

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519  
CN

**KLÜBER**  
LUBRICATION

## Klübersynth GEM 4-100 N (H)

Version	Revision Date:	Date of last issue: 2019-11-13	Print Date:
2.6	2021-04-13	Date of first issue: 2013-10-29	2021-04-13

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Klübersynth GEM 4-100 N (H)  
Article-No. : 012377  
Chemical nature : Synthetic hydrocarbon oil  
ester oil

#### Manufacturer or supplier's details

Company : Klüber Lubrication München  
Geisenhausenerstr. 7  
81379 München  
Deutschland  
Tel: +49 (0) 89 7876 0  
Fax: +49 (0) 89 7876 333  
info@klueber.com

E-mail address of person responsible for the SDS : mcm@klueber.com  
Material Compliance Management

National contact : Klüber Lubrication (Shanghai) Co., Ltd.  
No.88 Tuo Qing Road  
Qingpu Industrial Zone  
Shanghai 201700  
China  
Phone: +86 21 69225666  
Email: info@cn.klueber.com  
www.klueber.com.cn

Klüber Lubrication China Limited  
Room 1012 Shatin Galleria  
18-24 Shan Mei Street, Fotan, Shatin, N.T.  
Hong Kong  
China  
Phone: +852 26920191  
Email: info@cn.klueber.com  
www.klueber.com.cn

Emergency telephone number : +86 532 8388 9090 (NRCC, only for hazardous chemicals)  
+86 21 69225521

#### Recommended use of the chemical and restrictions on use

Recommended use : Lubricating oil  
Restrictions on use : Restricted to professional users.

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519  
CN



## Klübersynth GEM 4-100 N (H)

Version	Revision Date:	Date of last issue: 2019-11-13	Print Date:
2.6	2021-04-13	Date of first issue: 2013-10-29	2021-04-13

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

Appearance	:	liquid
Colour	:	yellow
Odour	:	characteristic

Not a hazardous substance or mixture.

### GHS Classification

Not a hazardous substance or mixture.

### GHS label elements

Not a hazardous substance or mixture.

### Physical and chemical hazards

Not classified based on available information.

### Health hazards

Not classified based on available information.

### Environmental hazards

Not classified based on available information.

### Other hazards which do not result in classification

None known.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### Hazardous components

No hazardous ingredients

## 4. FIRST AID MEASURES

If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.  
Keep patient warm and at rest.  
If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519  
CN

**KLÜBER**  
LUBRICATION

## Klübersynth GEM 4-100 N (H)

Version 2.6	Revision Date: 2021-04-13	Date of last issue: 2019-11-13 Date of first issue: 2013-10-29	Print Date: 2021-04-13
----------------	------------------------------	---	---------------------------

- In case of contact, immediately flush skin with plenty of water.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.  
If eye irritation persists, consult a specialist.
- If swallowed : Move the victim to fresh air.  
Do NOT induce vomiting.  
Rinse mouth with water.
- Most important symptoms and effects, both acute and delayed : No information available.  
None known.
- Notes to physician : No information available.

### 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Unsuitable extinguishing media : High volume water jet
- Hazardous combustion products : Carbon oxides
- Specific extinguishing methods : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.  
Exposure to decomposition products may be a hazard to health.

### 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.  
Use personal protective equipment.  
Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Try to prevent the material from entering drains or water courses.  
Prevent further leakage or spillage if safe to do so.  
Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for : Contain spillage, and then collect with non-combustible ab-

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519  
CN

**KLÜBER**  
LUBRICATION

## Klübersynth GEM 4-100 N (H)

Version	Revision Date:	Date of last issue: 2019-11-13	Print Date:
2.6	2021-04-13	Date of first issue: 2013-10-29	2021-04-13

containment and cleaning up : sorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

## 7. HANDLING AND STORAGE

### Handling

Advice on safe handling : For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Wash hands and face before breaks and immediately after handling the product.

Avoidance of contact : No materials to be especially mentioned.

