Safety Data Sheet

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

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

1.1 Product identifier

REF 740420.10
Product name NucleoBond Xtra Midi EF (10)

REACH Registration number(s): see SECTION 3.1/3.2 or
A registration number for the substance(s) does not exist because the annual tonnage does not require registration or the substance or its use is excluded from registration.

1 x 60 mL ELU-EF
2 x 200 mL ENDO-EF
1 x 200 mL EQU-EF
1 x 60 mL FIL-EF
1 x 100 mL LYS-EF
1 x 100 mL NEU-EF
1 x 100 mL RES-EF
1 x 0.6-100 mg RNase A (lyo)
1 x 30 mL TE-EF
1 x 200 mL WASH-EF
1 x 30 mL H_2O-EF
1 x 9 mL H_2O-EF (for 70% ethanol)

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

Relevant identified uses
Product for analytical use.
Exposure Scenario Classification according REACh, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0
The exposure scenario is integrated into sections 1-16.
Uses advised against
not described

1.3 Details of the supplier of the safety data sheet

Manufactured by:
MACHEREY-NAGEL GmbH & Co. KG
Valencienner Str. 11, 52355 Düren, GERMANY
Tel.: +49 2421 969 0 E-mail: sds@mn-net.com (msds@mn-net.com)

1.4 Emergency telephone number

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

You find our current versions of SDS (22 languages) in Internet: **http://www.mn-net.com/SDS**

SECTION 2: Hazard identification

2.0 Classification of the complete product

GHS02 GHS07 GHS08

Signal word DANGER

Hazard identification	Hazard classes/categories
H226	Flam. Liq. 3
H315	Skin Irrit. 2
H319	Eye Irrit. 2
H334	Resp. Sens. 1
H412	Aquatic Chronic 3

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2.1 Classification of the substance or mixture

60 mL ELU-EF

GHS02 GHS07

Signal word WARNING

Hazard identification	Hazard classes/categories
H226	Flam. Liq. 3
H319	Eye Irrit. 2

200 mL ENDO-EF

GHS02

Signal word WARNING

Hazard identification	Hazard classes/categories
H226	Flam. Liq. 3
H412	Aquatic Chronic 3

200 mL EQU-EF

GHS02

Signal word WARNING

Hazard identification	Hazard classes/categories
H226	Flam. Liq. 3
H412	Aquatic Chronic 3

60 mL FIL-EF

Do not need labelling as hazardous

Signal word -

No hazard class

100 mL LYS-EF

GHS07

Signal word WARNING

Hazard identification	Hazard classes/categories
H315	Skin Irrit. 2
H319	Eye Irrit. 2

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100 mL NEU-EF

Do not need labelling as hazardous

Signal word -

No hazard class

100 mL RES-EF

Do not need labelling as hazardous

Signal word -

No hazard class

0.6-100 mg RNase A (lyo)

GHS08

Signal word DANGER

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

30 mL TE-EF

Do not need labelling as hazardous

Signal word -

No hazard class

200 mL WASH-EF

GHS02

Signal word WARNING

Hazard identification	Hazard classes/categories
H226	Flam. Liq. 3

30 mL H_2O-EF

Do not need labelling as hazardous

Signal word -

No hazard class

9 mL H_2O-EF (for 70% ethanol)

Do not need labelling as hazardous

Signal word -

No hazard class

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2.2 Label elements

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

Harmful chemicals/mixtures with signal word: **WARNING** and highly flammable chemicals/mixtures must not be labelled with H and P phrases **until 125 mL** (EU 1272/2008 Annex I - 1.5.2). This labelling exemption is NOT valid for sensibilizing substances.

60 mL ELU-EF

GHS02 GHS07

Signal word: WARNING

200 mL ENDO-EF

GHS02

Signal word: WARNING

H226, H412
Flammable liquid and vapour. Harmful to aquatic life with long lasting effects.

P210, P273
Keep away from heat/sparks/open flames/hot surfaces. No smoking. Avoid release to the environment.

200 mL EQU-EF

GHS02

Signal word: WARNING

H226, H412
Flammable liquid and vapour. Harmful to aquatic life with long lasting effects.

P210, P273
Keep away from heat/sparks/open flames/hot surfaces. No smoking. Avoid release to the environment.

60 mL FIL-EF

Do not need labelling as hazardous
Signal word: -

100 mL LYS-EF

GHS07

Signal word: WARNING

100 mL NEU-EF

Do not need labelling as hazardous

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Signal word: -

100 mL RES-EF

Do not need labelling as hazardous
Signal word: -

0.6-100 mg RNase A (lyo)

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.

