

Safety Data Sheet

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

REF: 740780.250
Printing date: 15.11.2021

NucleoSpin Soil (250)
Date of issue: 04.02.2021

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

1.1 Product identifier

REF 740780.250
Product name NucleoSpin Soil (250)

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.

250 x 1 NucleoSpin® Bead Tubes (ceramic beads)
1 x 250 mL SB
1 x 60 mL SE
1 x 250 mL SL1
1 x 250 mL SL2
1 x 50 mL SL3
1 x 150 mL SW1
1 x 100 mL SW2
1 x 50 mL SX

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
Valenciennner 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

Signal word WARNING

Hazard identification	Hazard classes/categories
H226	Flam. Liq. 3
H302	Acute Tox. 4 oral
H319	Eye Irrit. 2
H336, H335	STOT SE 3
H412	Aquatic Chronic 3

2.1 Classification of the substance or mixture

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1 NucleoSpin® Bead Tubes (ceramic beads)

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

250 mL SB



Signal word GHS07
WARNING

Hazard identification	Hazard classes/categories
H302	Acute Tox. 4 oral
H412	Aquatic Chronic 3

60 mL SE

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

250 mL SL1

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

250 mL SL2

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

50 mL SL3

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

150 mL SW1



Signal word GHS02 GHS07
WARNING

Hazard identification	Hazard classes/categories
H226	Flam. Liq. 3
H302	Acute Tox. 4 oral
H319	Eye Irrit. 2
H336, H335	STOT SE 3

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100 mL SW2

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

50 mL SX

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

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** 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).
The irritant hazard should be eliminated, because of buffer chemicals inside.

1 NucleoSpin® Bead Tubes (ceramic beads)

Do not need labelling as hazardous
Signal word: -

250 mL SB



GHS07

Signal word: WARNING

H302, H412
Harmful if swallowed. Harmful to aquatic life with long lasting effects.

P264W, P273, P301+312, P330
Wash with water thoroughly after handling. Avoid release to the environment. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

60 mL SE

Do not need labelling as hazardous
Signal word: -

250 mL SL1

Do not need labelling as hazardous
Signal word: -

250 mL SL2

Do not need labelling as hazardous
Signal word: -

50 mL SL3

Do not need labelling as hazardous
Signal word: -

150 mL SW1

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GHS02



GHS07

Signal word: WARNING

H226, H302, H319, H336

Flammable liquid and vapour. Harmful if swallowed. Causes serious eye irritation. May cause drowsiness or dizziness.

P210, P260D, P264W, P280sh, P301+312, P330

Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do not breathe vapours. Wash with water thoroughly after handling. Wear protective gloves/eye protection. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

100 mL SW2

Do not need labelling as hazardous
Signal word: -

50 mL SX

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

Information pertaining to particular risks to human and possible symptoms

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

Information pertaining to particular risks to the environment

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

PBT: not applicable

vPvB: not applicable

Other hazards

SECTION 3: Composition/information on ingredients

3.1 Substances or 3.2 Mixtures

1 NucleoSpin® Bead Tubes (ceramic beads)

Chemical: *Ceramic particles*

CAS No.: -

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

TSCA Inventory: not applicable

Concentration: 95 - <100 %

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

250 mL SB

Chemical: *guanidinium thiocyanate*

CAS No.: 593-84-0

Classification: H302, Acute Tox. 4 oral, H312, Acute Tox. 4 derm., H314, Skin Corr. 1B, H332, Acute Tox. 4 inh., H412, Aquatic Chronic 3

Formula: $C_2H_6N_4S$

Pseudonym: guanidine rhodanide

TSCA Inventory: listed

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

EC No.: 209-812-1

Indice No.: 615-004-00-3

RTECS: XL1225000

MFCD: 00013027

KE No.: not listed

Concentration: 45 - <60 %

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

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60 mL SE

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 SL1

Chemical: *chemicals/mixture < 2%*
Classification: No criteria for classification or naming of chemical not required.
TSCA Inventory: all listed, <2%
KE No.: listed
Concentration: 1 - <2 %
acc. CLP (GHS): The criteria for classification are not fulfilled.

CAS No.: -

250 mL SL2

50 mL SL3

Chemical: *acetate buffer solution*
Classification: No criteria for classification or naming of chemical not required.
Formula: $\text{CH}_3\text{COOH/K/Na}\cdot\text{H}_2\text{O}$
TSCA Inventory: all listed
KE No.: listed
Concentration: 45 - <60 %
acc. CLP (GHS): The criteria for classification are not fulfilled.

