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

1.1 Product identifier
rhenus LCK 2
Authorisation No.: None
UFI: None

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

Relevant identified uses
PC 24 - Lubricants, greases, release products
Observe technical data sheet.

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)
Rhenus Lub GmbH & Co KG
Street: Hamburgring 45
Postal code/city: 41179 Mönchengladbach
Telephone: +49 21 61 58 69 - 0
Telefax: +49 21 61 58 69 93
Information contact:
Application technology - technical information:
+49 21 61 58 69 74 (Lubricants, greases, release products). Only available during office hours.
+49 21 61 58 69 77 (cooling grease). Only available during office hours.
QHSE: Information about Material-Safety-Data-Sheet:
+49 21 61 58 69 267 (Safety-Data-Sheet, QHSE [Quality-Health-Safety-Environment]). Only available during office hours.
eMail: sicherheitsdatenblatt@rhenusweb.de

1.4 Emergency telephone number

International (all languages, all informations, all time 24 h / 365 d): GBK Gefahrgutbüro GmbH +49 61 32 84 46 3.
National
+49 228 19 24 0

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]
None

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]
Special rules for supplemental label elements for certain mixtures
EUH208 Contains Zinc naphthenate. May produce an allergic reaction.
EUH210 Safety data sheet available on request.

2.3 Other hazards

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients
None

3.3 Additional information

Highly refined mineral oil (IP 346 DMSO extract < 3%).
SECTION 4: First aid measures

4.1 Description of first aid measures
   General information
   Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing immediately. When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps. If unconscious place in recovery position and seek medical advice. In the event of cardiac arrest immediately perform cardiopulmonary resuscitation.
   Following inhalation
   Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. When in doubt or if symptoms are observed, get medical advice.
   In case of skin contact
   After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician. Oils and greases injected under your skin with high pressure equipment is a serious damage. Seek medical attention IMMEDIATELY. Bring a copy of this safety data sheet with you to the hospital for information to the medical staff.
   After eye contact
   After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Remove contact lenses, if present and easy to do. Continue rinsing. Protect uninjured eye. Call a physician immediately.
   After ingestion
   Rinse mouth thoroughly with water. Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed
   Symptoms
   The following symptoms may occur: Respiratory complaints, Headache, Dizziness, Nausea. Symptoms can occur only after several hours.

4.3 Indication of any immediate medical attention and special treatment needed
   None

SECTION 5: Firefighting measures

5.1 Extinguishing media
   Suitable extinguishing media
   Foam, Extinguishing powder, Carbon dioxide (CO2), Sand.
   Co-ordinate fire-fighting measures to the fire surroundings.

   Unsuitable extinguishing media
   Water

5.2 Special hazards arising from the substance or mixture
   Hazardous combustion products
   Carbon dioxide (CO2), Nitrogen oxides (NOx), Sulphur oxides, Carbon monoxide, Aliphatic and aromatic pyrolysis products, Phosphorus oxides

5.3 Advice for firefighters
   Special protective equipment for firefighters
   Do not inhale explosion and combustion gases. In case of fire: Wear self-contained breathing apparatus.

5.4 Additional information
   Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Use water spray jet to protect personnel and to cool endangered containers. Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
   Special danger of slipping by leaking/spilling product. Provide fresh air.
   Avoid contact with skin, eyes and clothes.
   Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at
For non-emergency personnel
Avoid contact with skin, eyes and clothes. Use personal protection equipment. Remove all sources of ignition. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Special danger of slipping by leaking/spilling product. Provide adequate ventilation. See protective measures under point 7 and 8.

For emergency responders
Suitable material : NBR (Nitrile rubber)
Unsuitable material : Butyl caoutchouc (butyl rubber) , NR (natural rubber, natural latex) , CR (polychloroprene, chloroprene rubber)

6.2 Environmental precautions
Make sure spills can be contained, e.g. in sump pallets or kerbed areas. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up
For containment
Clear spills immediately. Cover drains.

For cleaning up
Take up mechanically, placing in appropriate containers for disposal. Treat the recovered material as prescribed in the section on waste disposal. Never return spills in original containers for re-use. Clean contaminated articles and floor according to the environmental legislation. Retain contaminated washing water and dispose it.

