

Safety Data Sheet

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

| | | |
|---------------------------|-----------------------------|-----------|
| REF: 722395 | Test mixture for NP columns | Page: 1/7 |
| Printing date: 01.10.2019 | Date of issue: 04.06.2018 | |

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

1.1 Product identifier

REF 722395
 Product name Test mixture for NP columns
 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 1 mL Test mixture for NP columns

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
 Neumann-Neander-Str. 6-8, 52355 Dueren, 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

2.1 Classification of the substance or mixture

1 mL Test mixture for NP columns



GHS02 GHS07 GHS08 GHS09

Signal word DANGER

| Hazard identification | Hazard classes/categories |
|-----------------------|---------------------------|
| H225 | Flam. Liq. 2 |
| H304 | Asp. Tox. 1 |
| H315 | Skin Irrit. 2 |
| H336 | not defined |
| H410 | Aquatic Chronic 1 |

2.2 Label elements

Inner packages up to 10 mL need max. 2 symbols (Annex I - 1.5.2.4.1 / 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).
Not hazardous labelled, because 1 mL units or minimal amounts have low hazard risk. The following listed labelling would be creating an "OVERLABELLING".

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GHS02



GHS07



GHS08



GHS09

Signal word: DANGER

H304, H410

May be fatal if swallowed and enters airways. Very toxic to aquatic life with long lasting effects.

P301+310, P331, P391

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

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. ---

Information pertaining to particular risks to human and possible symptoms

May be fatal if swallowed and enters airways. -

Information pertaining to particular risks to the environment

Very toxic 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 mL Test mixture for NP columns

Chemical: *n*-heptane

CAS No.: 142-82-5

Classification: H225, Flam. Liq. 2, H304, Asp. Tox. 1, H315, Skin Irrit. 2, H336, STOT SE 3, H410, Aquatic Chronic 1

Formula: C₇H₁₆

TSCA Inventory: listed

REACH Reg. No.: 01-2119457603-38-xxxx

EC No.: 205-563-8

Indice No.: 601-008-00-2

RTECS: MI7700000

MFCD: 00009544

KE No.: KE-18271

Concentration: 80 - <100 %

acc. CLP (GHS): H225, Flam. Liq. 2, H304, Asp. Tox. 1, H315, Skin Irrit. 2, H336, STOT SE 3, H410, Aquatic Chronic 1

Chemical: *test chemical(s) (ppm)*

CAS No.: -

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

TSCA Inventory: all <0.1%

Concentration: 0,01 - <0,1 %

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

3.3 Remarks

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.

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- 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. ---
- 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**

- 4.3 Indication of any immediate medical attention and special treatment needed**

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**
DANGER: Highly flammable (GHS regulation). Forms explosive vapour-air mixtures. ---
- 5.3 Advice for firefighters**
No, for listed product. Product package burns like paper or plastic.
- 5.4 Additional information**

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures**
Regular staff training is necessary.
- 6.2 Environmental precautions**
not necessary, contains only small amounts of these substances
- 6.3 Methods and material for containment and cleaning up**
Not for organic solvents (see section 13).
- 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.
- 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**
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Chemical: *n*-heptane CAS No.: 142-82-5
 DNEL: 2085_{inh} mg/kg
DNEL = Derived No-Effect Level (for workers)
 PNEC_(fresh water): no risk
PNEC = Predicted No Effect Concentration
 EU value: 500 ppm / 2085 mg/m³
 TRGS 900 (DE): 500 ppm / 2100 mg/m³
E/e respirable
 Short-term exposure factor: 1 (I)
skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded
 SUVA(CH) MAK value: 400 ppm / 1600 mg/m³
 NIOSH: TWA 85 ppm / 350 mg/m³; C 440 ppm / 1800_{15min} 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 500 ppm / 2000 mg/m³
 Chemical: *test chemical(s) (ppm)* CAS No.: -

8.2 Exposure controls

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 (f.ex. from Ansell or KCL).

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.