30 mL TE-EF

Do not need labelling as hazardous
Signal word: -

200 mL WASH-EF

GHS02

Signal word: WARNING

H226
Flammable liquid and vapour.

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

30 mL H_2O-EF

Do not need labelling as hazardous
Signal word: -

9 mL H_2O-EF (for 70% ethanol)

Do not need labelling as hazardous
Signal word: -

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 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
Harmful to aquatic life with long lasting effects. Avoid contact of substance/mixture to environment.
PBT: not applicable
vPvB: not applicable

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Other hazards

SECTION 3: Composition/information on ingredients

3.1 Substances or 3.2 Mixtures

60 mL ELU-EF

Chemical: *2-propanol* — CAS No.: 67-63-0
Classification: H225, Flam. Liq. 2, H319, Eye Irrit. 2, H336, STOT SE 3
Formula: $C_3 H_8 O$
Pseudonym: isopropanol, IPA, propan-2-ol
TSCA Inventory: listed
REACH Reg. No.: 01-2119457558-25-XXXX
EC No.: 200-661-7 — Indice No.: 603-117-00-0
RTECS: NT8050000 — MFCD: 00011674
KE No.: KE-29363
Concentration: 10 - <15 %
acc. CLP (GHS): H226, Flam. Liq. 3, H319, Eye Irrit. 2

Chemical: *potassium chloride* — CAS No.: 7447-40-7
Classification: No criteria for classification or naming of chemical not required.
Formula: KCl
TSCA Inventory: listed
REACH Reg. No.: 01-2119539416-36-xxxx
EC No.: 231-211-8
RTECS: TS8050000 — MFCD: 00011360
KE No.: KE-29086
Concentration: 1 - <10 %
acc. CLP (GHS): The criteria for classification are not fulfilled.

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

200 mL ENDO-EF

Chemical: *ethanol* (diluted < 20 %) (denatured with 1%IPA/1%MEK, acc.2016/1867/EU) — CAS No.: 64-17-5d
Classification: H225, Flam. Liq. 2
Formula: $C_2 H_6 O$; $C_2 H_5 OH$
Pseudonym: ethyl alcohol, methylated spirit
TSCA Inventory: listed
REACH Reg. No.: 01-2119457610-43-xxxx
EC No.: 200-578-6 — Indice No.: 603-002-00-5
RTECS: KQ6300000 — MFCD: 00003568
KE No.: KE-13217
Concentration: 5 - <20 %
acc. CLP (GHS): H226, Flam. Liq. 3

Chemical: *potassium chloride* — CAS No.: 7447-40-7
Classification: No criteria for classification or naming of chemical not required.
Formula: KCl
TSCA Inventory: listed
REACH Reg. No.: 01-2119539416-36-xxxx
EC No.: 231-211-8
RTECS: TS8050000 — MFCD: 00011360
KE No.: KE-29086
Concentration: 1 - <10 %
acc. CLP (GHS): The criteria for classification are not fulfilled.

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Chemical: *Triton® X-114* CAS No.: 9036-19-5
Classification: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H318, Eye Dam. 1, H410, Aquatic Chronic 1
Formula: $C_{30}H_{54}O_9$
Pseudonym: Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-
TSCA Inventory: listed
SVHC listed: **listed**
EC No.: 232-658-1
RTECS: RI0720000
KE No.: KE-33567
Concentration: 0.25 - <2.5 %
acc. CLP (GHS): H412, Aquatic Chronic 3

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

200 mL EQU-EF

Chemical: *ethanol* (diluted < 20 %) CAS No.: 64-17-5d
(denatured with 1%IPA/1%MEK, acc.2016/1867/EU)
Classification: H225, Flam. Liq. 2
Formula: C_2H_6O; C_2H_5OH
Pseudonym: ethyl alcohol, methylated spirit
TSCA Inventory: listed
REACH Reg. No.: 01-2119457610-43-xxxx
EC No.: 200-578-6 Indice No.: 603-002-00-5
RTECS: KQ6300000 MFCD: 00003568
KE No.: KE-13217
Concentration: 5 - <20 %
acc. CLP (GHS): H226, Flam. Liq. 3

Chemical: *potassium chloride* CAS No.: 7447-40-7
Classification: No criteria for classification or naming of chemical not required.
Formula: KCl
TSCA Inventory: listed
REACH Reg. No.: 01-2119539416-36-xxxx
EC No.: 231-211-8
RTECS: TS8050000 MFCD: 00011360
KE No.: KE-29086
Concentration: 1 - <10 %
acc. CLP (GHS): The criteria for classification are not fulfilled.

