

# Klübersynth GEM 4-32 NH

| Version | Revision Date: | Date of last issue: 2019-11-12  | Print Date: |
|---------|----------------|---------------------------------|-------------|
| 2.6     | 2020-07-07     | Date of first issue: 2015-01-14 | 2020-07-07  |

## **1. PRODUCT AND COMPANY IDENTIFICATION**

| Product name                                     | :    | Klübersynth GEM 4-32 NH   |
|--|------|---|
| Article-No.                                      | :    | 012296  |
| Other names                                      | :    | None  |
| Recommended use of the ch                        | em   | ical and restrictions on use  |
| Recommended use                                  | :    | Lubricating oil   |
| Restrictions on use                              | :    | Restricted to professional users.   |
| Manufacturer or supplier's de                    | etai | ils   |
| Company  | :    | Klüber Lubrication München<br>Geisenhausenerstr. 7<br>81379 München<br>Deutschland<br>Tel: +49 (0) 89 7876 0<br>Fax: +49 (0) 89 7876 333<br>info@klueber.com  |
| E-mail address of person responsible for the SDS | :    | mcm@klueber.com<br>Material Compliance Management   |
| National contact                                 | :    | Klüber Lubrication China Limited<br>Room 1012 Shatin Galleria<br>18-24 Shan Mei Street, Fotan, Shatin, N.T.<br>Hong Kong<br>China<br>Phone: +852 26920191<br>Email: info@cn.klueber.com<br>www.klueber.com.cn |
| Emergency telephone number                       | :    | +886 2 8793 3212  |
|  |      | +49 89 7876 700 (24 hours)  |
|  |      |   |

## 2. HAZARDS IDENTIFICATION

## **GHS Classification**

Not a hazardous substance or mixture.





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### **GHS** label elements

Not a hazardous substance or mixture.

### Other hazards which do not result in classification

None known.

4.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Substance / Mixture   | :     | Mixture  |
|---|-------|--|
| Chemical nature   | :     | Synthetic hydrocarbon oil<br>ester oil   |
| Hazardous components<br>No hazardous ingredients            |       |  |
| . FIRST AID MEASURES  |       |  |
| First aid measures for diffe                                | erent | exposure routes  |
| If inhaled  | :     | Remove person to fresh air. If signs/symptoms continue, get<br>medical attention.<br>Keep patient warm and at rest.<br>If breathing is irregular or stopped, administer artificial respira-<br>tion. |
| In case of skin contact                                     | :     | Remove contaminated clothing. If irritation develops, get med-<br>ical attention.<br>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,<br>for at least 10 minutes.<br>If eye irritation persists, consult a specialist.   |
| If swallowed  | :     | Move the victim to fresh air.<br>Do NOT induce vomiting.<br>Rinse mouth with water.  |
| Most important symptoms and effects, both acute and delayed | :     | No information available.<br>None known.   |

#### 5. FIREFIGHTING MEASURES

Notes to physician

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or car-

: No information available.





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|             |                           |   |     |  |                           |
|             |                           |   |     | bon dioxide.   |                           |
|             | Unsuit<br>media           | able extinguishing  | :   | High volume water jet  |                           |
|             | Specifi<br>fighting       | ic hazards during fire-<br>g                                | :   | Fire may cause evolution of:<br>Carbon oxides  |                           |
|             | Specifi<br>ods            | ic extinguishing meth-                                      | :   | Standard procedure for chemical fires.   |                           |
|             |                           | al protective equipment<br>fighters                         | :   | In the event of fire, wear self-contained<br>Use personal protective equipment.<br>Exposure to decomposition products management.<br>health.   |                           |
| 6. A        | CCIDE                     | NTAL RELEASE MEA  | SUF | RES  |                           |
|             | tive eq                   | nal precautions, protec-<br>uipment and emer-<br>procedures | - : | Evacuate personnel to safe areas.<br>Use personal protective equipment.<br>Refer to protective measures listed in s  | ections 7 and 8.          |
|             | Environmental precautions |   | :   | Try to prevent the material from entering drains or water<br>courses.<br>Prevent further leakage or spillage if safe to do so.<br>Local authorities should be advised if significant spillages<br>cannot be contained. |                           |
|             |                           | ds and materials for<br>nment and cleaning up               | :   | Contain spillage, and then collect with r<br>sorbent material, (e.g. sand, earth, diate<br>miculite) and place in container for disp<br>/ national regulations (see section 13).                                       | omaceous earth, ver-      |
| 7. H        | ANDLI                     | NG AND STORAGE  |     |  |                           |
|             | Handl                     | ina   |     |  |                           |
|             |                           | e on safe handling  | :   | For personal protection see section 8.<br>Smoking, eating and drinking should be<br>plication area.<br>Wash hands and face before breaks an<br>handling the product.   |                           |
|             | Storag                    | ge  |     |  |                           |
|             | -                         | ions for safe storage                                       | :   | Store in original container.   |                           |

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.