### Storage

Conditions for safe storage : Store in original container.  
Keep container closed when not in use.  
Keep in a dry, cool and well-ventilated place.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Store in accordance with the particular national regulations.  
Keep in properly labelled containers.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : none

### Personal protective equipment

Respiratory protection : Not required; except in case of aerosol formation.

Filter type : Filter type A-P

Eye/face protection : Safety glasses with side-shields

### Hand protection

Material : Nitrile rubber

Break through time : > 10 min

Protective index : Class 1

Remarks : Wear protective gloves. The break through time depends amongst other things on the material, the thickness and the

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519  
CN

**KLÜBER**  
LUBRICATION

## Klübersynth GEM 4-100 N (H)

Version 2.6	Revision Date: 2021-04-13	Date of last issue: 2019-11-13 Date of first issue: 2013-10-29	Print Date: 2021-04-13
----------------	------------------------------	---	---------------------------

type of glove and therefore has to be measured for each case.

- Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.  
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
- Hygiene measures : Wash face, hands and any exposed skin thoroughly after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : yellow
- Odour : characteristic
- Odour Threshold : No data available
- pH : Not applicable
- Melting point/range : No data available
- Boiling point/boiling range : No data available
- Flash point : > 200 °C  
Method: open cup
- Evaporation rate : No data available
- Flammability (solid, gas) : Not applicable
- Self-ignition : No data available
- Upper explosion limit / Upper flammability limit : No data available
- Lower explosion limit / Lower flammability limit : No data available
- Vapour pressure : < 0.001 hPa (20 °C)
- Relative vapour density : No data available

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519  
CN

**KLÜBER**  
LUBRICATION

## Klübersynth GEM 4-100 N (H)

Version	Revision Date:	Date of last issue: 2019-11-13	Print Date:
2.6	2021-04-13	Date of first issue: 2013-10-29	2021-04-13

Relative density : 0.85 (20 °C)  
Reference substance: Water  
The value is calculated

Density : 0.85 g/cm<sup>3</sup> (20 °C)

Bulk density : No data available

Solubility(ies)  
Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity  
Viscosity, dynamic : No data available

Viscosity, kinematic : 100 mm<sup>2</sup>/s ( 40 °C)

Explosive properties : Not explosive

Oxidizing properties : No data available

Sublimation point : No data available

## 10. STABILITY AND REACTIVITY

Reactivity : No hazards to be specially mentioned.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.

Conditions to avoid : No conditions to be specially mentioned.

Incompatible materials : No materials to be especially mentioned.

Hazardous decomposition products : No decomposition if stored and applied as directed.

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519  
CN

**KLÜBER**  
LUBRICATION

## Klübersynth GEM 4-100 N (H)

Version 2.6	Revision Date: 2021-04-13	Date of last issue: 2019-11-13 Date of first issue: 2013-10-29	Print Date: 2021-04-13
----------------	------------------------------	---	---------------------------

### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

**Product:**

Acute oral toxicity : Remarks: This information is not available.

Acute inhalation toxicity : Remarks: This information is not available.

Acute dermal toxicity : Remarks: This information is not available.

#### Skin corrosion/irritation

**Product:**

Remarks : This information is not available.

#### Serious eye damage/eye irritation

**Product:**

Remarks : This information is not available.

#### Respiratory or skin sensitisation

**Product:**

Remarks : This information is not available.

#### Germ cell mutagenicity

**Product:**

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

#### Carcinogenicity

**Product:**

Remarks : No data available

#### Reproductive toxicity

**Product:**

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519  
CN



## Klübersynth GEM 4-100 N (H)

Version 2.6	Revision Date: 2021-04-13	Date of last issue: 2019-11-13 Date of first issue: 2013-10-29	Print Date: 2021-04-13
----------------	------------------------------	---	---------------------------

### Repeated dose toxicity

**Product:**

Remarks : This information is not available.

### Aspiration toxicity

**Product:**

This information is not available.

