

# Safety Data Sheet

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

REF: 722320

Test mixture for FAME columns

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Printing date: 01.10.2019

Date of issue: 18.06.2018

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

### 1.1 Product identifier

REF 722320  
Product name Test mixture for FAME 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 FAME test solution in n-hexane

### 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](mailto:sds@mn-net.com) ([msds@mn-net.com](mailto:msds@mn-net.com))

### 1.4 Emergency telephone number

Outside Germany (DE): Call your regional Poisons Information Service or call local Life Saving Service.  
DE: Gemeinsames 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 FAME test solution in n-hexane



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	STOT SE 3
H361f	Repr. 2
H373	STOT RE 2
H411	Aquatic Chronic 2

### 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".

[www.mn-net.com](http://www.mn-net.com)

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## 1 mL FAME test solution in n-hexane



GHS02 GHS07 GHS08 GHS09

Signal word: DANGER

H304, H361f

May be fatal if swallowed and enters airways. Suspected of damaging fertility.

P280sh, P301+310, P331

Wear protective gloves/eye protection. IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Do NOT induce vomiting.

### 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

Suspected of damaging fertility. May be fatal if swallowed and enters airways. -

#### 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

#### 1 mL FAME test solution in n-hexane

Chemical: *n-hexane*

CAS No.: 110-54-3

Classification: H225, Flam. Liq. 2, H304, Asp. Tox. 1, H315, Skin Irrit. 2, H336, STOT SE 3, H361f, Repr. 2, H373, STOT RE 2, H411, Aquatic Chronic 2

Formula: C<sub>6</sub>H<sub>14</sub>

Pseudonym: hexyl hydride, normal-hexane

TSCA Inventory: listed

REACH Reg. No.: 01-2119474209-33-xxxx

EC No.: 203-777-6

Indice No.: 601-037-00-0

RTECS: MN9275000

MFCD: 00009520

KE No.: KE-18626

Concentration: 90 - <100 %

acc. CLP (GHS): H225, Flam. Liq. 2, H304, Asp. Tox. 1, H315, Skin Irrit. 2, H336, STOT SE 3, H361f, Repr. 2, H373, STOT RE 2, H411, Aquatic Chronic 2

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

CAS No.: -

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

TSCA Inventory: all <0.1%

Concentration: 0,1 - <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

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Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water.

- 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**  
---
- 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**  
Carcinogenic Effects: Suspected of damaging fertility. ---
- 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**  
Wear suitable protective gloves (see 8.2.2). Regular staff training is necessary, indicating hazards and precautions on the basis of operating instructions. Restrictions on activity must be observed.
- 6.2 Environmental precautions**  
not necessary, contains only small amounts of these substances
- 6.3 Methods and material for containment and cleaning up**  
And dispose in accordance to local regulations for the disposal of hazardous chemicals. Clean any contaminated equipment and floors with plenty of water. 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.

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### 1 mL FAME test solution in n-hexane

Chemical: *n-hexane*

CAS No.: 110-54-3

EU value: (50 ppm / 180) mg/m<sup>3</sup>

TRGS 900 (DE): 50 ppm / 180 mg/m<sup>3</sup>  
E/e respirable

Short-term exposure factor: 8 (II), Y

skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

SUVA(CH) MAK value: 50 ppm / 180 mg/m<sup>3</sup>

SUVA(CH) BAT value: U/b 5 mg/L

TRGS 903 (DE): U/b 5 mg/L

B blood, U urine, a no limitation, b end of exposition or shift

NIOSH: TWA 50 ppm / 180 mg/m<sup>3</sup>

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

OSHA: TWA 500 ppm / 1800 mg/m<sup>3</sup>

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 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 mL FAME test solution in n-hexane

Appearance: liquid

Colour: colourless

Odor: organic

Odor limit: 465 mg/m<sup>3</sup>

Melting point: -94 °C

Boiling point: 69 °C

Flash point: -22 °C

Explosion limits: 1.2-8,9 Vol%

Vapour pressure (20°C): 160 hPa

Vapour density (air=1): 2,97

Specific gravity: 0,66 g/cm<sup>3</sup>

Solubility in water: 0 %

Flashing temperature: 230 °C

Volatiles by volume: 566 g/m<sup>3</sup>

### 9.2 Other information

#### Relevant Properties of Substance Group

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

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## 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.

#### 1 mL FAME test solution in n-hexane

Chemical:	<i>n-hexane</i>	CAS No.:	110-54-3
TSCA Inventory:	listed	California Proposition 65 List:	listed (Dec 2017)
Exposure Routes:	inhalation, ingestion, skin and/or eye contact		
Target Organs:	Eyes, skin, respiratory system, central nervous system, peripheral nervous system		
Symptoms:	irritation eyes, nose; nausea, headache; peripheral neuropathy: numb extremities, muscle weak; dermatitis; dizziness; chemical pneumonitis (aspiration)		
Australia NICNAS:	not listed	Canada CEPA 1999:	DSI Yes
Japan CSCL/PRTR:	PAC Yes, PRTR: $\geq 1,0\%$ class I, Japan PDSCCL: not listed		
Japan ISHL:	listed $\geq 1,0\%/\geq 0,1\%$ , Article 57-1+2 (Labelling&SDS required)		
South Korea TCCA:	not listed		
Korea Exist.Chem.Inventory:	KE-18626		
LD50 <sub>oral</sub> rat :	16-32 g/kg		
LC50 <sub>ihl</sub> rat :	[24h] 5000 ppm		
LD50 <sub>drm</sub> rbt :	3300 mg/kg		

Chronic Effects: May cause damage to organs through prolonged or repeated exposure.

Carcinogenic Effects: Suspected of damaging fertility.

EU carcinogen: R<sub>F</sub> 3

TRGS 905 (DE): R<sub>F</sub> C

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

CAS No.: -

TSCA Inventory: all <0.1%

## SECTION 12: Ecological information

### 12.1 Toxicity

Following information is valid for pure substances.

#### 1 mL FAME test solution in n-hexane

Chemical:	<i>n-hexane</i>	CAS No.:	110-54-3
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).			
Bio Toxicity:	1/-/-		
Water hazard class (DE):	2	WGK No.:	0124
Storage class (VCI):	3		

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

CAS No.: -

Storage class (VCI): 12

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- 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). 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](http://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.                                 |
| H361f | Suspected of damaging fertility.                                   |
| H373  | May cause damage to organs through prolonged or repeated exposure. |
| H411  | Toxic to aquatic life with long lasting effects.                   |
- 16.1.2 List of relevant P phrases**
- |      |   |
|------|---|
| P201 | Obtain special instructions before use. |
|------|---|



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P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233	Keep container tightly closed.
P260D	Do not breathe vapours.
P260sh	Do not breathe dust/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.

## 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.  
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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, 4<sup>th</sup> adaptation of CLP regulation to technical and scientific progress  
 Regulation 669/2018/EU, 4<sup>th</sup> 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  
 Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work  
 TRGS 905, German engineering rules governing carcinogens and mutagens, updated 03/18  
 KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

### Revisions/Updates

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