

Klüberpaste UH1 84-201

Version 2.1

Revision Date 29.08.2017

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

1.1 Product identifier

Product name : Klüberpaste UH1 84-201
Article-No. : 005113

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

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

1.3 Details of the supplier of the safety data sheet

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 : mcm@klueber.com
Responsible/issuing person : Material Compliance Management

National contact : Konstantin & Soehne GmbH
Jantra Straße 13 A
1124 Sofia
Bulgaria
+359-2-9434190, -9434188, -9447917
Fax: +359-2-9434199, -9447917
office@k-sinove.com

1.4 Emergency telephone number

+49 89 7876 700 (24 hrs)

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Chronic aquatic toxicity, Category 3 H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

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Hazard statements : H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P273 Avoid release to the environment.

2.3 Other hazards

3. Composition/information on ingredients

3.2 Mixtures

Chemical nature : Synthetic hydrocarbon oil
PTFE
solid lubricant

Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
sodium benzoate	532-32-1 208-534-8 / 01-2119460683-35-XXXX	Eye Irrit. 2; H319	>= 1 - < 10
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine	110-25-8 203-749-3 / 01-2119488991-20-XXXX	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Acute 1; H400	>= 0,25 - < 1
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	95-38-5 202-414-9	Acute Tox. 4; H302 Skin Corr. 1C; H314 Eye Dam. 1; H318 STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 0,25 - < 1
Substances with a workplace exposure limit :			
magnesium oxide	1309-48-4 215-171-9		>= 10 - < 20

For the full text of the H-Statements mentioned in this Section, see Section 16.

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 unconscious, place in recovery position and seek medical advice.

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Keep respiratory tract clear.
If breathing is irregular or stopped, administer artificial respiration.

- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.
In case of contact, immediately flush skin with plenty of water.
Wash clothing before reuse.
Thoroughly clean shoes before reuse.
- 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.
If unconscious, place in recovery position and seek medical advice.
Keep respiratory tract clear.
Do not induce vomiting without medical advice.
Never give anything by mouth to an unconscious person.

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.

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 firefighting : Fire may cause evolution of:
Carbon oxides
Halogenated compounds
Metal oxides
Oxides of phosphorus

5.3 Advice for firefighters

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

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Further information : Standard procedure for chemical fires.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

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).
Avoid breathing dust.
Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Do not allow contact with soil, surface or ground water.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials 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.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin and eyes.
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.
Do not ingest.
Do not repack.
These safety instructions also apply to empty packaging which may still contain product residues.
Keep container closed when not in use.

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.

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Keep in properly labelled containers.

7.3 Specific end use(s)

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

8. Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value type	Control parameters	Update	Basis
magnesium oxide	1309-48-4	TWA	10 mg/m ³	2012-01-06	BG OEL

DNEL

sodium benzoate

: End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 3 mg/m³

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term local effects
Value: 0,1 mg/m³

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 62,5 mg/kg

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine

: End Use: Industrial use
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 0,2 mg/m³

End Use: Industrial use
Exposure routes: Inhalation
Potential health effects: Acute systemic effects
Value: 18 mg/m³

End Use: Industrial use
Exposure routes: Inhalation
Potential health effects: Long-term local effects
Value: 0,01 mg/m³

End Use: Industrial use
Exposure routes: Inhalation

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	Potential health effects: Acute local effects Value: 18 mg/m ³
	End Use: Industrial use Exposure routes: Skin contact Potential health effects: Long-term systemic effects Value: 10 mg/kg
	End Use: Industrial use Exposure routes: Skin contact Potential health effects: Acute systemic effects Value: 100 mg/kg
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	: End Use: Workers Exposure routes: Skin contact Potential health effects: Long-term exposure, Systemic effects Value: 0,6 mg/kg
	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term exposure, Systemic effects Value: 0,46 mg/m ³
	End Use: Workers Exposure routes: Skin contact Potential health effects: Short-term exposure, Systemic effects Value: 2 mg/kg
	End Use: Workers Exposure routes: Inhalation Potential health effects: Short-term exposure, Systemic effects Value: 14 mg/m ³
PNEC sodium benzoate	: Fresh water Value: 0,13 mg/l
	Marine water Value: 0,013 mg/l
	Intermittent use/release Value: 0,305 mg/l
	Microbiological Activity in Sewage Treatment Systems Value: 10 mg/l
	Fresh water sediment Value: 1,76 mg/kg
	Marine sediment Value: 0,176 mg/kg
	Soil Value: 0,000265 mg/kg

