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



# Klüberoil GEM 1-220 N

 Version
 Revision Date:
 Date of last issue: 27.04.2021
 Print Date:

 3.0
 06.08.2021
 Date of first issue: 15.06.2015
 06.08.2021

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

1.1 Product identifier

Product name : Klüberoil GEM 1-220 N

Article-No. : 030058

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

Use of the Sub- : Lubricating oil

stance/Mixture

Recommended restrictions : Restricted to professional users.

on use

The state of the s

1.3 Details of the supplier of the safety data sheet

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 Deutschland

Geisenhausenerstraße 7

81379 München Deutschland

Tel.: +49 89 7876 0 Fax: +49 89 7876 565

customer.service.de@klueber.com

www.klueber.com

1.4 Emergency telephone number

Emergency telephone num- : +49 89 7876 700 (24 hrs)

ber

## **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

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

Not a hazardous substance or mixture.



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



# Klüberoil GEM 1-220 N

 Version
 Revision Date:
 Date of last issue: 27.04.2021
 Print Date:

 3.0
 06.08.2021
 Date of first issue: 15.06.2015
 06.08.2021

# 2.2 Label elements

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

Not a hazardous substance or mixture.

#### 2.3 Other hazards

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.

# **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

Chemical nature : Mineral oil.

## Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration limits M-Factor Notes	Concentration (% w/w)
Substances with a work		T		
residual oils (petrole- um), hydrotreated	64742-57-0 265-160-8 649-470-00-4 01-2119489287-22- XXXX	Not classified	Note L	>= 30 - < 50
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified	64742-54-7 265-157-1 649-467-00-8 01-2119484627-25- XXXX	Not classified	Note L	>= 30 - < 50

For explanation of abbreviations see section 16.

## **SECTION 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 respira-

ion.



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



Klüberoil GEM 1-220 N

 Version
 Revision Date:
 Date of last issue: 27.04.2021
 Print Date:

 3.0
 06.08.2021
 Date of first issue: 15.06.2015
 06.08.2021

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.

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.

**SECTION 5: Firefighting measures** 

5.1 Extinguishing media

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

bon dioxide.

Unsuitable extinguishing

media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion prod-

ucts

Carbon oxides Sulphur 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. Exposure to decomposi-

tion products may be a hazard to health.

Further information : Standard procedure for chemical fires.



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



## Klüberoil GEM 1-220 N

 Version
 Revision Date:
 Date of last issue: 27.04.2021
 Print Date:

 3.0
 06.08.2021
 Date of first issue: 15.06.2015
 06.08.2021

#### **SECTION 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 material for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible ab-

sorbent 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.

## **SECTION 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 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.

#### 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. 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.

Storage class (TRGS 510) : 10, Combustible liquids

7.3 Specific end use(s)

Specific use(s) : Specific instructions for handling, not required.



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



# Klüberoil GEM 1-220 N

 Version
 Revision Date:
 Date of last issue: 27.04.2021
 Print Date:

 3.0
 06.08.2021
 Date of first issue: 15.06.2015
 06.08.2021

# **SECTION 8: Exposure controls/personal protection**

# 8.1 Control parameters

# **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
residual oils (petro- leum), hydrotreat- ed	64742-57-0	AGW (Vapour and aerosols)	5 mg/m3	DE TRGS 900 (2018-06-07)
Peak-limit: excursion factor (category)	4;(II)			
Further information	When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
Distillates (petrole- um), hydrotreated heavy paraffinic; Baseoil — un- specified	64742-54-7	AGW (Vapour and aerosols)	5 mg/m3	DE TRGS 900 (2018-06-07)
Peak-limit: excursion factor (category)	4;(II)			
Further information	When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			

## Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

2011104 110 211001 20101 (21122) 40001 41119 10 1109 11001 (20114 10017 2001					
Substance name	End Use	Exposure routes	Potential health effects	Value	
residual oils (petrole- um), hydrotreated	Workers	Inhalation	Long-term systemic effects	2,7 mg/m3	
	Workers	Inhalation	Acute systemic effects	5,6 mg/m3	
	Workers	Skin contact	Long-term systemic effects	1 mg/kg	
Distillates (petrole- um), hydrotreated heavy paraffinic; Baseoil — unspecified	Workers	Inhalation	Long-term local effects	5,6 mg/m3	

# Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Distillates (petroleum), hy-	Oral	9,33 mg/kg
drotreated heavy paraffinic;		
Baseoil — unspecified		



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



# Klüberoil GEM 1-220 N

 Version
 Revision Date:
 Date of last issue: 27.04.2021
 Print Date:

 3.0
 06.08.2021
 Date of first issue: 15.06.2015
 06.08.2021

## 8.2 Exposure controls

#### **Engineering measures**

none

## Personal protective equipment

Eye protection : Safety glasses with side-shields

Hand protection

Material : Nitrile rubber
Break through time : > 10 min
Protective index : Class 1

Remarks : For prolonged or repeated contact use 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.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374

derived from it.