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Store in accordance with the particular national regulations. Keep in properly labelled containers.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| Components with workplac    | e c  | ontrol parameters   |
|-----------------------------|------|---|
| Contains no substances with | occ  | upational exposure limit values.  |
| Engineering measures        | :    | none  |
| Personal protective equipm  | nent | t i i i i i i i i i i i i i i i i i i i   |
| Respiratory protection      | :    | Not required; except in case of aerosol formation.  |
| Filter type                 | :    | Filter type A-P   |
| Hand protection             |      |   |
| Material                    | :    | Nitrile rubber  |
| Break through time          | :    | > 10 min  |
| Protective index            | :    | Class 1   |
|                             |      |   |
| Remarks                     | :    | Wear protective gloves. The break through time depends<br>amongst other things on the material, the thickness and the<br>type of glove and therefore has to be measured for each<br>case.   |
| Eye protection              | :    | Safety glasses with side-shields  |
| Protective measures         | :    | The type of protective equipment must be selected according<br>to the concentration and amount of the dangerous substance<br>at the specific workplace.<br>Choose body protection in relation to its type, to the concen-<br>tration and amount of dangerous substances, and to the spe-<br>cific 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 |





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|             |               |  |     |   |                        |
|             | рН            |  | :   | No data available                                       |                        |
|             | Melting       | g point/range                            | :   | No data available                                       |                        |
|             | Boiling       | point/boiling range                      | :   | No data available                                       |                        |
|             | Flash p       | point                                    | :   | >= 200 °C   |                        |
|             |               |  |     | Method: ISO 2592, open cup                              |                        |
|             | Evapo         | ration rate                              | :   | No data available                                       |                        |
|             | Flamm         | ability (solid, gas)                     | :   | Not applicable  |                        |
|             | Self-ig       | nition                                   | :   | No data available                                       |                        |
|             |               | explosion limit / Upper<br>ability limit | :   | No data available                                       |                        |
|             |               | explosion limit / Lower<br>ability limit | :   | No data available                                       |                        |
|             | Vapou         | r pressure                               | :   | < 0.001 hPa (20 °C)                                     |                        |
|             | Relativ       | e vapour density                         | :   | No data available                                       |                        |
|             | Densit        | У  | :   | 0.85 g/cm3 (20 °C)                                      |                        |
|             | Bulk d        | ensity                                   | :   | No data available                                       |                        |
|             |               | ity(ies)<br>ter solubility               | :   | insoluble   |                        |
|             | Sol           | ubility in other solvents                | 6 : | No data available                                       |                        |
|             |               | on coefficient: n-<br>I/water            | :   | No data available                                       |                        |
|             | Auto-iç       | gnition temperature                      | :   | No data available                                       |                        |
|             | Decom         | position temperature                     | :   | No data available                                       |                        |
|             | Viscos<br>Vis | ity<br>cosity, dynamic                   | :   | No data available                                       |                        |
|             | Vis           | cosity, kinematic                        | :   | 32 mm2/s ( 40 °C)                                       |                        |
|             | Explos        | ive properties                           | :   | Not explosive   |                        |
|             | Oxidizi       | ng properties                            | :   | No data available                                       |                        |





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| :            | Sublin               | nation point              | :     | No data available   |                           |
| 10. S        | TABI                 |                           | (     |   |                           |
|              | Reacti               | ivity                     | :     | No hazards to be specially mentioned                        | d.                        |
|              | Chem                 | ical stability            | :     | Stable under normal conditions.                             |                           |
|              | Possit<br>tions      | bility of hazardous reac- | :     | No dangerous reaction known under                           | conditions of normal use  |
|              | Condi                | tions to avoid            | :     | No conditions to be specially mention                       | ned.                      |
|              | Incom                | patible materials         | :     | No materials to be especially mention                       | ned.                      |
|              | Hazar<br>produc      | dous decomposition<br>cts | :     | No decomposition if stored and applic                       | ed as directed.           |
| 11. T        | OXIC                 | OLOGICAL INFORMA          | ΓΙΟΝ  | l   |                           |
|              | Sympt                | toms of Overexposure      | :     | No information available.                                   |                           |
|              | Acute                | toxicity                  |       |   |                           |
|              | Produ                | ict:                      |       |   |                           |
|              | Acute                | oral toxicity             | :     | Remarks: This information is not avail                      | lable.                    |
|              | Acute                | inhalation toxicity       | :     | Remarks: This information is not avail                      | lable.                    |
|              | Acute                | dermal toxicity           | :     | Remarks: This information is not avail                      | lable.                    |
| :            | Skin c               | corrosion/irritation      |       |   |                           |
|              | Produ                | ict:                      |       |   |                           |
|              | Rema                 | rks                       | :     | This information is not available.                          |                           |
| :            | Seriou               | us eye damage/eye irr     | itati | on  |                           |
|              | <b>Produ</b><br>Rema |                           | :     | This information is not available.                          |                           |
|              | Respi                | ratory or skin sensitis   | atio  | n   |                           |
|              | <b>Produ</b><br>Rema |                           | :     | This information is not available.                          |                           |