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	Oral Value: 300 mg/kg
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine	: Fresh water Value: 0,00043 mg/l Marine water Value: 0,000043 mg/l Intermittent use/release Value: 0,0043 mg/l Microbiological Activity in Sewage Treatment Systems Value: 13 mg/l
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	: Fresh water Value: 0,00003 mg/l Marine water Value: 0,000003 mg/l Fresh water sediment Value: 0,376 mg/kg Marine sediment Value: 0,0376 mg/kg Soil Value: 0,075 mg/kg

8.2 Exposure controls

Engineering measures

Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Respiratory protection	: Not required; except in case of aerosol formation. Filter type P
Hand protection	: For prolonged or repeated contact use protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. The 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. In case of contact through splashing: : Nitrile rubber Protective index Class 1
Eye protection	: Tightly fitting safety goggles

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- Hygiene measures : Wash face, hands and any exposed skin thoroughly after handling.
- Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Environmental exposure controls

- General advice : Do not allow contact with soil, surface or ground water.
If the product contaminates rivers and lakes or drains inform respective authorities.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Form : paste
- Colour : white
- Odour : characteristic
- Odour Threshold : No data available
- pH : No data available
- Melting point/range : No data available
- Boiling point/boiling range : No data available
- Flash point : Not applicable
- Evaporation rate : No data available
- Flammability (solid, gas) : Combustible Solids
- Lower explosion limit : No data available
- Upper explosion limit : No data available
- Vapour pressure : < 0,001 hPa, 20 °C
- Relative vapour density : No data available
- Density : 1,13 g/cm³, 20 °C
- Water solubility : insoluble
- Solubility in other solvents : No data available
- Partition coefficient: n-octanol/water : No data available
- Auto-ignition temperature : No data available
- Ignition temperature : No data available
- Thermal decomposition : No data available
- Viscosity, dynamic : No data available

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Viscosity, kinematic : No data available
Explosive properties : Not explosive
Oxidizing properties : No data available

9.2 Other information

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

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 pyrolysis products.

11. Toxicological information

11.1 Information on toxicological effects

Product

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

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Reproductive toxicity	: No data available
Teratogenicity	: No data available
Repeated dose toxicity	: This information is not available.
Aspiration toxicity	: This information is not available.
Further information	: Information given is based on data on the components and the toxicology of similar products.

Components:

sodium benzoate :

Acute oral toxicity	: LD50: 4.070 mg/kg, Rat
Skin corrosion/irritation	: Rabbit, Result: No skin irritation, Classification: No skin irritation, OECD Test Guideline 404, GLP: yes
Serious eye damage/eye irritation	: Rabbit, Result: Irritating to eyes., Classification: Irritating to eyes., OECD Test Guideline 405
Germ cell mutagenicity	
Genotoxicity in vitro	: Ames test, Salmonella typhimurium, Result: negative, OECD Test Guideline 471
Genotoxicity in vivo	: in vivo assay, Rat, OECD Test Guideline 475, Result: negative
Assessment	: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine :

Acute oral toxicity	: LD50: 9.200 mg/kg, Rat
Acute inhalation toxicity	: LC50: 1,37 mg/l, 4 h, Rat, dust/mist
Skin corrosion/irritation	: Rabbit, Result: Irritating to skin., Classification: Irritating to skin., OECD Test Guideline 404
Serious eye damage/eye irritation	: Rabbit, Result: Risk of serious damage to eyes., Classification: Risk of serious damage to eyes., OECD Test Guideline 405
Respiratory or skin sensitisation	: Maximisation Test, Guinea pig, Result: Does not cause skin sensitisation., Classification: Does not cause skin sensitisation., OECD Test Guideline 406
Germ cell mutagenicity	
Assessment	: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Aspiration toxicity	: No aspiration toxicity classification

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol :

Acute oral toxicity	: LD50: 1.265 mg/kg, Rat, OECD Test Guideline 401, GLP: yes
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Acute dermal toxicity	: LD50: > 2.000 mg/kg, Rabbit, The substance or mixture has no acute dermal toxicity
Skin corrosion/irritation	: Rabbit, Result: Corrosive, category 1C - where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days., OECD Test Guideline 404, GLP: yes
Serious eye damage/eye irritation	: Rabbit, Result: Corrosive, Classification: Corrosive, OECD Test Guideline 405
Respiratory or skin sensitisation	: Guinea pig, Result: Does not cause skin sensitisation., Classification: Does not cause skin sensitisation., OECD Test Guideline 406
Germ cell mutagenicity	
Assessment	: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Repeated dose toxicity	: Rat, Oral, 100 mg/kg, NOAEL: 20 mg/kg
STOT - repeated exposure	: Exposure routes: Ingestion Target Organs: Digestive organs, thymus gland Assessment: May cause damage to organs through prolonged or repeated exposure.