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

Filter type : Filter type A-P

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**

## 9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : yellow

Odour : characteristic

Odour Threshold : No data available

pH : Not applicable

Melting point/range : No data available



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



Klüberoil GEM 1-220 N

 Version
 Revision Date:
 Date of last issue: 27.04.2021
 Print Date:

 3.0
 06.08.2021
 Date of first issue: 15.06.2015
 06.08.2021

Boiling point/boiling range : No data available

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

Method: ISO 2592, open cup

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

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

Relative density : 0,890 (20 °C)

Reference substance: Water The value is calculated

Density : 0,89 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

9.2 Other information

Sublimation point : No data available

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



# Klüberoil GEM 1-220 N

 Version
 Revision Date:
 Date of last issue: 27.04.2021
 Print Date:

 3.0
 06.08.2021
 Date of first issue: 15.06.2015
 06.08.2021

Self-ignition : No data available

## **SECTION 10: Stability and reactivity**

## 10.1 Reactivity

No hazards to be specially mentioned.

#### 10.2 Chemical stability

Stable under normal conditions.

#### 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

No decomposition if stored and applied as directed.

## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

# **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.

#### Components:

## residual oils (petroleum), hydrotreated:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 402



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



## Klüberoil GEM 1-220 N

 Version
 Revision Date:
 Date of last issue: 27.04.2021
 Print Date:

 3.0
 06.08.2021
 Date of first issue: 15.06.2015
 06.08.2021

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 401

GLP: yes

Acute inhalation toxicity : LC50 (Rat): > 5,53 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg

Method: OECD Test Guideline 402

Skin corrosion/irritation

**Product:** 

Remarks : This information is not available.

**Components:** 

residual oils (petroleum), hydrotreated:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : yes

Serious eye damage/eye irritation

**Product:** 

Remarks : This information is not available.

**Components:** 

residual oils (petroleum), hydrotreated:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

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



## Klüberoil GEM 1-220 N

 Version
 Revision Date:
 Date of last issue: 27.04.2021
 Print Date:

 3.0
 06.08.2021
 Date of first issue: 15.06.2015
 06.08.2021

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

GLP : yes

## Respiratory or skin sensitisation

**Product:** 

Remarks : This information is not available.

## **Components:**

# residual oils (petroleum), hydrotreated:

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

Assessment : Does not cause respiratory sensitisation.
Result : Does not cause respiratory sensitisation.

## Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

GLP : yes

## Germ cell mutagenicity

**Product:** 

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Carcinogenicity

**Product:** 

Remarks : No data available

## **Components:**

## residual oils (petroleum), hydrotreated:

Carcinogenicity - Assess- : Not classifiable as a human carcinogen.

ment

## Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

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



# Klüberoil GEM 1-220 N

 Version
 Revision Date:
 Date of last issue: 27.04.2021
 Print Date:

 3.0
 06.08.2021
 Date of first issue: 15.06.2015
 06.08.2021

Carcinogenicity - Assess-

ment

Not classifiable as a human carcinogen.

## Reproductive toxicity

**Product:** 

Effects on fertility : Remarks: No data available

Effects on foetal develop-

ment

: Remarks: No data available

## **Components:**

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Reproductive toxicity - As-

sessment

: No toxicity to reproduction

## Repeated dose toxicity

**Product:** 

Remarks : This information is not available.

## **Aspiration toxicity**

## **Product:**

This information is not available.

# **Components:**

#### residual oils (petroleum), hydrotreated:

No aspiration toxicity classification

## Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

No aspiration toxicity classification

#### **Further information**

**Product:** 

Remarks : Information given is based on data on the components and

the toxicology of similar products.

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



## Klüberoil GEM 1-220 N

Date of last issue: 27.04.2021 Version Revision Date: Print Date: Date of first issue: 15.06.2015 3.0 06.08.2021 06.08.2021

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

**Product:** 

Toxicity to fish Remarks: No data available

Toxicity to daphnia and other :

aquatic invertebrates

Remarks: No data available

Toxicity to algae/aquatic

plants

Remarks: No data available

Toxicity to microorganisms

Remarks: No data available

## **Components:**

residual oils (petroleum), hydrotreated:

Toxicity to fish LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l

> Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 10.000 mg/l

Exposure time: 48 h Test Type: Immobilization

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l Toxicity to fish

> Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 10.000 mg/l

Exposure time: 48 h Test Type: Immobilization

Method: OECD Test Guideline 202

GLP: yes

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 10 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Test Type: semi-static test