6.4 Reference to other sections
Wear personal protection equipment (refer to section 8). Disposal: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
No hazardous reaction when handled and stored according to provisions. (Health hazards: None). Avoid contact with skin, eyes and clothes.
Do not breathe vapour/aerosol. Provide fresh air.
Respiratory protection necessary at: generation/formation of aerosols, insufficient ventilation, insufficient exhaust.

Protective measures
Measures to prevent fire
No special fire protection measures are necessary.

Measures to prevent aerosol and dust generation
No special measures are necessary.

Specific requirements or handling rules
No special measures are necessary.

7.2 Conditions for safe storage, including any incompatibilities
Packaging materials
 Unsuitable container/equipment material: None

Requirements for storage rooms and vessels
Floors should be impervious, resistant to liquids and easy to clean. Make sure spills can be contained, e.g. in sump pallets or kerbed areas. Shafts and sewers must be protected from entry of the product. Keep/Store only in original container. Protect containers against damage. Ensure adequate ventilation of the storage area.

Hints on joint storage
Possibility of hazardous reactions: Oxidizing agent.

Storage class (TRGS 510): 11

Further information on storage conditions
Keep/Store only in original container. Keep in a cool, well-ventilated place.
Do not store at temperatures below: 0 °C.
Recommended storage temperature: 0 °C - 40 °C.
Protect against: Protect against direct sunlight. Keep away from heat.
Storage stability: >= 6 months. Observe technical data sheet.

7.3 Specific end use(s)
None

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

None

8.2 Exposure controls

A substance-tailored exposure-driven testing according to REACH, annex XI, chapter 3 was not performed.

Appropriate engineering controls
See section 7. No additional measures necessary.

Personal protection equipment
Technical measures and the application of suitable work processes have priority over personal protection equipment.

Eye/face protection
Additional eye protection measures: Wear eye/face protection.

Skin protection

Hand protection
Tested protective gloves must be worn. DIN-/EN-Norms: EN ISO 374. Breakthrough time (maximum wearing time): 4 hours (NBR (Nitrile rubber), Thickness of the glove material: 0.4 mm). See information supplied by the manufacturer. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Unsuitable material: Butyl caoutchouc (butyl rubber), NR (natural rubber, natural latex), CR (polychloroprene, chloroprene rubber)

Respiratory protection
Usually no personal respirative protection necessary.

General information
Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing immediately. Wash hands before breaks and after work. Keep away from food, drink and animal feeding stuffs. Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance
Physical state: solid
Colour: brown
Odour
characteristic

Safety characteristics
Melting point/freezing point: (1013 hPa) > 170 °C
Initial boiling point and boiling range: (1013 hPa) > 250 °C
Decomposition temperature:
Flash point:
Lower explosion limit:
Upper explosion limit:
Danger of explosion: No explosive hazard
Density: (20 °C) approx. 0.93 g/cm³ DIN 51757
Solubility in / Miscibility with Water: Not miscible or difficult to mix.

log P O/W: not determined
Odour threshold:
Relative vapour density: (20 °C) not determined
Vapourisation rate:
Flammable solids: Not determined.
Oxidising solids: Not oxidising.
SECTION 10: Stability and reactivity

10.1 Reactivity
This material is considered to be non-reactive under normal use conditions.

10.2 Chemical stability
The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions
No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid
In case of exceeding the storage temperature: Danger of bursting container.

10.5 Incompatible materials
Reaction with oxidizing agents possible. Acid

10.6 Hazardous decomposition products
Does not decompose when used for intended uses. Thermal decomposition can lead to the escape of irritating gases and vapours. Hazardous decomposition products: Carbon monoxide, Carbon dioxide, aldehydes, Ketone, Sulphur oxides, Nitrogen oxides (NOx), Phosphorus oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
- Acute oral toxicity
  Based on available data, the classification criteria are not met.
- Acute dermal toxicity
  Based on available data, the classification criteria are not met.
- Acute inhalation toxicity
  Based on available data, the classification criteria are not met.

