

## Klübersynth GEM 4-220 N

Version 1.0

Revision Date 16.10.2014

Print Date 16.10.2014

### 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Product name : Klübersynth GEM 4-220 N  
Article-No. : 012234

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : Lubricating oil  
Recommended restrictions on use : Restricted to professional users.

#### 1.3 Details of the supplier of the safety data sheet

KLÜBER LUBRICATION MÜNCHEN  
Geisenhausenerstrasse 7  
D-81379 München  
Deutschland  
Tel: +49 (0) 897876-0  
Fax: +49 (0) 897876-333

E-mail address : mcm@klueber.com  
Responsible/issuing person : Material Compliance Management

National contact : Klüber Lubrication Great Britain Limited  
Unit 10 Pennine Business Park  
Longbow Close  
Huddersfield  
West Yorkshire HD2 1GQ  
Great Britain  
Tel: +44-1422-205115  
Fax: +44-1422-206073  
sales@uk.klueber.com

#### 1.4 Emergency telephone number

0049 (0) 897876-700 (24hrs)

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### 2. Hazards identification

#### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008)**

Not a hazardous substance or mixture.

**Classification (67/548/EEC, 1999/45/EC)**

Not a hazardous substance or mixture.

#### 2.2 Label elements

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### Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

### 2.3 Other hazards

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## 3. Composition/information on ingredients

### 3.2 Mixtures

Chemical nature : Synthetic hydrocarbon oil  
ester oil

Remarks : No hazardous ingredients

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## 4. First aid measures

### 4.1 Description of 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.  
In case of contact, immediately flush skin with plenty of water.
- In case of eye contact : If eye irritation persists, consult a specialist.  
Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.
- If swallowed : Do not induce vomiting without medical advice.  
Get medical attention if symptoms occur.
- : Move the victim to fresh air.
- : Rinse mouth with water.

### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

Risks : None known.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

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## 5. Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

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circumstances and the surrounding environment.

Unsuitable extinguishing media : none

### 5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Fire may cause evolution of:  
Carbon oxides

### 5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.  
In the case of respirable dust and/or fumes, use self-contained breathing apparatus.  
Exposure to decomposition products may be a hazard to health.

Further information : Standard procedure for chemical fires.

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## 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.  
Use personal protective equipment.  
Refer to protective measures listed in sections 7 and 8.

### 6.2 Environmental precautions

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.

### 6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

### 6.4 Reference to other sections

For personal protection see section 8.

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## 7. Handling and storage

### 7.1 Precautions for safe 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.

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### 7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers :
- Store in original container.
  - Keep container closed when not in use.
  - Keep in a dry, cool and well-ventilated place.
  - To maintain product quality, do not store in heat or direct sunlight.
  - 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.

### 7.3 Specific end use(s)

- :
- Consult the technical guidelines for the use of this substance/mixture.

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## 8. Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Engineering measures

Maintain air concentrations below occupational exposure standards.  
It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment.  
Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).  
none

#### Personal protective equipment

- Respiratory protection :
- In the case of vapour formation use a respirator with an approved filter.
- Hand protection :
- For prolonged or repeated contact use protective gloves.
  - The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
  - The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.
  - The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.
- Eye protection :
- Safety glasses with side-shields conforming to EN166
- Hygiene measures :
- Wash face, hands and any exposed skin thoroughly after

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handling.

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.

### Environmental exposure controls

General advice : 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.

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance	: liquid
Colour	: yellow
Odour	: characteristic
Odour Threshold	: No data available
pH	: No data available
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: $\geq 200$ °C, Test Method: open cup
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Vapour pressure	: $< 0.001$ hPa, 20 °C
Relative vapour density	: No data available
Density	: 0.85 g/cm <sup>3</sup> , 20 °C
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Ignition temperature	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: 220 mm <sup>2</sup> /s, 40 °C
Oxidizing properties	: No data available

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### 9.2 Other information

Sublimation point : No data available  
Bulk density : No data available

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## 10. Stability and reactivity

### 10.1 Reactivity

No hazards to be specially mentioned.

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

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

### 10.4 Conditions to avoid

Conditions to avoid : No conditions to be specially mentioned.

### 10.5 Incompatible materials

Materials to avoid : No materials to be especially mentioned.

### 10.6 Hazardous decomposition products

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

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## 11. Toxicological information

### 11.1 Information on toxicological effects

#### Product

Acute inhalation toxicity : This information is not available.  
Skin corrosion/irritation : This information is not available.  
Serious eye damage/eye irritation : This information is not available.  
Respiratory or skin sensitisation : This information is not available.  
Germ cell mutagenicity :  
Genotoxicity in vitro : No data available  
Genotoxicity in vivo : No data available  
Carcinogenicity : No data available  
Reproductive toxicity : No data available  
Teratogenicity : No data available  
Repeated dose toxicity : This information is not available.  
Aspiration toxicity : This information is not available.

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

## 12. Ecological information

### 12.1 Toxicity

**Product:**

Toxicity to fish : No data available  
Toxicity to daphnia and other aquatic invertebrates : No data available  
Toxicity to algae : No data available  
Toxicity to bacteria : No data available

### 12.2 Persistence and degradability

**Product:**

Biodegradability : No data available  
Physico-chemical removability : No data available

### 12.3 Bioaccumulative potential

**Product:**

Bioaccumulation : This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT)., This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

### 12.4 Mobility in soil

**Product:**

Mobility : No data available  
Distribution among environmental compartments : No data available

### 12.5 Results of PBT and vPvB assessment

**Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

**Product:**

Additional ecological information : No information on ecology is available.

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### 13. Disposal considerations

#### 13.1 Waste treatment methods

- |                        |   |   |
|------------------------|---|---|
| Product                | : | The product should not be allowed to enter drains, water courses or the soil.                       |
|                        | : | Waste codes should be assigned by the user based on the application for which the product was used. |
| Contaminated packaging | : | Empty containers can be landfilled, when in accordance with the local regulations.                  |

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### 14. Transport information

#### 14.1 UN number

**ADR**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

#### 14.2 Proper shipping name

**ADR**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

#### 14.3 Transport hazard class

**ADR**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

#### 14.4 Packing group

**ADR**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

#### 14.5 Environmental hazards

**ADR**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 - GB



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Not dangerous goods

### 14.6 Special precautions for user

No data available

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

Not available

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## 15. Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

Major Accident Hazard Legislation : 96/82/EC Update: not applicable

### 15.2 Chemical Safety Assessment

This information is not available.

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## 16. Other information

### Further information

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