according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



# Klüber Tyreno Fluid 6/14V

 Version
 Revision Date:
 Date of last issue: 05.05.2022
 Print Date: 05.08.2022

 2.0
 04.08.2022
 Date of first issue: 15.02.2017
 05.08.2022

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

1.1 Product identifier

Product name : Klüber Tyreno Fluid 6/14V

Article-No. : 130022

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

Use of the Sub-

stance/Mixture

Lubricating oil

Recommended restrictions

on use

Restricted to professional users.

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



according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



# Klüber Tyreno Fluid 6/14V

Version Revision Date: Date of last issue: 05.05.2022 Print Date: 2.0 04.08.2022 Date of first issue: 15.02.2017 05.08.2022

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

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

Not a hazardous substance or mixture.

#### 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.

Ecological information: 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.

Toxicological information: 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.

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

## 3.1 Substances

Chemical nature : perfluorinated polyether oil

Components

Remarks : No hazardous ingredients

### **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-

tion.



according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



Klüber Tyreno Fluid 6/14V

Version Revision Date: Date of last issue: 05.05.2022 Print Date: 2.0 04.08.2022 Date of first issue: 15.02.2017 05.08.2022

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

No information available. **Symptoms** 

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

Nitrogen oxides (NOx) Halogenated compounds

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 (Commission Regulation (EU) 2020/878)



## Klüber Tyreno Fluid 6/14V

Version Revision Date: Date of last issue: 05.05.2022 Print Date: 2.0 04.08.2022 Date of first issue: 15.02.2017 05.08.2022

#### **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

which are opened must be carefully resealed and kept uprig to prevent leakage. Store in accordance with the particular national regulations. Keep in properly labelled containers.

Storage class (TRGS 510) : 12, Non 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 (Commission Regulation (EU) 2020/878)



# Klüber Tyreno Fluid 6/14V

Version Revision Date: Date of last issue: 05.05.2022 Print Date: 2.0 04.08.2022 Date of first issue: 15.02.2017 05.08.2022

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

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

### 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.

Skin and body protection : Choose body protection in relation to its type, to the concen-

tration and amount of dangerous substances, and to the spe-

cific work-place.

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.

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Physical state : liquid

Colour : colourless

Odour : odourless

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



Klüber Tyreno Fluid 6/14V

 Version
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 05.08.2022

Odour Threshold : No data available

Melting point/range : No data available

Boiling point/boiling range : > 270 °C

Flammability (solid, gas) : Not applicable

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Flash point : does not flash

Auto-ignition temperature : No data available

Decomposition temperature : No data available

pH : Not applicable

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : 60 mm2/s (40 °C)

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Vapour pressure : <= 0,000003 hPa (20 °C)

Relative density : 1,893 (20 °C)

Reference substance: Water The value is calculated

Density : 1,89 g/cm3

(20 °C)

Bulk density : No data available

Relative vapour density : No data available

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



# Klüber Tyreno Fluid 6/14V

Version Revision Date: Date of last issue: 05.05.2022 Print Date: 2.0 04.08.2022 Date of first issue: 15.02.2017 05.08.2022

#### 9.2 Other information

**Explosives** Not explosive

Oxidizing properties No data available

Flammability (liquids) Will not burn

Self-ignition No data available

Evaporation rate No data available

Sublimation point 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

No conditions to be specially mentioned. Conditions to avoid

10.5 Incompatible materials

Materials to avoid No materials to be especially mentioned.

## 10.6 Hazardous decomposition products

Hazardous decomposition

products

: >280 °C danger of forming toxic fluorine-containing pyrolysis

products.

### **SECTION 11: Toxicological information**

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

## **Acute toxicity**

**Product:** 

Acute oral toxicity Remarks: This information is not available.

Acute inhalation toxicity Remarks: This information is not available.

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



Klüber Tyreno Fluid 6/14V

Version Revision Date: Date of last issue: 05.05.2022 Print Date: 2.0 04.08.2022 Date of first issue: 15.02.2017 05.08.2022

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 develop-

nent

Remarks: No data available

Repeated dose toxicity

**Product:** 

Remarks : This information is not available.