Chemical: *Triton® X-114* CAS No.: 9036-19-5
Classification: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H318, Eye Dam. 1, H410, Aquatic Chronic 1
Formula: $C_{30}H_{54}O_9$
Pseudonym: Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-
TSCA Inventory: listed
SVHC listed: **listed**
EC No.: 232-658-1
RTECS: RI0720000
KE No.: KE-33567
Concentration: 0.25 - <2.5 %
acc. CLP (GHS): H412, Aquatic Chronic 3

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

60 mL FIL-EF

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Chemical: *potassium chloride* CAS No.: 7447-40-7
Classification: No criteria for classification or naming of chemical not required.
Formula: KCl
TSCA Inventory: listed
REACH Reg. No.: 01-2119539416-36-xxxx
EC No.: 231-211-8
RTECS: TS8050000 MFCD: 00011360
KE No.: KE-29086
Concentration: 1 - <10 %
acc. CLP (GHS): The criteria for classification are not fulfilled.

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

100 mL LYS-EF

Chemical: *sodium hydroxide solution* (diluted < 2 %) CAS No.: 1310-73-2d
Classification: H314, Skin Corr. 1B
Formula: $NaOH \cdot H_2O$
Pseudonym: diluted soda lye
TSCA Inventory: listed
REACH Reg. No.: 01-2119457892-27-xxxx
EC No.: 215-185-5 Indice No.: 011-002-00-6
RTECS: WB4900000
KE No.: KE-31487
Concentration: 0.5 - <1 %
acc. CLP (GHS): H315, Skin Irrit. 2, H319, Eye Irrit. 2

Chemical: *dodecyl sulfate, sodium salt* CAS No.: 151-21-3
Classification: H228, Flam. Sol. 1, H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H318, Eye Dam. 1, H332, Acute Tox. 4 inh., H335, STOT SE 3, H412, Aquatic Chronic 3
Formula: $C_{12}H_{25}NaO_4S$
Pseudonym: sodium lauryl sulfate, sulfuric acid monododecyl ester sodium salt
TSCA Inventory: listed
REACH Reg. No.: 01-2119489461-32-xxxx
EC No.: 205-788-1
RTECS: WT1050000 MFCD: 00036175
KE No.: KE-21884
Concentration: 0.1 - <1 %
acc. CLP (GHS): The criteria for classification are not fulfilled.

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

100 mL NEU-EF

Chemical: *acetate buffer solution* CAS No.: -
Classification: No criteria for classification or naming of chemical not required.
Formula: $CH_3COOH/K/Na \cdot H_2O$
TSCA Inventory: all listed
KE No.: listed
Concentration: 25 - <45 %
acc. CLP (GHS): The criteria for classification are not fulfilled.

100 mL RES-EF

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

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0.6-100 mg RNase A (lyo)

Chemical: *RNase* — CAS No.: 9001-99-4
Classification: H334, Resp. Sens. 1
Formula: Enzyme Comm. No. 3.1.27.5, origin: bovine pancreas (controlled population)
Pseudonym: Nuclease, ribo-
TSCA Inventory: listed
EC No.: 232-646-6
RTECS: RF0760000
KE No.: KE-30341
Concentration: 90 - <100 %
acc. CLP (GHS): H334, Resp. Sens. 1

30 mL TE-EF

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

200 mL WASH-EF

Chemical: *ethanol* (diluted < 20 %) (denatured with 1%IPA/1%MEK, acc.2016/1867/EU) — CAS No.: 64-17-5d
Classification: H225, Flam. Liq. 2
Formula: C_2H_6O; C_2H_5OH
Pseudonym: ethyl alcohol, methylated spirit
TSCA Inventory: listed
REACH Reg. No.: 01-2119457610-43-xxxx
EC No.: 200-578-6 — Indice No.: 603-002-00-5
RTECS: KQ6300000 — MFCD: 00003568
KE No.: KE-13217
Concentration: 5 - <20 %
acc. CLP (GHS): H226, Flam. Liq. 3

Chemical: *potassium chloride* — CAS No.: 7447-40-7
Classification: No criteria for classification or naming of chemical not required.
Formula: KCl
TSCA Inventory: listed
REACH Reg. No.: 01-2119539416-36-xxxx
EC No.: 231-211-8
RTECS: TS8050000 — MFCD: 00011360
KE No.: KE-29086
Concentration: 1 - <10 %
acc. CLP (GHS): The criteria for classification are not fulfilled.

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

30 mL H_2O-EF

Chemical: *water* — CAS No.: 7732-18-5
Classification: No criteria for classification or naming of chemical not required.
Formula: H_2O
TSCA Inventory: listed
REACH Reg. No.: exempt, Annex IV
EC No.: 231-791-2
RTECS: ZC0110000
KE No.: KE-35400
Concentration: 90 - <100 %
acc. CLP (GHS): The criteria for classification are not fulfilled.