### Further information

**Product:**

Remarks : Information given is based on data on the components and the toxicology of similar products.

---

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

**Product:**

Toxicity to fish :  
Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates :  
Remarks: No data available

Toxicity to algae :  
Remarks: No data available

Toxicity to microorganisms :  
Remarks: No data available

### Persistence and degradability

**Product:**

Biodegradability :  
Remarks: No data available

Physico-chemical removability :  
Remarks: No data available

### Bioaccumulative potential

**Product:**

Bioaccumulation :  
Remarks: This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).  
This mixture contains no substance considered to be very



# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519  
CN

**KLÜBER**  
LUBRICATION

## Klübersynth GEM 4-100 N (H)

Version 2.6	Revision Date: 2021-04-13	Date of last issue: 2019-11-13 Date of first issue: 2013-10-29	Print Date: 2021-04-13
----------------	------------------------------	---	---------------------------

persistent and very bioaccumulating (vPvB).

### Mobility in soil

#### Product:

Mobility : Remarks: No data available

Distribution among environmental compartments : Remarks: No data available

### Other adverse effects

#### Product:

Additional ecological information : No information on ecology is available.

---

## 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.

Contaminated packaging : Packaging that is not properly emptied must be disposed of as the unused product.  
Dispose of waste product or used containers according to local regulations.

---

## 14. TRANSPORT INFORMATION

### International Regulations

#### **UNRTDG**

Not regulated as a dangerous good

#### **IATA-DGR**

Not regulated as a dangerous good

#### **IMDG-Code**

Not regulated as a dangerous good

#### **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

### National Regulations

#### **GB 6944/12268**

Not regulated as a dangerous good

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519  
CN



## Klübersynth GEM 4-100 N (H)

Version	Revision Date:	Date of last issue: 2019-11-13	Print Date:
2.6	2021-04-13	Date of first issue: 2013-10-29	2021-04-13

### Special precautions for user

Not applicable

## 15. REGULATORY INFORMATION

### National regulatory information

#### Regulations on Safety Management of Hazardous Chemicals

Catalogue of Hazardous Chemicals : Not applicable

Hazardous Chemicals for Priority Management under SAWS : Not applicable

#### Regulations on Labour Protection in Workplaces where Toxic Substances are Used

Catalogue of Highly Toxic Chemicals : Not applicable

#### Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

China Severely Restricted Toxic Chemicals for Import and Export : Not applicable

#### The components of this product are reported in the following inventories:

IECSC : On the inventory, or in compliance with the inventory

## 16. OTHER INFORMATION

Date format : yyyy/mm/dd

### Full text of other abbreviations

AllC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule;

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519  
CN

**KLUBER**  
LUBRICATION

## Klübersynth GEM 4-100 N (H)

Version	Revision Date:	Date of last issue: 2019-11-13	Print Date:
2.6	2021-04-13	Date of first issue: 2013-10-29	2021-04-13

ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECl - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

### Disclaimer

This safety data sheet applies only to products as originally packed and labelled. The information contained therein may not be reproduced or modified without our express written permission. Any forwarding of this document is only permitted to the extent required by law. Any further, in particular public, dissemination of the safety data sheet (e.g. as a document for download from the Internet) is not permitted without our express written consent. We provide our customers with amended safety data sheets as prescribed by law. The customer is responsible for passing on safety data sheets and any amendments contained therein to its own customers, employees and other users of the product. We provide no guarantee that safety data sheets received by users from third parties are up-to-date. All information and instructions in this safety data sheet have been compiled to the best of our knowledge and are based on the information available to us on the day of publication. The information provided is intended to describe the product in relation to the required safety measures; it is neither an assurance of characteristics nor a guarantee of the product's suitability for particular applications and does not justify any contractual legal relationship. The existence of a safety data sheet for a particular jurisdiction does not necessarily mean that import or use within that jurisdiction is legally permitted. If you have any questions, please contact your responsible sales contact or authorized trading partner.