Method: OECD Test Guideline 211

GLP: yes

## 12.2 Persistence and degradability

#### **Product:**



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



## Klüberoil GEM 1-220 N

Version Date of last issue: 27.04.2021 Revision Date: Print Date: 06.08.2021 Date of first issue: 15.06.2015 06.08.2021 3.0

Biodegradability Remarks: No data available

Physico-chemical removabil- : Remarks: No data available

#### Components:

## residual oils (petroleum), hydrotreated:

Biodegradability : Result: Not rapidly biodegradable

## Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Biodegradability Test Type: aerobic

> Inoculum: activated sludge Result: Not rapidly biodegradable

Biodegradation: 3 % Exposure time: 28 d

Method: OECD Test Guideline 301B

GLP: yes

#### 12.3 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).

## **Components:**

## Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Partition coefficient: n-

octanol/water

: log Pow: > 2

## 12.4 Mobility in soil

## **Product:**

: Remarks: No data available Mobility

Distribution among environ-

mental compartments

: Remarks: 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...



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



## Klüberoil GEM 1-220 N

 Version
 Revision Date:
 Date of last issue: 27.04.2021
 Print Date:

 3.0
 06.08.2021
 Date of first issue: 15.06.2015
 06.08.2021

#### **Components:**

#### Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Assessment : Non-classified vPvB substance. Non-classified PBT sub-

stance.

#### 12.6 Other adverse effects

**Product:** 

Endocrine disrupting poten-

tial

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

Additional ecological infor-

mation

: No information on ecology is available.

## **SECTION 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 : 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.

The following Waste Codes are only suggestions:

Waste Code : unused product

13 02 05\*, mineral-based non-chlorinated engine, gear and

lubricating oils

uncleaned packagings

15 01 10, packaging containing residues of or contaminated

by hazardous substances

## **SECTION 14: Transport information**

## 14.1 UN number

ADN : Not regulated as a dangerous good



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



## Klüberoil GEM 1-220 N

 Version
 Revision Date:
 Date of last issue: 27.04.2021
 Print Date:

 3.0
 06.08.2021
 Date of first issue: 15.06.2015
 06.08.2021

ADR : Not regulated as a dangerous good

RID : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.2 UN proper shipping name

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.3 Transport hazard class(es)

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.4 Packing group

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA (Cargo) : Not regulated as a dangerous good
IATA (Passenger) : Not regulated as a dangerous good

14.5 Environmental hazards

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA (Passenger) : Not regulated as a dangerous good
IATA (Cargo) : Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Remarks : Not applicable for product as supplied.

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



## Klüberoil GEM 1-220 N

 Version
 Revision Date:
 Date of last issue: 27.04.2021
 Print Date:

 3.0
 06.08.2021
 Date of first issue: 15.06.2015
 06.08.2021

## **SECTION 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 (Regu-

lation (EC) No 1907/2006 (REACH),

Article 57).

REACH - List of substances subject to authorisation

(Annex XIV)

Not applicable

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

: Not applicable

Regulation (EU) 2019/1021 on persistent organic pollu-

tants (recast)

Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import

of dangerous chemicals

: Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances,

preparations and articles (Annex XVII)

Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

Water contaminating class

(Germany)

WGK 1 slightly hazardous to water

Classification according to AwSV, Annex 1 (5.2)

TA Luft List (Germany) : Total dust:

others: 0,06 %

Inorganic substances in powdered form:

Not applicable

Inorganic substances in vapour or gaseous form:

Not applicable Organic Substances: portion Class 1: 0,02 %

others: 99,91 %

Carcinogenic substances:

Not applicable
Mutagenic:
Not applicable

Toxic to reproduction:

Not applicable



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



## Klüberoil GEM 1-220 N

 Version
 Revision Date:
 Date of last issue: 27.04.2021
 Print Date:

 3.0
 06.08.2021
 Date of first issue: 15.06.2015
 06.08.2021

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial

emissions (integrated pollution prevention and control)
Volatile organic compounds (VOC) content: 0,11 %

#### 15.2 Chemical safety assessment

This information is not available.

#### **SECTION 16: Other information**

#### Full text of other abbreviations

Note L : The classification as a carcinogen need not apply if it can be

shown that the substance contains less than 3 % DMSO extract as measured by IP 346 "Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions - Dimethyl sulphoxide extraction refractive index method", Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.

DE TRGS 900 : Germany. TRGS 900 - Occupational exposure limit values.

DE TRGS 900 / AGW : Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; 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; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet;

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



## Klüberoil GEM 1-220 N

 Version
 Revision Date:
 Date of last issue: 27.04.2021
 Print Date:

 3.0
 06.08.2021
 Date of first issue: 15.06.2015
 06.08.2021

SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### **Further information**

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.

