

# SAFETY DATA SHEET

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



## Klüberalfa GR Y VAC 2

Version	Revision Date:	Date of last issue: 30.04.2020	Print Date:
1.3	07.05.2020	Date of first issue: 24.09.2015	08.05.2020

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

#### 1.1 Product identifier

Product name : Klüberalfa GR Y VAC 2  
Article-No. : 090189

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

Use of the Sub- : Lubricant  
stance/Mixture  
  
Recommended restrictions : Restricted to professional users.  
on use

#### 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)  
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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008)**  
Not a hazardous substance or mixture.

# SAFETY DATA SHEET

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



## Klüberalfa GR Y VAC 2

Version	Revision Date:	Date of last issue: 30.04.2020	Print Date:
1.3	07.05.2020	Date of first issue: 24.09.2015	08.05.2020

### 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 : perfluorinated polyether oil  
PTFE

#### Components

Chemical name	CAS-No. EC-No.  Index-No. Registration number	Classification	Concentration limits M-Factor Notes	Concentration (% w/w)
Substances with a workplace exposure limit :				
Ethylene, tetrafluoro-, polymer	9002-84-0 618-337-2	Not classified		>= 20 - < 30

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 respiration.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.  
Wash off with soap and 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.

# SAFETY DATA SHEET

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

**KLÜBER**  
LUBRICATION

## Klüberalfa GR Y VAC 2

Version	Revision Date:	Date of last issue: 30.04.2020	Print Date:
1.3	07.05.2020	Date of first issue: 24.09.2015	08.05.2020

Do not induce vomiting without medical advice.

### 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 carbon dioxide.

Unsuitable extinguishing media : High volume water jet

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

Specific hazards during fire-fighting : Fire may cause evolution of:  
Carbon oxides  
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 decomposition products may be a hazard to health.

Further information : Standard procedure for chemical fires.

## SECTION 6: Accidental release measures

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

Personal precautions : Evacuate personnel to safe areas.  
Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).  
Do not breathe vapours, aerosols.  
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

# SAFETY DATA SHEET

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



## Klüberalfa GR Y VAC 2

Version	Revision Date:	Date of last issue: 30.04.2020	Print Date:
1.3	07.05.2020	Date of first issue: 24.09.2015	08.05.2020

courses.  
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 : Clean up promptly by sweeping or vacuum.  
Keep in suitable, closed containers for disposal.

### 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 application 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) : 13, Non Combustible Solids

### 7.3 Specific end use(s)

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

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Ethylene, tetrafluoro-, polymer	9002-84-0	AGW (Inhalable fraction)	10 mg/m <sup>3</sup>	DE TRGS 900 (2014-04-02)

# SAFETY DATA SHEET

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

**KLÜBER**  
LUBRICATION

## Klüberalfa GR Y VAC 2

Version 1.3      Revision Date: 07.05.2020      Date of last issue: 30.04.2020      Print Date: 08.05.2020  
Date of first issue: 24.09.2015

Peak-limit: excursion factor (category)	2;(II)			
		AGW (Alveolate fraction)	1,25 mg/m <sup>3</sup>	DE TRGS 900 (2014-04-02)
Peak-limit: excursion factor (category)	2;(II)			

### 8.2 Exposure controls

#### Engineering measures

none

#### Personal protective equipment

Eye protection : Tightly fitting safety goggles

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 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 specific work-place.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance : paste  
Colour : white  
Odour : odourless

# SAFETY DATA SHEET

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

**KLÜBER**  
LUBRICATION

## Klüberalfa GR Y VAC 2

Version	Revision Date:	Date of last issue: 30.04.2020	Print Date:
1.3	07.05.2020	Date of first issue: 24.09.2015	08.05.2020

Odour Threshold : No data available

pH : No data available

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : Not applicable

Evaporation rate : No data available

Flammability (solid, gas) : Will not burn

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapour pressure : < 0,0000001 hPa (20 °C)

Relative vapour density : No data available

Density : 1,97 g/cm<sup>3</sup>  
(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 : No data available

Explosive properties : Not explosive

Oxidizing properties : No data available

# SAFETY DATA SHEET

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

**KLÜBER**  
LUBRICATION

## Klüberalfa GR Y VAC 2

Version	Revision Date:	Date of last issue: 30.04.2020	Print Date:
1.3	07.05.2020	Date of first issue: 24.09.2015	08.05.2020

### 9.2 Other information

Sublimation point : No data available

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

Hazardous decomposition products : >280 °C danger of forming toxic fluorine-containing pyrolysis products.

## 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:

##### **Ethylene, tetrafluoro-, polymer:**

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg  
Method: OECD Test Guideline 401

# SAFETY DATA SHEET

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

**KLÜBER**  
LUBRICATION

## Klüberalfa GR Y VAC 2

Version	Revision Date:	Date of last issue: 30.04.2020	Print Date:
1.3	07.05.2020	Date of first issue: 24.09.2015	08.05.2020

### Skin corrosion/irritation

**Product:**

Remarks : This information is not available.