**Aspiration toxicity** 

**Product:** 

This information is not available.

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



# Klüber Tyreno Fluid 6/14V

Version Revision Date: Date of last issue: 05.05.2022 Print Date: 2.0 04.08.2022 Date of first issue: 15.02.2017 05.08.2022

#### 11.2 Information on other hazards

#### **Endocrine disrupting properties**

**Product:** 

Assessment The substance/mixture does not contain components consid-

> ered 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.

**Further information** 

**Product:** 

Remarks Information given is based on data on the components and

the toxicology of similar products.

## **SECTION 12: Ecological information**

#### 12.1 Toxicity

**Product:** 

Remarks: No data available Toxicity to fish

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

#### 12.2 Persistence and degradability

**Product:** 

Biodegradability Remarks: No data available

Physico-chemical removabil- : Remarks: No data available

### 12.3 Bioaccumulative potential

**Product:** 

Bioaccumulation Remarks: This substance is not considered to be persistent,

bioaccumulating and toxic (PBT).

This substance is not considered to be very persistent and

very bioaccumulating (vPvB).



according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



# Klüber Tyreno Fluid 6/14V

Version Revision Date: Date of last issue: 05.05.2022 Print Date: 2.0 04.08.2022 Date of first issue: 15.02.2017 05.08.2022

### 12.4 Mobility in soil

**Product:** 

Mobility : Remarks: No data available

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.

#### 12.6 Endocrine disrupting properties

**Product:** 

Assessment : The substance/mixture does not contain components consid-

ered 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.

#### 12.7 Other adverse effects

**Product:** 

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

07 01 03\*, organic halogenated solvents, washing liquids and

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



# Klüber Tyreno Fluid 6/14V

Version Revision Date: Date of last issue: 05.05.2022 Print Date: 2.0 04.08.2022 Date of first issue: 15.02.2017 05.08.2022

mother liquors

uncleaned packagings

15 01 10, packaging containing residues of or contaminated

by hazardous substances

## **SECTION 14: Transport information**

## 14.1 UN number or ID number

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

#### 14.2 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

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



Klüber Tyreno Fluid 6/14V

 Version
 Revision Date:
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 2.0
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 Date of first issue: 15.02.2017
 05.08.2022

ADR : Not regulated as a dangerous good

RID : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Remarks : Not applicable for product as supplied.

**SECTION 15: Regulatory information** 

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

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

mixtures and articles (Annex XVII)

Not applicable

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

(EU SVHC)

This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH),

Article 57).

REACH - List of substances subject to authorisation

(Annex XIV)

(EU. REACH-Annex XIV)

: Not applicable

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

plete the ozone layer (EC 1005/2009)

(20 1000/2000)

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

tants (recast) (EU POP) Not applicable

Not applicable

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

of dangerous chemicals

(EU PIC)

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 hazard class (Germa-

ny)

WGK 1 slightly hazardous to water

Code Number: 5.143

Classification according to AwSV, Annex 1 (4)

TA Luft List (Germany) : Total dust:

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Klüber Tyreno Fluid 6/14V

Version Revision Date: Date of last issue: 05.05.2022 Print Date: 2.0 04.08.2022 Date of first issue: 15.02.2017 05.08.2022

Not applicable

Inorganic substances in powdered form:

Not applicable

Inorganic substances in vapour or gaseous form:

Not applicable Organic Substances: others: 100 %

Carcinogenic substances:

Not applicable
Mutagenic:
Not applicable
Toxic to reproduction:
Not applicable

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

emissions (integrated pollution prevention and control)

Not applicable

#### 15.2 Chemical safety assessment

This information is not available.

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

#### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - 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 sub-

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



## Klüber Tyreno Fluid 6/14V

 Version
 Revision Date:
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 Print Date: 05.08.2022

 2.0
 04.08.2022
 Date of first issue: 15.02.2017
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stance; 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; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals 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**

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