CAS No.: -

150 mL SW1

Chemical: *guanidine hydrochloride*
Classification: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2
Formula: CH_6ClN_3
Pseudonym: guanidinium chloride
TSCA Inventory: listed
REACH Reg. No.: 01-2119977063-35-0005
EC No.: 200-002-3
RTECS: MF4300000
KE No.: KE-18111
Concentration: 36 - <50 %
acc. CLP (GHS): H302, Acute Tox. 4 oral, H319, Eye Irrit. 2

CAS No.: 50-01-1

Indice No.: 607-148-00-0
MFCD: 00013026

Chemical: *2-propanol*
Classification: H225, Flam. Liq. 2, H319, Eye Irrit. 2, H336, STOT SE 3
Formula: $\text{C}_3\text{H}_8\text{O}$
Pseudonym: isopropanol, IPA, propan-2-ol
TSCA Inventory: listed
REACH Reg. No.: 01-2119457558-25-XXXX
EC No.: 200-661-7
RTECS: NT8050000
KE No.: KE-29363
Concentration: 20 - <35 %
acc. CLP (GHS): H226, Flam. Liq. 3, H319, Eye Irrit. 2, H336, STOT SE 3

CAS No.: 67-63-0

Indice No.: 603-117-00-0
MFCD: 00011674

100 mL SW2

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.: -

50 mL SX

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Chemical: acetate buffer solution
Classification: No criteria for classification or naming of chemical not required.
Formula: $\text{CH}_3\text{COOH/K/Na}\cdot\text{H}_2\text{O}$
TSCA Inventory: all listed
KE No.: listed
Concentration: 15 - <25 %
acc. CLP (GHS): The criteria for classification are not fulfilled.

CAS No.: -

3.3 Remarks

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

List of H and P phrases: see section 16.1

SECTION 4: First aid measures

4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately. Ensure quiet, warmth, and provide resuscitation if necessary. If necessary contact medical advice.

- 4.1.1 After SKIN Contact**
Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water. (If possible) use soap.
- 4.1.2 After EYE Contact**
After contact with the eyes rinse thoroughly under running water with the eyelid wide open 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. ---
- 4.1.4 After ORAL Intake**
After oral intake lots of water with activated charcoal supplement should be drunk after it has been ingested. ---

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

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. ---

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. 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. 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.

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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

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.

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): 3

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

1 NucleoSpin® Bead Tubes (ceramic beads)

Chemical: Ceramic particles

CAS No.: -

250 mL SB

Chemical: guanidinium thiocyanate

CAS No.: 593-84-0

DNEL: [inh] 1092 µg/m³

DNEL = Derived No-Effect Level (for workers)

PNEC(fresh water): 42.4 µg/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

60 mL SE

Chemical: chemicals/mixture < 1%

CAS No.: -

250 mL SL1

Chemical: chemicals/mixture < 2%

CAS No.: -

250 mL SL2

50 mL SL3

Chemical: acetate buffer solution

CAS No.: -

150 mL SW1

Chemical: guanidine hydrochloride

CAS No.: 50-01-1

DNEL: [inh] 3.5 mg/m³

DNEL = Derived No-Effect Level (for workers)

PNEC(fresh water): -

PNEC = Predicted No Effect Concentration

NIOSH: not listed

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

OSHA: not listed

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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 Effect 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

100 mL SW2

Chemical: chemicals/mixture < 1%

CAS No.: -

50 mL SX

Chemical: acetate buffer solution

CAS No.: -

8.2 Exposure controls

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

8.2.1 Respiratory protection

No additional recommendations.

8.2.2 Hand protection

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

8.2.3 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

1 NucleoSpin® Bead Tubes (ceramic beads)

Appearance: solid Colour: white Odor: odorless
Particle size: 0.6-0.8 mm

250 mL SB

Appearance: liquid Colour: colourless Odor: odorless
pH: 6.5-7.5
Specific gravity: 1.13 g/cm³

60 mL SE

Appearance: liquid Colour: colourless Odor: odorless
pH: 8-9
Specific gravity: 1.0 g/cm³

250 mL SL1

Appearance: liquid Colour: colourless Odor: odorless
Specific gravity: 1.02 g/cm³

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250 mL SL2

Appearance: liquid
Specific gravity:

Colour: colourless
1.02 g/cm³

Odor: odorless

50 mL SL3

Appearance: liquid
pH:
Specific gravity:

Colour: colourless
5-6
1.19 g/cm³

Odor: acetic

150 mL SW1

Appearance: liquid
pH:
Flash point:
Specific gravity:

Colour: colourless
7-8
25 °C
1.06 g/cm³

Odor: alcoholic

100 mL SW2

Appearance: liquid
pH:
Specific gravity:

Colour: colourless
7-8
1.00 g/cm³

Odor: odorless

50 mL SX

Appearance: liquid
pH:

Colour: colourless
7-8

Odor: acetic

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

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.