9 mL H_2O-EF (for 70% ethanol)

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US: Tel.: +1 484 821 0984 Fax: +1 484 821 1272 E-mail: sales-us@mn-net.com

Chemical:	*water*	CAS No.: 7732-18-5
Classification:	No criteria for classification or naming of chemical not required.	
Formula:	H_2O	
TSCA Inventory:	listed	
REACH Reg. No.:	exempt, Annex IV	
EC No.:	231-791-2	
RTECS:	ZC0110000	
KE No.:	KE-35400	
Concentration:	90 - <100 %	
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 16.1

SECTION 4: First aid measures

4.1 Description of first aid measures

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

4.1.1 After SKIN Contact

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

4.1.2 After EYE Contact

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

4.1.3 After INHALATION of vapours

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

4.1.4 After ORAL Intake

After oral intake lots of water should be drunk after it has been ingested. ---

4.2 Most important symptoms and effects, both acute and delayed

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

4.3 Indication of any immediate medical attention and special treatment needed

Inform patient respectively further measures and the possibility of long-term damages. ---

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

WARNING: Flammable (GHS regulation). May form explosive vapour-air mixtures. Formation of hazardous and caustic vapour-air mixtures possible. ---

5.3 Advice for firefighters

No, for listed product. 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.

5.4 Additional information

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapours. 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.

6.2 Environmental precautions

not necessary, contains only small amounts of these substances

6.3 Methods and material for containment and cleaning up

Bind any escaping liquid with inert absorbent. 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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

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

7.2 Conditions for safe storage, including any incompatibilities

The original product package of MACHEREY-NAGEL allows a safe storage.
Storage class (VCI): 3
Water hazard class (DE): 2

7.2.1 Requirements for stock rooms and containers

Keep original product packages tightly closed during handling and storage.

7.3 Specific end use(s)

Product for analytical use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

60 mL ELU-EF

Chemical: *2-propanol* CAS No.: 67-63-0
DNEL: [inh] 500 mg/m³
DNEL = Derived No-Effect Level (for workers)
PNEC(fresh water): 140.9 mg/L
PNEC = Predicted No Effected Concentration
TRGS 900 (DE): 200 ppm / 500 mg/m³
E/e respirable
Short-term exposure factor: 2 (II), Y
skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded
SUVA(CH) MAK value: 200 ppm / 500 mg/m³
TRGS 903 (DE): [Aceton B/b, U/b] 25 mg/L
B blood, U urine, a no limitation, b end of exposition or shift
NIOSH: [TWA] 400 ppm / 980 mg/m³
NIOSH STEL: 500 ppm / 1225 mg/m³
[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/m³

Chemical: *potassium chloride* CAS No.: 7447-40-7

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

200 mL ENDO-EF

Chemical: *ethanol* CAS No.: 64-17-5d
DNEL: [derm] 343 mg/kg; [inh] 950 mg/m³
DNEL = Derived No-Effect Level (for workers)
PNEC(fresh water): 0.96 mg/L
PNEC = Predicted No Effected Concentration
TRGS 900 (DE): 200 ppm / 380 mg/m³
E/e respirable
Short-term exposure factor: 4 (II), Y
skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

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SUVA(CH) MAK value: 500 ppm / 960 mg/m³
NIOSH: [TWA] 1000 ppm / 1900 mg/m³
[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/m³

Chemical: *potassium chloride* CAS No.: 7447-40-7

Chemical: *Triton® X-114* CAS No.: 9036-19-5

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

200 mL EQU-EF
Chemical: *ethanol* CAS No.: 64-17-5d
DNEL: [derm] 343 mg/kg; [inh] 950 mg/m³
DNEL = Derived No-Effect Level (for workers)
$PNEC_{(fresh\ water)}$: 0.96 mg/L
PNEC = Predicted No Effected Concentration
TRGS 900 (DE): 200 ppm / 380 mg/m³
E/e respirable
Short-term exposure factor: 4 (II), Y
skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded
SUVA(CH) MAK value: 500 ppm / 960 mg/m³
NIOSH: [TWA] 1000 ppm / 1900 mg/m³
[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/m³

Chemical: *potassium chloride* CAS No.: 7447-40-7

Chemical: *Triton® X-114* CAS No.: 9036-19-5

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

60 mL FIL-EF
Chemical: *potassium chloride* CAS No.: 7447-40-7

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

100 mL LYS-EF
Chemical: *sodium hydroxide solution* CAS No.: 1310-73-2d

Chemical: *dodecyl sulfate, sodium salt* CAS No.: 151-21-3
NIOSH: not listed
[TWA] Time-weighted average to a reference period of 8 hours, [STEL] Short-term exposure limit related to a 15-minute period
OSHA: not listed