**Components:**

**Ethylene, tetrafluoro-, polymer:**

Species : Rabbit  
Assessment : No skin irritation  
Result : No skin irritation

### Serious eye damage/eye irritation

**Product:**

Remarks : This information is not available.

**Components:**

**Ethylene, tetrafluoro-, polymer:**

Species : Rabbit  
Assessment : No eye irritation  
Result : No eye irritation

### Respiratory or skin sensitisation

**Product:**

Remarks : This information is not available.

**Components:**

**Ethylene, tetrafluoro-, polymer:**

Assessment : Did not cause sensitisation on laboratory animals.  
Result : Did not cause sensitisation on laboratory animals.

### Germ cell mutagenicity

**Product:**

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

### Carcinogenicity

**Product:**

Remarks : No data available



# SAFETY DATA SHEET

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

**KLÜBER**  
LUBRICATION

## Klüberalfa GR Y VAC 2

Version	Revision Date:	Date of last issue: 30.04.2020	Print Date:
1.3	07.05.2020	Date of first issue: 24.09.2015	08.05.2020

### Components:

#### **Ethylene, tetrafluoro-, polymer:**

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

### **Reproductive toxicity**

#### Product:

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

### **STOT - single exposure**

#### Components:

#### **Ethylene, tetrafluoro-, polymer:**

Assessment : The substance or mixture is not classified as specific target organ toxicant, single exposure.

### **STOT - repeated exposure**

#### Components:

#### **Ethylene, tetrafluoro-, polymer:**

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

### **Repeated dose toxicity**

#### Product:

Remarks : This information is not available.

### **Aspiration toxicity**

#### Product:

This information is not available.

#### Components:

#### **Ethylene, tetrafluoro-, polymer:**

No aspiration toxicity classification

### **Further information**

#### Product:

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

# SAFETY DATA SHEET

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

**KLÜBER**  
LUBRICATION

## Klüberalfa GR Y VAC 2

Version	Revision Date:	Date of last issue: 30.04.2020	Print Date:
1.3	07.05.2020	Date of first issue: 24.09.2015	08.05.2020

the toxicology of similar products.

## 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

### 12.2 Persistence and degradability

**Product:**

Biodegradability : Remarks: No data available

Physico-chemical removability : Remarks: No data available

### 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).

### 12.4 Mobility in soil

**Product:**

Mobility : Remarks: No data available

Distribution among environmental 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

# SAFETY DATA SHEET

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



## Klüberalfa GR Y VAC 2

Version	Revision Date:	Date of last issue: 30.04.2020	Print Date:
1.3	07.05.2020	Date of first issue: 24.09.2015	08.05.2020

0.1% or higher..

### Components:

#### Ethylene, tetrafluoro-, polymer:

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

### 12.6 Other adverse effects

#### Product:

Additional ecological information : 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 : used product, unused product  
12 01 12\*, spent waxes and fats  
  
uncleaned packagings  
15 01 10, packaging containing residues of or contaminated by hazardous substances

## SECTION 14: Transport information

### 14.1 UN number

ADR : 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

# SAFETY DATA SHEET

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

**KLÜBER**  
LUBRICATION

## Klüberalfa GR Y VAC 2

Version 1.3	Revision Date: 07.05.2020	Date of last issue: 30.04.2020 Date of first issue: 24.09.2015	Print Date: 08.05.2020
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**ADR** : 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)

**ADR** : Not regulated as a dangerous good

**IMDG** : Not regulated as a dangerous good

**IATA** : Not regulated as a dangerous good

### 14.4 Packing group

**ADR** : 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

**ADR** : 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.

## 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 (Regulation (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 deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

Regulation (EC) No 649/2012 of the European Parlia- : Not applicable

# SAFETY DATA SHEET

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

**KLÜBER**  
LUBRICATION

## Klüberalfa GR Y VAC 2

Version	Revision Date:	Date of last issue: 30.04.2020	Print Date:
1.3	07.05.2020	Date of first issue: 24.09.2015	08.05.2020

ment and the Council concerning the export and import of dangerous chemicals

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: 25,8 %

Inorganic substances in powdered form:  
Not applicable  
Inorganic substances in vapour or gaseous form:  
Not applicable  
Organic Substances:  
others: 74,2 %

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

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; AICS - Australian Inventory of Chemical Substances; 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

# SAFETY DATA SHEET

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

**KLÜBER**  
LUBRICATION

## Klüberalfa GR Y VAC 2

Version	Revision Date:	Date of last issue: 30.04.2020	Print Date:
1.3	07.05.2020	Date of first issue: 24.09.2015	08.05.2020

- 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; 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

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