Corrosion
- Skin corrosion/irritation
  Based on available data, the classification criteria are not met.
- Serious eye damage/eye irritation
  Based on available data, the classification criteria are not met.
- Irritation to respiratory tract
  Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation
- Skin sensitisation
  Based on available data, the classification criteria are not met.
- Sensitisation to the respiratory tract
  Based on available data, the classification criteria are not met.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Carcinogenicity
  Based on available data, the classification criteria are not met.
- Germ cell mutagenicity
  Based on available data, the classification criteria are not met.
- Reproductive toxicity
  Based on available data, the classification criteria are not met.

STOT-single exposure
Based on available data, the classification criteria are not met.
STOT-repeated exposure
Based on available data, the classification criteria are not met.

Aspiration hazard
Based on available data, the classification criteria are not met.

11.3 Symptoms related to the physical, chemical and toxicological characteristics

In case of ingestion
No known symptoms to date.

In case of skin contact
No known symptoms to date.

In case of inhalation
No known symptoms to date.

In case of eye contact
No known symptoms to date.

SECTION 12: Ecological information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

12.1 Toxicity
There are no data available on the mixture itself.

12.2 Persistence and degradability
There are no data available on the mixture itself.

12.3 Bioaccumulative potential
There are no data available on the mixture itself.

12.4 Mobility in soil
There are no data available on the mixture itself.

12.5 Results of PBT and vPvB assessment
There are no data available on the mixture itself.

12.6 Other adverse effects
There are no data available on the mixture itself.

12.7 Additional ecotoxicological information
None

SECTION 13: Disposal considerations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Recycle according to official regulations.

13.1 Waste treatment methods

Product/Packaging disposal
The waste is to be kept separate from other types of waste until its recycling. Recycle according to official regulations. Waste for recycling is to be classified and labelled.

Waste codes/waste designations according to EWC/AVV
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Waste code product
List of proposed waste codes/waste designations in accordance with AAV : 120112*

Waste code packaging
List of proposed waste codes/waste designations in accordance with AAV : 150110*

Waste treatment options

Appropriate disposal / Product
Evidence for disposal must be provided. Send to a hazardous waste incinerator facility under observation of official regulations.

Appropriate disposal / Package
Contaminated packages must be completely emptied and can be re-used following proper cleaning. Non-contaminated packages must be recycled or disposed of. Packing which cannot be properly cleaned must be disposed of. Handle contaminated packages...
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

Trade name : rhenus LCK 2
Revision : 05.11.2019
Print date : 05.11.2019
Version (Revision) : 3.0.0 (2.0.1)

Other disposal recommendations
Dispose according to legislation. Do not allow to enter into surface water or drains.

SECTION 14: Transport information

14.1 UN number
No dangerous good in sense of these transport regulations.

14.2 UN proper shipping name
No dangerous good in sense of these transport regulations.

14.3 Transport hazard class(es)
No dangerous good in sense of these transport regulations.

14.4 Packing group
No dangerous good in sense of these transport regulations.

14.5 Environmental hazards
No dangerous good in sense of these transport regulations.

14.6 Special precautions for user
None

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
No dangerous good in sense of these transport regulations.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
EU legislation
Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP] . This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: Keine Other regulations (EU)

National regulations
Water hazard class (WGK)
Class : 1 (Slightly hazardous to water) Classification according to AwSV

15.2 Chemical safety assessment
For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1 Indication of changes
02. Classification of the substance or mixture · 02. Label elements · 02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] · 02. Special rules for supplemental label elements for certain mixtures · 06. Methods and material for containment and cleaning up - For cleaning up · 07. Hints on joint storage · Storage class · 09. Physical state · 15. Water hazard class (WGK)

16.2 Abbreviations and acronyms
None

16.3 Key literature references and sources for data
Data arise from reference works and literature.
16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]
Calculation method.

16.5 Relevant H- and EUH-phrases (Number and full text)
GHS Hazard statements of components

16.6 Training advice
None

16.7 Additional information
During mixing, observe all labels and safety data sheets of all the components. Please refer to our internet website for more information: See section 1.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.