Chemical: *indicator dye(s)* CAS No.: -

100 mL NEU-EF
Chemical: *acetate buffer solution* CAS No.: -

100 mL RES-EF
Chemical: *chemicals/mixture < 1%* CAS No.: -

0.6-100 mg RNase A (lyo)
Chemical: *RNase* CAS No.: 9001-99-4

30 mL TE-EF
Chemical: *chemicals/mixture < 1%* CAS No.: -

200 mL WASH-EF
Chemical: *ethanol* CAS No.: 64-17-5d
DNEL: [derm] 343 mg/kg; [inh] 950 mg/m³
DNEL = Derived No-Effect Level (for workers)
$PNEC_{(fresh\ water)}$: 0.96 mg/L
PNEC = Predicted No Effected Concentration

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TRGS 900 (DE): 200 ppm / 380 mg/m³
E/e respirable
Short-term exposure factor: 4 (II), Y
skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded
SUVA(CH) MAK value: 500 ppm / 960 mg/m³
NIOSH: [TWA] 1000 ppm / 1900 mg/m³
[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/m³

Chemical: *potassium chloride* CAS No.: 7447-40-7

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

30 mL H_2 O-EF
Chemical: *water* CAS No.: 7732-18-5

9 mL H_2 O-EF (for 70% ethanol)
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 Hand protection
Yes, gloves according EN 374 (permeation time >30 min - level 2), consist of PVC, natural latex, Neopren, or Nitril (f.ex. from Ansell or KCL). Use for short times chemical resistant latex gloves with code EN 374-3 level 1.

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

8.2.4 Skin protection
Recommended to avoid contamination with these hazards.

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

60 mL ELU-EF

Appearance: liquid	Colour: colourless	Odor: alcoholic
pH:	8.5-9.5	
Flash point:	30 °C	
Specific gravity:	1.04 g/cm³	

200 mL ENDO-EF

Appearance: liquid	Colour: colourless	Odor: alcoholic
pH:	6-7	
Flash point:	39 °C	
Specific gravity:	1.04 g/cm³	

200 mL EQU-EF

Appearance: liquid	Colour: colourless	Odor: alcoholic
pH:	6-7	
Flash point:	39 °C	
Specific gravity:	1.04 g/cm³	

60 mL FIL-EF

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Appearance: liquid	Colour: colourless	Odor: odorless
pH:	6-7	
Specific gravity:	1.06 g/cm³	

100 mL LYS-EF

Appearance: liquid	Colour: blue	Odor: odorless
pH:	13	
Specific gravity:	1.008 g/cm³	

100 mL NEU-EF

Appearance: liquid	Colour: colourless	Odor: acetic
pH:	4-5	
Flash point:	63 °C	
Specific gravity:	1.19 g/cm³	

100 mL RES-EF

Appearance: liquid	Colour: colourless	Odor: odorless
pH:	7.5 - 8.5	
Specific gravity:	1.01 g/cm³	

0.6-100 mg RNase A (lyo)

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

30 mL TE-EF

Appearance: liquid	Colour: colourless	Odor: odorless
pH:	7.2-7.7	
Specific gravity:	1.0 g/cm³	

200 mL WASH-EF

Appearance: liquid	Colour: colourless	Odor: alcoholic
pH:	6-7	
Flash point:	39 °C	
Specific gravity:	1.04 g/cm³	

30 mL H_2O-EF

Appearance: liquid	Colour: colourless	Odor: odorless
pH:	6-8	
Specific gravity:	1.0 g/cm³	

9 mL H_2O-EF (for 70% ethanol)

Appearance: liquid	Colour: colourless	Odor: odorless
pH:	6-8	
Specific gravity:	1.0 g/cm³	

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

But avoid reactions with oxidizing agents. No further data available.

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10.4 Conditions to avoid

Not necessary. But can form explosive gases/vapour with air. Use only in a well-ventilated working areas. ---

10.5 Incompatible materials

Avoid contact with strong acids or alkalines. Avoid storage with oxidising 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 substances. Quantitative data on the toxicity of this product are not available.