12. Ecological information

12.1 Toxicity

Product:

Toxicity to fish	: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Toxicity to daphnia and other aquatic invertebrates	: No data available
Toxicity to algae	: No data available
Toxicity to bacteria	: No data available

Components:

sodium benzoate :

Toxicity to fish	: LC50: 484 mg/l, 96 h, Pimephales promelas (fathead minnow), flow-through test
Toxicity to daphnia and other	: LC50: 650 mg/l, 48 h, Daphnia magna (Water flea)

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aquatic invertebrates
Toxicity to algae : EC50: > 30,5 mg/l, 72 h, Pseudokirchneriella subcapitata (microalgae), static test, OECD Test Guideline 201, GLP: yes

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine :

Toxicity to fish : LC50: 3,2 - 4,6 mg/l, 96 h, Leuciscus idus (Golden orfe), static test, DIN 38412

Toxicity to daphnia and other aquatic invertebrates : EC50: 0,53 mg/l, 48 h, Daphnia magna (Water flea), static test, Directive 67/548/EEC, Annex V, C.2.

Toxicity to algae : EC50: 5,1 mg/l, 72 h, Desmodesmus subspicatus (green algae), Growth inhibition, Directive 67/548/EEC, Annex V, C.3.

M-Factor : 1

Toxicity to bacteria : EC50: 1.300 mg/l, 3 h, Bacteria, Respiration inhibition, OECD 209, GLP: yes

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol :

Toxicity to fish : LC50: 0,3 mg/l, 96 h, Danio rerio (zebra fish), static test, OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50: 0,136 mg/l, 48 h, Daphnia magna (Water flea), Immobilization, OECD Test Guideline 202, GLP: yes

Toxicity to algae : ErC50: 0,03 mg/l, 72 h, Desmodesmus subspicatus (green algae), Growth inhibition, OECD Test Guideline 201

M-Factor : 10

Toxicity to bacteria : EC50: 26 mg/l, 3 h, activated sludge, Respiration inhibition, OECD 209

12.2 Persistence and degradability

Product:

Biodegradability : No data available

Physico-chemical removability : No data available

Components:

sodium benzoate :

Biodegradability : Result: rapidly biodegradable

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine :

Biodegradability : aerobic, 85 %, Result: rapidly biodegradable, Exposure time: 28 d, activated sludge, OECD 301 B

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol :

Biodegradability : Primary biodegradation, Result: Not rapidly biodegradable,

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OECD 301 B

12.3 Bioaccumulative potential

Product:

Bioaccumulation : 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:

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine :

Bioaccumulation : Due to the distribution coefficient n-octanol/water, accumulation in organisms is possible.

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol :

Bioaccumulation : Bioconcentration factor (BCF): 371,8,
Does not accumulate in organisms.

12.4 Mobility in soil

Product:

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

12.5 Results of PBT and vPvB assessment

Product:

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

Components:

sodium benzoate :

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

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine :

Assessment : 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).

12.6 Other adverse effects

Product:

Additional ecological information : Harmful to aquatic life with long lasting effects.
: Toxic to aquatic life with long lasting effects.

13. Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.

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- Contaminated packaging : Waste codes should be assigned by the user based on the application for which the product was used.
- Contaminated packaging : Empty containers can be landfilled, when in accordance with the local regulations.

14. Transport information

14.1 UN number

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.2 Proper shipping name

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.3 Transport hazard class

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.4 Packing group

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.5 Environmental hazards

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.6 Special precautions for user

No special precautions required.

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

Remarks : Not applicable for product as supplied.

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15. Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	: This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).
Major Accident Hazard Legislation	: 96/82/EC Update: Dangerous for the environment 9b Quantity 1: 200 t Quantity 2: 500 t
	: 2012/18/EU Update: Not applicable
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.

16. Other information

Full text of H-Statements referred to under sections 2 and 3.

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further information

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