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|------------------------|--|-------|--|---------------------------|
| Chro                   | nic toxicity                           |       |  |                           |
| Germ                   | cell mutagenicity                      |       |  |                           |
| Produ                  | uct:                                   |       |  |                           |
| Geno                   | toxicity in vitro                      | :     | Remarks: No data available   |                           |
| Geno                   | toxicity in vivo                       | :     | Remarks: No data available   |                           |
| Carci                  | nogenicity                             |       |  |                           |
| Prod                   | uct:                                   |       |  |                           |
| Rema                   | arks                                   | :     | No data available  |                           |
| Repro                  | oductive toxicity                      |       |  |                           |
| Prod                   |  |       |  |                           |
| Effect                 | ts on fertility                        |       | Remarks: No data available   |                           |
| Effect<br>ment         | ts on foetal develop-                  | :     | Remarks: No data available   |                           |
| Repe                   | ated dose toxicity                     |       |  |                           |
| <u>Prod</u><br>Rema    |  | :     | This information is not available.                                     |                           |
| Aspir                  | ration toxicity                        |       |  |                           |
| <u>Produ</u><br>This i | <b>uct:</b><br>nformation is not avail | able. |  |                           |
| Furth                  | er information                         |       |  |                           |
| Prod                   |  |       |  |                           |
| Rema                   | arks                                   | :     | Information given is based on data the toxicology of similar products. | a on the components and   |
| ECOL                   | OGICAL INFORMATI                       | ON    |  |                           |
| Ecoto                  | oxicity                                |       |  |                           |
| Produ                  | uct:                                   |       |  |                           |
| Toxic                  | ity to fish                            | :     | Remarks: No data available   |                           |
| Toxic                  | ity to daphnia and oth                 | er :  |  |                           |

a brand of
FREUDENBERG



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| lubersyr           |                                     |      |   |  |
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|                    |                                     |      |   |  |
| aquatic            | invertebrates                       |      | Remarks: No data available  |  |
| Toxicity           | to algae                            | :    |   |  |
|                    |                                     |      | Remarks: No data available  |  |
| Toxicity           | to microorganisms                   | :    | Remarks: No data available  |  |
| Persist            | ence and degradabi                  | lity |   |  |
| Produc             | <u>et:</u>                          |      |   |  |
| Biodegr            | radability                          | :    | Remarks: No data available  |  |
| Physicc<br>ity     | o-chemical removabil-               | :    | Remarks: No data available  |  |
| Bioacc             | umulative potential                 |      |   |  |
| Produc             | <u>:t:</u>                          |      |   |  |
| Bioaccu            | umulation                           | :    | Remarks: This mixture contains n<br>be persistent, bioaccumulating an<br>This mixture contains no substand<br>persistent and very bioaccumulati | d toxic (PBT).<br>ce considered to be very |
| Mobilit            | y in soil                           |      |   |  |
| Produc             | <u>:t:</u>                          |      |   |  |
| Mobility           | ,                                   | :    | Remarks: No data available  |  |
|                    | tion among environ-<br>compartments | :    | Remarks: No data available  |  |
| Other a            | dverse effects                      |      |   |  |
| <u>Produc</u>      | et:                                 |      |   |  |
| Additior<br>mation | nal ecological infor-               | :    | No information on ecology is avail  | able.                                      |
| 3. DISPOS          | AL CONSIDERATIO                     | NS   |   |  |
| Dispos             | al methods                          |      |   |  |
| Waste f            | from residues                       | :    | The product should not be allowed   | d to enter drains, water                   |

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



courses or the soil.



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## **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.

### Special precautions for user

Not applicable

## **15. REGULATORY INFORMATION**

#### National regulatory information

Regulations on Occupational Safety and Health Facilities Standards for the Storage, Cleanup, Handling and Disposal of Industrial Waste

### **16. OTHER INFORMATION**

| Responsible Department | : | Klüber Lubrication München<br>Geisenhausenerstr. 7<br>81379 München<br>Deutschland<br>Tel: +49 (0) 89 7876 0<br>Fax: +49 (0) 89 7876 333<br>info@klueber.com |
|------------------------|---|--|
| Prepared by            | : | mcm@klueber.com<br>Material Compliance Management  |
| Revision Date          | : | 2020-07-07   |
| Date format            | : | yyyy/mm/dd   |

### Full text of other abbreviations





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AICS - Australian Inventory of Chemical Substances; 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; 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; KECI - 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

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