1 NucleoSpin® Bead Tubes (ceramic beads)

Chemical: *Ceramic particles*
TSCA Inventory: not applicable

CAS No.: -

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250 mL SB

Chemical: *guanidinium thiocyanate* CAS No.: 593-84-0
TSCA Inventory: listed California Proposition 65 List: not listed
Australia NICNAS: not listed Canada CEPA 1999: DSL yes
Japan CSCL/PRTR: not listed, Japan PDSCL: not listed
Japan ISHL: not listed
South Korea TCCA: not listed
Korea Exist.Chem.Inventory: not listed
LD50_{orl rat}: 593 mg/kg
LC50_{drm rbt}: >2000 mg/m³
LC50_{ihl rat}: [4h] 5.319 mg/L
LD50_{ipr mus}: 300 mg/kg
Acute Effects: Cause after oral intake, impairments of health when ingested in small quantities.

60 mL SE

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

250 mL SL1

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

250 mL SL2

50 mL SL3

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

150 mL SW1

Chemical: *guanidine hydrochloride* CAS No.: 50-01-1
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-18111
LD50_{orl rat}: 475-907 mg/kg
LC50_{ihl rat}: [4h] 3181-7655 µg/m³
LD50_{drm rbt}: 2000 mg/kg
Acute Effects: Cause after oral intake, impairments of health when ingested in small quantities.

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: KE-29363
Korea Exist.Chem.Inventory: KE-29363
LD50_{orl rat}: 5045 mg/kg
LC_{Loworl hmn}: 3570 mg/kg
LC50_{ihl rat}: 164h g/m³
LD50_{drm rbt}: 12.8 g/kg
TRGS 905 (DE): R_F-C

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100 mL SW2

Chemical: *chemicals/mixture < 1%*
TSCA Inventory: *all listed, <1%*
Korea Exist.Chem.Inventory: *listed*

CAS No.: -

50 mL SX

Chemical: *acetate buffer solution*
TSCA Inventory: *all listed*
Korea Exist.Chem.Inventory: *listed*

CAS No.: -

SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

1 NucleoSpin® Bead Tubes (ceramic beads)

Chemical: *Ceramic particles*
Storage class (VCI): 12-13

CAS No.: -

250 mL SB

Chemical: *guanidinium thiocyanate* CAS No.: 593-84-0
Harmful to aquatic life with long lasting effects. Avoid contact of substance/mixture to environment.
Environmental hazards must not be labelled with P phrases until 125 mL (EU 1272/2008 Annex I - 1.5.2).
PNEC(fresh water) : 42.4 µg/L
PNEC = Predicted No Effect Concentration
LC50_{fish/96h} : [4d] 89.1 mg/L
EC50_{daphnia/48h} : 42.4 mg/L
IC50_{scenedesmus quadricauda/72h} : 130 mg/L
EC10_{pseudomonas putida/16h} : [10d] 200 mg/L
Water hazard class (DE): 3
Dispersion coefficient_(octanol-water) : [pH 5.1] -1.11
Storage class (VCI): 12

60 mL SE

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

CAS No.: -

250 mL SL1

Chemical: *chemicals/mixture < 2%*
Water hazard class (DE): 1
Storage class (VCI): 12-13

CAS No.: -

250 mL SL2

50 mL SL3

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

CAS No.: -

150 mL SW1

Chemical: *guanidine hydrochloride* CAS No.: 50-01-1
PNEC(fresh water) : -
PNEC = Predicted No Effect Concentration
LC50_{leuciscus idus/96h} : 1759 mg/L
LC50_{fish/96h} : [4d] 690-1850; [48h] 1758-2420 mg/L
EC50_{daphnia/48h} : 70.2 mg/L
EC10_{pseudomonas putida/16h} : [72h] 11.8-33.5 mg/L
Water hazard class (DE): 1 WGK No.: 0788
Storage class (VCI): 12

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

CAS No.: 67-63-0

100 mL SW2

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

CAS No.: -

50 mL SX

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

CAS No.: -

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

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

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

13.1 Waste treatment methods

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

SECTION 14: Transport information

14.1 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

Safety Data Sheet

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

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

not applicable

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013
German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC
TRGS 200, German engineering rules governing the classification and labelling of hazardous substances, preparations and products, updated October 2011
MN Leaflet/User manual, also see www.mn-net.com
Look for your country-specific regulations.
- 15.2 Chemical safety assessment**
not necessary for these small amounts ---

SECTION 16: Other information

16.1 List of H and P phrases

- 16.1.1 List of relevant H phrases**
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
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.
P260D Do not breathe vapours.
P264W Wash with water thoroughly after handling.
P273 Avoid release to the environment.
P280sh Wear protective gloves/eye protection.
P301+312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330 Rinse mouth.

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
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)

www.mn-net.com

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Revisions/Updates

Reason for Revision: 2016-03 Adaptation of regulation 1221/2015/EU
2017-11 Adaption of ECHA Registration dossier