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 mL Test mixture for NP columns

| | | |
|-------------------------------------|------------------------|---------------|
| Appearance: liquid | Colour: colourless | Odor: organic |
| Odor limit: | 68 mg/m ³ | |
| pH: | 7 | |
| Melting point: | -45 °C | |
| Boiling point: | 82 °C | |
| Flash point: | 2 °C | |
| Explosion limits: | 3.0-16 Vol% | |
| Vapour pressure (20 °C): | 97 hPa | |
| Vapour density _(air=1) : | 1,42 | |
| Specific gravity: | 0,78 g/cm ³ | |
| Solubility in water: | 0-100 % | |
| Flashing temperature: | 525 °C | |
| Volatiles by volume: | 162 g/m ³ | |

9.2 Other information

Relevant Properties of Substance Group

Substances are very volatile and form flammable vapour-air mixtures. ---

SECTION 10: Stability and reactivity

10.1 Reactivity

no further data available.

10.2 Chemical stability

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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.

1 mL Test mixture for NP columns

| | | |
|-----------------------------|--|-------------------|
| Chemical: | <i>n-heptane</i> | CAS No.: 142-82-5 |
| TSCA Inventory: | listed | |
| Exposure Routes: | inhalation, ingestion, skin and/or eye contact | |
| Target Organs: | Skin, respiratory system, central nervous system | |
| Symptoms: | dizziness, stupor, incoordination; loss of appetite, nausea; dermatitis; chemical pneumonitis (aspiration liquid); unconsciousness | |
| Japan CSCL/PRTR: | not listed, Japan PDSCL: not listed | |
| Japan ISHL: | listed $\geq 1,0\%$ / $\geq 1,0\%$ | |
| Korea Exist.Chem.Inventory: | KE-18271 | |
| LD50 _{orl rat} : | >15 g/kg | |
| LC50 _{ihl rat} : | >29.3 / 103 _{4h} g/m ³ | |
| TRGS 905 (DE): | R _F D | |

| | | |
|-----------------|-------------------------------|------------|
| Chemical: | <i>test chemical(s) (ppm)</i> | CAS No.: - |
| TSCA Inventory: | all <0.1% | |

SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

1 mL Test mixture for NP columns

| | | |
|--|--------------------|-------------------|
| Chemical: | <i>n-heptane</i> | CAS No.: 142-82-5 |
| Very toxic to aquatic life with long lasting effects. Avoid contact of substance/mixture to environment. | | |
| Environmental hazards must not be labelled with H and P phrases until 125 mL (EU 1272/2008 Annex I - 1.5.2). | | |
| PNEC _(fresh water) : | no risk | |
| PNEC = Predicted No Effect Concentration | | |
| LC50 _{daphnia magna/48h} : | NOELR/21d: 1 mg/L | |
| LC50 _{fish/96h} : | 5.7 mg/L | |
| EC50 _{daphnia/48h} : | 3.9 mg/L | |
| EC50 _{pseudokirchneriella subcapitata/72h} : | EL50/72h: 4,3 mg/L | |
| Water hazard class (DE): | 2 | WGK No.: 0120 |
| Storage class (VCI): | 3 | |

| | | |
|----------------------|-------------------------------|------------|
| Chemical: | <i>test chemical(s) (ppm)</i> | CAS No.: - |
| Storage class (VCI): | 12 | |

12.2 Persistence and degradability

not necessary

12.3 Bioaccumulative potential

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

13.1 Waste treatment methods

SECTION 14: Transport information

14.1 - 14.4: No dangerous goods according the transport regulations because
De Minimis (excepted quantities: $\leq 1 \text{ mL} / \sum \leq 100 \text{ mL}$) = ADR 3.5.1.4
De Minimis (excepted quantities: $\leq 1 \text{ mL} / \sum \leq 100 \text{ mL}$) = IATA DRG 2.6.10

14.5 Environmental hazards

none, 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 ---

SECTION 16: Other information

16.1 List of H and P phrases

16.1.1 List of relevant H phrases

| | |
|------|---|
| H225 | Highly flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H336 | May cause drowsiness or dizziness. |
| H410 | Very toxic 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. |
| P233 | Keep container tightly closed. |
| P260D | Do not breathe vapours. |
| P273 | Avoid release to the environment. |
| P280sh | Wear protective gloves/eye protection. |
| P301+310 | IF SWALLOWED: Immediately call a POISON CENTER/ doctor. |
| P331 | Do NOT induce vomiting. |

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P391 Collect spillage.

16.2 Training advice

Multiple safety training of staffs about danger and protection by using hazards in working area.

16.3 Recommended restriction on use

Only for professional user.

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.

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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

TRGS 900, German engineering rules governing limits in air at work, updated 03/2018

SUVA .CH, Limits in air at work 2009, revised on 01.2009

KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

Revisions/Updates

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