: PRTR - Class I Designated Chemical Substance, Japan PDSCL: not listed
Japan ISHL: not listed
South Korea TCCA: not listed
Korea Exist.Chem.Inventory: KE-21884
LD50_{orl rat}: 1288 mg/kg
LC50_{inh rat}: 3900_{1h} mg/m³
LD50_{drm rbt}: 10 g/kg

Chemical: *indicator dye(s)* CAS No.: -
TSCA Inventory: all listed, $< 1\%$

250 mL F3

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

60 mL FE

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

25-100 mg RNase A (lyo)

Chemical: *RNase* CAS No.: 9001-99-4
TSCA Inventory: listed
Japan CSCL/PRTR: not listed
Japan ISHL: not listed
Korea Exist.Chem.Inventory: KE-30341
LD50_{intraperitoneal rat}: 392 mg/kg
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.

SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

250 mL F1

Chemical: *chemicals/mixture $< 1\%$* CAS No.: -
Water hazard class (DE): 1
Storage class (VCI): 12-13

Safety Data Sheet

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

REF: 740618.4

NucleoSpin 96 Flash (4x96)

Page: 9/10

Printing date: 15.11.2021

Date of issue: 22.10.2021

250 mL F2 (with LyseControl)

Chemical: *sodium hydroxide solution*
LC50_{leuciscus idus/96h}: 35-189 mg/L
LC50_{fish/96h}: 45.4 mg/L
EC50_{daphnia/48h}: >100 mg/L
Water hazard class (DE): nwg WGK No.: 0142
Storage class (VCI): 12-13

CAS No.: 1310-73-2d

Chemical: *dodecyl sulfate, sodium salt*
LC50_{daphnia magna/48h}: 6.3 mg/L
LC50_{fish/96h}: 1.31-22.5 mg/L
Water hazard class (DE): 2
Dispersion coefficient_(octanol-water): 1.6
Storage class (VCI): 12-13

CAS No.: 151-21-3

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

CAS No.: -

250 mL F3

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

CAS No.: -

60 mL FE

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

CAS No.: -

25-100 mg RNase A (Iyo)

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

CAS No.: 9001-99-4

12.2 Persistence and degradability

not necessary

12.3 Bioaccumulative potential

not necessary

12.4 Mobility in soil

not necessary

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no additional data available

SECTION 13: Disposal considerations

Please observe local regulations for collection and disposal of hazardous waste and contact waste disposal company, where you will obtain information on laboratory waste disposal (waste code number 16 05 06).

13.1 Waste treatment methods

Normally it is possible to empty small amounts (diluted!) into drains.

SECTION 14: Transport information

14.1 - 14.4: No dangerous goods according the transport regulations

14.5 Environmental hazards

none, contains only small quantities of hazardous substances

14.6 Special precautions for user

not necessary

Safety Data Sheet

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

REF: 740618.4

NucleoSpin 96 Flash (4x96)

Page: 10/10

Printing date: 15.11.2021

Date of issue: 22.10.2021

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

not applicable

SECTION 15: Regulatory information

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

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013
German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC
TRGS 200, German engineering rules governing the classification and labelling of hazardous substances, preparations and products, updated October 2011
MN Leaflet/User manual, also see www.mn-net.com
Look for your country-specific regulations.

15.2 Chemical safety assessment

not necessary for these small amounts ---

SECTION 16: Other information

16.1 List of H and P phrases

16.1.1 List of relevant H phrases

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

16.1.2 List of relevant P phrases

P261sh Avoid breathing dust/vapours.
P280sh Wear protective gloves/eye protection.
P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342+311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

16.2 Training advice

Multiple safety training of staffs about danger and protection by using hazards in working area. Additionally training and introduction of staffs for using these products.

16.3 Recommended restriction on use

Only for professional user.
Look about employee restrictions for young people (f. ex. 94/33/EC or DE § 22 JArbSchG)!
Look about employee restrictions for pregnant women and nursing women (f.ex. 92/85/EEC or for DE §§ 11-13 MuSchG 2017)!
An individual package of this product or test kit has a moderate hazardous potential.

16.4 Further information

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.

16.5 Sources of key data

Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS
Regulation 487/2013/EU, 4th adaptation of CLP regulation to technical and scientific progress
Regulation 669/2018/EU, 4th adaptation of CLP regulation to technical and scientific progress
Regulation 1480/2018/EU, 4th adaptation of CLP regulation to technical and scientific progress
Regulation 849/2021/EU, 4th adaptation of CLP regulation to technical and scientific progress
TRGS 900, German engineering rules governing limits in air at work, updated 03/2019
SUVA .CH, Limits in air at work 2009, revised on 01.2009
TRGS 907, German engineering rules governing listing of substances and causes of sensitizations, updated November 2011
KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

Revisions/Updates

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