60 mL ELU-EF

Chemical: *2-propanol* CAS No.: 67-63-0
TSCA Inventory: listed California Proposition 65 List: not listed
ACGIH: 1230 ppm
Exposure Routes: inhalation, ingestion, skin and/or eye contact
Target Organs: Eyes, skin, respiratory system
Symptoms: irritation eyes, nose, throat; drowsiness, dizziness, headache; dry cracking skin; in animals: narcosis
Australia NICNAS: Canada CEPA 1999: DSL yes
Japan CSCL/PRTR: PAC yes, Japan PDSCL: -
Japan ISHL: listed ≥1,0%/≥0,1%, Article 57-2 (SDS required)
South Korea TCCA:
Korea Exist.Chem.Inventory: KE-29363
$LD50_{orl\ rat}$: 5045 mg/kg
$LC_Low_{orl\ hmn}$: 3570 mg/kg
$LC50_{ihl\ rat}$: 16_{4h} g/m³
$LD50_{drm\ rbt}$: 12.8 g/kg

TRGS 905 (DE): R_F C

Chemical: *potassium chloride* CAS No.: 7447-40-7
TSCA Inventory: listed
Korea Exist.Chem.Inventory: KE-29086
$LD50_{orl\ rat}$: 2600 mg/kg

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

200 mL ENDO-EF

Chemical: *ethanol* CAS No.: 64-17-5d
TSCA Inventory: listed California Proposition 65 List: not listed
ACGIH: 1000 ppm
Exposure Routes: inhalation, ingestion, skin and/or eye contact
Target Organs: Eyes, skin, respiratory system, central nervous system, liver, blood, reproductive system
Symptoms: irritation eyes, skin, nose; headache, drowsiness, lassitude (weakness, exhaustion), narcosis; cough; liver damage; anemia; reproductive, teratogenic
Australia NICNAS: not listed Canada CEPA 1999: DSL yes
Japan CSCL/PRTR: not listed, Japan PDSCL: not listed
Japan ISHL: listed ≥0,1%/≥0,1%, Article 57-2 (SDS required)
South Korea TCCA: not listed
Korea Exist.Chem.Inventory: KE-13217
$LD50_{orl\ rat}$: 6200 mg/kg
$LC_Low_{ihl\ gpg}$: 21.9 g/m³
$LC_Low_{orl\ hmn}$: 1400 mg/kg
$LC50_{ihl\ mouse}$: [4h] 39 g/m³
$LC50_{ihl\ rat}$: [10h] 20 g/m³
$LD50_{drm\ rbt}$: 20 000 mg/kg
$LD50_{oral\ mouse}$: 3450 mg/kg

TRGS 905 (DE): K5, M5, R_F C

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Chemical: *potassium chloride* CAS No.: 7447-40-7
TSCA Inventory: listed
Korea Exist.Chem.Inventory: KE-29086
$LD50_{orl\ rat}$: 2600 mg/kg

Chemical: *Triton® X-114* CAS No.: 9036-19-5
TSCA Inventory: listed
Korea Exist.Chem.Inventory: KE-33567

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

200 mL EQU-EF

Chemical: *ethanol* CAS No.: 64-17-5d
TSCA Inventory: listed California Proposition 65 List: not listed
ACGIH: 1000 ppm
Exposure Routes: inhalation, ingestion, skin and/or eye contact
Target Organs: Eyes, skin, respiratory system, central nervous system, liver, blood, reproductive system
Symptoms: irritation eyes, skin, nose; headache, drowsiness, lassitude (weakness, exhaustion), narcosis; cough; liver damage; anemia; reproductive, teratogenic
Australia NICNAS: not listed Canada CEPA 1999: DSL yes
Japan CSCL/PRTR: not listed, Japan PDSCL: not listed
Japan ISHL: listed ≥0,1%/≥0,1%, Article 57-2 (SDS required)
South Korea TCCA: not listed
Korea Exist.Chem.Inventory: KE-13217
$LD50_{orl\ rat}$: 6200 mg/kg
$LC_Low_{ihl\ gpg}$: 21.9 g/m³
$LC_Low_{orl\ hmn}$: 1400 mg/kg
$LC50_{ihl\ mouse}$: [4h] 39 g/m³
$LC50_{ihl\ rat}$: [10h] 20 g/m³
$LD50_{drm\ rbt}$: 20 000 mg/kg
$LD50_{oral\ mouse}$: 3450 mg/kg

TRGS 905 (DE): K5, M5, R_F C

Chemical: *potassium chloride* CAS No.: 7447-40-7
TSCA Inventory: listed
Korea Exist.Chem.Inventory: KE-29086
$LD50_{orl\ rat}$: 2600 mg/kg

Chemical: *Triton® X-114* CAS No.: 9036-19-5
TSCA Inventory: listed
Korea Exist.Chem.Inventory: KE-33567

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

60 mL FIL-EF

Chemical: *potassium chloride* CAS No.: 7447-40-7
TSCA Inventory: listed
Korea Exist.Chem.Inventory: KE-29086
$LD50_{orl\ rat}$: 2600 mg/kg

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

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100 mL LYS-EF

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 ≥1,0%/≥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%

100 mL NEU-EF

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

100 mL RES-EF

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

0.6-100 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
$LD50_{intraperitonaeal\ rat}$: 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.

