

## Klübersynth GEM 4-220 N (H)

Version Revision Date: Date of last issue: 27.03.2020 Print Date: 2.5 15.07.2020 Date of first issue: 16.10.2014 15.07.2020

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

Product name : Klübersynth GEM 4-220 N (H)

Article-No. : 012351

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 : mcm@klueber.com

responsible for the SDS Material Compliance Management

National contact : Klüber Lubrication Australia Pty. Ltd.

1st Floor, 3 Brand Drive

P.O. Box 4

Thomastown Victoria 3074 (Melbourne)

Australia

Tel: +61 3 9464 7577 Fax: +61 3 9464 7588 kluber.mel@au.klueber.com

Emergency telephone number : +61 2 8014 4558 (24hrs)

Recommended use of the chemical and restrictions on use

Recommended use : Lubricating oil

Restrictions on use : Restricted to professional users.

#### **SECTION 2. HAZARDS IDENTIFICATION**

#### **GHS Classification**

Not a hazardous substance or mixture.

**GHS** label elements

Not a hazardous substance or mixture.



## Klübersynth GEM 4-220 N (H)

Version Revision Date: Date of last issue: 27.03.2020 Print Date: 2.5 15.07.2020 Date of first issue: 16.10.2014 15.07.2020

#### Other hazards which do not result in classification

None known.

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

Chemical nature : Synthetic hydrocarbon oil

ester oil

**Hazardous components** 

No hazardous ingredients

#### **SECTION 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 respira-

tion.

In case of skin contact : Remove contaminated clothing. If irritation develops, get med-

ical attention.

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.

### **SECTION 5. FIREFIGHTING MEASURES**

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

bon dioxide.

Unsuitable extinguishing

media

High volume water jet





Klübersynth GEM 4-220 N (H)

Version Revision Date: Date of last issue: 27.03.2020 Print Date: 2.5 15.07.2020 Date of first issue: 16.10.2014 15.07.2020

Specific hazards during fire-

fighting

: Fire may cause evolution of:

Carbon oxides

Specific extinguishing meth-

ods

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.

Hazchem Code : -

### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emer-

gency 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

containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, ver-

miculite) and place in container for disposal according to local / national regulations (see section 13).

#### **SECTION 7. HANDLING AND STORAGE**

Advice on safe handling : For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Wash hands and face before breaks and immediately after

handling the product.

Hygiene measures : Wash face, hands and any exposed skin thoroughly after

handling.

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.



## Klübersynth GEM 4-220 N (H)

Version Revision Date: Date of last issue: 27.03.2020 Print Date: 2.5 15.07.2020 Date of first issue: 16.10.2014 15.07.2020

### **SECTION 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

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 type of glove and therefore has to be measured for each

case.

Eye protection : Safety glasses with side-shields

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 spe-

cific work-place.

#### **SECTION 9. 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



## Klübersynth GEM 4-220 N (H)

VersionRevision Date:Date of last issue: 27.03.2020Print Date:2.515.07.2020Date of first issue: 16.10.201415.07.2020

Flash point :  $>= 200 \, ^{\circ}\text{C}$ 

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

Density : 0.86 g/cm3 (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 : 220 mm2/s (40 °C)

Explosive properties : Not explosive

Oxidizing properties : No data available

Sublimation point : No data available

## **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No hazards to be specially mentioned.



Klübersynth GEM 4-220 N (H)

Version Revision Date: Date of last issue: 27.03.2020 Print Date: 2.5 15.07.2020 Date of first issue: 16.10.2014 15.07.2020

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

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.

### **SECTION 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.

**Chronic toxicity** 

Germ cell mutagenicity

**Product:** 

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available



## Klübersynth GEM 4-220 N (H)

Version Revision Date: Date of last issue: 27.03.2020 Print Date: 2.5 15.07.2020 Date of first issue: 16.10.2014 15.07.2020

Carcinogenicity

**Product:** 

Remarks : No data available

Reproductive toxicity

**Product:** 

Effects on fertility : Remarks: No data available

Effects on foetal develop-

ment

Remarks: No data available

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.

**SECTION 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



## Klübersynth GEM 4-220 N (H)

Version Revision Date: Date of last issue: 27.03.2020 Print Date: 2.5 15.07.2020 Date of first issue: 16.10.2014 15.07.2020

### Persistence and degradability

**Product:** 

Biodegradability : Remarks: No data available

Physico-chemical removabil- :

ity

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

persistent and very bioaccumulating (vPvB).

Mobility in soil

**Product:** 

Mobility : Remarks: No data available

Distribution among environ-

mental compartments

Remarks: No data available

Other adverse effects

**Product:** 

Additional ecological infor-

mation

No information on ecology is available.

## **SECTION 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.

### **SECTION 14. TRANSPORT INFORMATION**

International Regulations

**UNRTDG** 



Klübersynth GEM 4-220 N (H)

Version Revision Date: Date of last issue: 27.03.2020 Print Date: 2.5 15.07.2020 Date of first issue: 16.10.2014 15.07.2020

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

Schedule 5

Not applicable for product as supplied.

**National Regulations** 

**ADG** 

Not regulated as a dangerous good

#### **SECTION 15. REGULATORY INFORMATION**

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

Standard for the Uniform

Scheduling of Medicines and

**Poisons** 

Prohibition/Licensing Requirements

: There is no applicable prohibition or

notification/licensing requirements, including for carcinogens under Commonwealth, State or Territory

legislation.

### **SECTION 16. OTHER INFORMATION**

Revision Date : 15.07.2020

Date format : dd.mm.yyyy

Full text of other abbreviations

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



## Klübersynth GEM 4-220 N (H)

VersionRevision Date:Date of last issue: 27.03.2020Print Date:2.515.07.2020Date of first issue: 16.10.201415.07.2020

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

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.