30 mL TE-EF

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

200 mL WASH-EF

Chemical: *ethanol* CAS No.: 64-17-5d
TSCA Inventory: listed California Proposition 65 List: not listed
ACGIH: 1000 ppm
Exposure Routes: inhalation, ingestion, skin and/or eye contact
Target Organs: Eyes, skin, respiratory system, central nervous system, liver, blood, reproductive system

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Symptoms: irritation eyes, skin, nose; headache, drowsiness, lassitude (weakness, exhaustion), narcosis; cough; liver damage; anemia; reproductive, teratogenic
Australia NICNAS: not listed Canada CEPA 1999: DSL yes
Japan CSCL/PRTR: not listed, Japan PDSCL: not listed
Japan ISHL: listed ≥0,1%/≥0,1%, Article 57-2 (SDS required)
South Korea TCCA: not listed
Korea Exist.Chem.Inventory: KE-13217
$LD50_{orl\ rat}$: 6200 mg/kg
$LC_Low_{ihl\ gpg}$: 21.9 g/m³
$LC_Low_{orl\ hmn}$: 1400 mg/kg
$LC50_{ihl\ mouse}$: [4h] 39 g/m³
$LC50_{ihl\ rat}$: [10h] 20 g/m³
$LD50_{drm\ rbt}$: 20 000 mg/kg
$LD50_{oral\ mouse}$: 3450 mg/kg

TRGS 905 (DE): K5, M5, R_F C

Chemical: *potassium chloride* CAS No.: 7447-40-7
TSCA Inventory: listed
Korea Exist.Chem.Inventory: KE-29086
$LD50_{orl\ rat}$: 2600 mg/kg

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

30 mL H_2 O-EF

Chemical: *water* CAS No.: 7732-18-5
TSCA Inventory: listed
Korea Exist.Chem.Inventory: KE-35400

9 mL H_2 O-EF (for 70% ethanol)

Chemical: *water* CAS No.: 7732-18-5
TSCA Inventory: listed
Korea Exist.Chem.Inventory: KE-35400

SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

60 mL ELU-EF

Chemical: *2-propanol* CAS No.: 67-63-0
$PNEC_{(fresh\ water)}$: 140.9 mg/L
PNEC = Predicted No Effected Concentration
$LC50_{fish/96h}$: 1400 mg/L
$EC50_{daphnia/48h}$: 13.3 g/L
$IC50_{scenedesmus\ quadricauda/72h}$: >1000 mg/L
$EC10_{pseudomonas\ putita/16h}$: EC5: 1050 mg/L
Water hazard class (DE): 1 WGK No.: 0135
$Dispersion\ coefficient_{(octanol\text{-}water)}$: 0.05
Storage class (VCI): 3

Chemical: *potassium chloride* CAS No.: 7447-40-7
Water hazard class (DE): 1
Storage class (VCI): 12-13

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

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200 mL ENDO-EF

Chemical: *ethanol* CAS No.: 64-17-5d
PNEC(fresh water) : 0.96 mg/L
PNEC = Predicted No Effected Concentration
LC50daphnia magna/48h : >100 g/L
LC50pimephales promelas/96h : 13.4-15.1 g/L
LC50leuciscus idus/96h : [48h] 8.14 g/L
LC50fish/96h : 13 g/L
EC50daphnia/48h : 9.3-14.2 g/L
IC50scenedesmus quadricauda/72h : [7d] 5000 mg/L
EC10pseudomonas putita/16h : [EC5] 6500 mg/L
Water hazard class (DE): 1 WGK No.: 0096
Dispersion coefficient(octanol-water) : -0.31
Storage class (VCI): 3

Chemical: *potassium chloride* CAS No.: 7447-40-7
Water hazard class (DE): 1
Storage class (VCI): 12-13

Chemical: *Triton® X-114* CAS No.: 9036-19-5
Harmful to aquatic life with long lasting effects. Avoid contact of substance/mixture to environment.
Environmental hazards must not be labelled with P phrases until 125 mL (EU 1272/2008 Annex I - 1.5.2).
Water hazard class (DE): 1
Storage class (VCI): 12-13

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

200 mL EQU-EF

Chemical: *ethanol* CAS No.: 64-17-5d
PNEC(fresh water) : 0.96 mg/L
PNEC = Predicted No Effected Concentration
LC50daphnia magna/48h : >100 g/L
LC50pimephales promelas/96h : 13.4-15.1 g/L
LC50leuciscus idus/96h : [48h] 8.14 g/L
LC50fish/96h : 13 g/L
EC50daphnia/48h : 9.3-14.2 g/L
IC50scenedesmus quadricauda/72h : [7d] 5000 mg/L
EC10pseudomonas putita/16h : [EC5] 6500 mg/L
Water hazard class (DE): 1 WGK No.: 0096
Dispersion coefficient(octanol-water) : -0.31
Storage class (VCI): 3

Chemical: *potassium chloride* CAS No.: 7447-40-7
Water hazard class (DE): 1
Storage class (VCI): 12-13

Chemical: *Triton® X-114* CAS No.: 9036-19-5
Harmful to aquatic life with long lasting effects. Avoid contact of substance/mixture to environment.
Environmental hazards must not be labelled with P phrases until 125 mL (EU 1272/2008 Annex I - 1.5.2).
Water hazard class (DE): 1
Storage class (VCI): 12-13

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

60 mL FIL-EF

Chemical: *potassium chloride* CAS No.: 7447-40-7
Water hazard class (DE): 1
Storage class (VCI): 12-13

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

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100 mL LYS-EF

Chemical: *sodium hydroxide solution* — CAS No.: 1310-73-2d
$LC50_{leuciscus\ idus/96h}$: 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

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
Water hazard class (DE): 2
Dispersion coefficient$_{(octanol\text{-}water)}$: 1.6
Storage class (VCI): 12-13

Chemical: *indicator dye(s)* — CAS No.: -
Storage class (VCI): 12-13

100 mL NEU-EF

Chemical: *acetate buffer solution* — CAS No.: -
Storage class (VCI): 12

100 mL RES-EF

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

0.6-100 mg RNase A (lyo)

Chemical: *RNase* — CAS No.: 9001-99-4
Water hazard class (DE): 1
Storage class (VCI): 13

30 mL TE-EF

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

200 mL WASH-EF

Chemical: *ethanol* — CAS No.: 64-17-5d
$PNEC_{(fresh\ water)}$: 0.96 mg/L
PNEC = Predicted No Effected 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
$EC10_{pseudomonas\ putita/16h}$: [EC5] 6500 mg/L
Water hazard class (DE): 1 WGK No.: 0096
Dispersion coefficient$_{(octanol\text{-}water)}$: -0.31
Storage class (VCI): 3

Chemical: *potassium chloride* — CAS No.: 7447-40-7
Water hazard class (DE): 1
Storage class (VCI): 12-13

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

30 mL H_2O-EF

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

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9 mL H_2 O-EF (for 70% ethanol)
Chemical: *water* CAS No.: 7732-18-5

12.2 Persistence and degradability
not necessary

12.3 Bioaccumulative potential
not necessary

12.4 Mobility in soil
not necessary

12.5 Results of PBT and vPvB assessment
no data available

12.6 Other adverse effects
no additional data available

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
UN 1993 class 3 III, **Excepted Quantities** (≤30 mL/∑≤1 L) = ADR/ IATA E1
or

14.1 UN number: 1993 **14.2 UN proper shipping name: Flammable liquid, n.o.s. (2-propanol mixture)**
14.3 Class: 3 **14.4 Packing group: III**

Road transport

Classification code:	F1		
Limited Quantity:	5 L	Tunnel restriction code:	E
Excepted Quantity:	E 1	Special instructions:	640E

Air transport

PAX:	355	max. weight PAX:	60 L
CAO:	366	max. weight CAO:	220 L

Maritime transport

EmS:	F-E, S-E	Storage category:	A

14.5 Environmental hazards
none, contains only small quantities of hazardous substances, contains only small amounts of these substances

14.6 Special precautions for user
not necessary

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code
not applicable

SECTION 15: Regulatory information

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

15.2 Chemical safety assessment
not necessary for these small amounts ---

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SECTION 16: Other information

16.1 List of H and P phrases

16.1.1 List of relevant H phrases

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H412	Harmful to aquatic life with long lasting effects.

16.1.2 List of relevant P phrases

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261sh	Avoid breathing dust/vapours.
P273	Avoid release to the environment.
P280sh	Wear protective gloves/eye protection.
P304+340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342+311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

16.2 Training advice

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

16.3 Recommended restriction on use

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

16.4 Further information

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16.5 Sources of key data

Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS
Regulation 487/2013/EU, 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
Directive 1999/92/EC Minimum requirements for improving the safety and health protection of workers at risk from potentially explosive atmospheres
KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

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

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